



MODELS FOR SUCCESS:

U.S.-CHINA COOPERATION ON STANDARDS, CONFORMITY ASSESSMENT AND TECHNICAL REGULATIONS (SCATR)

Case Study:

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Standards and conformity assessment play a crucial role in the overall U.S.-China trade picture. The American National Standards Institute (ANSI) developed its China program and launched its Standards Portal (www.StandardsPortal.org) to advance the interests of its members whose activities and attention have been keenly focused in this market. Through the portal, the Institute provides essential information and tools to aid entry into the U.S. and Chinese markets. The following case study presents the perspective of a U.S.-based organization (Caterpillar, Inc.) that has been successful in addressing standards, conformity assessment and technical regulations (SCATR) opportunities in China.

What is your organization's history in China?

Caterpillar's Asia international standards and regulations (IS&R) team was founded in late 2004 in response to a previously unknown regulation in South Korea that had an impact on our local dealership. By the time Caterpillar, Inc. learned of the new requirement, the enterprise only had one month to comply. Although the new requirements were not onerous or difficult from a technical perspective, the time needed to complete the necessary paperwork and mandatory testing resulted in a temporary loss of market access for the effected products despite significant effort by the design group to complete the required processes.

The Caterpillar Asia IS&R team monitors SCATR development in key emerging markets such as China, India, and Russia, as well as other Asian countries such as South Korea, Indonesia, and Malaysia. The team works to ensure that the manufacturer perspective is presented to regulators, working with them to understand not just what keeps air clean, operators safe, etc., but also what can be reasonably complied with from a manufacturer perspective and how manufacturers can most effectively meet these shared objectives for environment, health and safety.

Most of the members of the IS&R team are either engineers or are heavily trained in relevant technical areas. Team members are required to have a unique combination of

skills - part engineer, part advisor, part educator, but the core knowledge is a broad technical understanding of their companies' products. This allows the team to give regulators confidence that they know what they are talking about. In addition to their technical skills, most also hold MBA degrees. This is helpful as it helps us make technical recommendations that help regulators meet their objectives in a way that also makes business sense.

What have been your organization's objectives in China?

Our end goal is one test, one certification, accepted everywhere. Of course, this goal is also beneficial to Chinese manufacturers who either currently are or will eventually be exporting their products to other markets. Within Chinese industry, there seems to be a growing understanding about the value of a one test, one certification approach.

Internally, we have focused on educating our product engineers and managers on the requirements for sale in China and building awareness to ensure that our products meet or exceed these requirements.

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Externally, we are working to encourage the adoption of international standards in China and other markets, plus the even application and enforcement of regulations. In China, as well as in many other countries, we must currently adjust the level of technology we offer for sale to meet local requirements. Caterpillar supports universally accepted international standards that make the most advanced products possible in all markets. These standards would improve safety and environmental quality for the entire industry.

Our objectives in China require a balance of global standards with consistent enforcement. We accomplish this by communicating regularly with Chinese manufacturers on their ability to comply with relevant global standards. We encourage Chinese regulators to adopt the global standard as written into

technical regulations, and then allow a certain amount of time for the regulation to be phased-in before it is enforced to accommodate domestic manufacturers. At the same time, we work with domestic manufacturers to help them understand what the standards are and what it means to meet them. This should help Chinese manufacturers to compete in the global market.

How would you characterize your organization's progress toward achieving these objectives?

We're making good progress in China, particularly in the area of encouraging the use and adoption of the global standards for the industry. The Standardization Administration of China (SAC) has supported Chinese contribution toward and participation in the ISO standards that are used by the industry. For the first time, China sent a full delegation outside of China to the ISO Technical Committee meeting (TC127) in November 2006 that covers the industry. Our team and SAC were able to work together to bring full representation by China at the global standards policy setting level. As an example of how we helped, one of our Caterpillar local (Beijing) Chinese team members was included in the Chinese delegation, acting as a technical interpreter for the rest of the delegation. This high level of participation and buy-in has hopefully paved the way for China's adoption of relevant global standards in its mandatory regulations and voluntary standards, and will also continue to increase the transparency of the processes. China's full participation also gives China a greater voice in the global discussion on standards and regulations.

We have also made progress working with regulators in China to gain better clarifications or in some cases, to get officials with the appropriate level of authority to give a "black and white" verification/confirmation on specific criteria within new regulations. One recent example is the scope of China's Restriction on Hazardous Substances (RoHS) regulations. From the draft regulatory text, it was unclear whether the computer components in our products would be subject to these requirements. We were able to identify

who in the Ministry of Information Industry was drafting the regulations and request a meeting to get clarification. We actually came to the meeting carrying an industrial computer used on diesel engines and other products that control engine and transmission functions. We were able to show clearly how this was not an off-the-shelf computer, but a very specific component that can't be used for anything else. As soon as the official saw this, he was able to confirm that it was exempt. We were able to follow up this meeting with electronic confirmation via email that indeed we were exempt from this requirement. It cannot be stressed enough how important it is to have direct contact for complex issues such as these. This type of communication to gain clear guidance provides manufacturers with a clarity related to regulations. This type of communication also helps to ensure that China is recognized for making positive progress in this area, which provides a greater sense of transparency from a business point of view.

What activities have been effective and what activities have been ineffective in achieving your objectives?

In the case of China, rather than suggesting what one company thinks may be the best solution, we have worked in a very cooperative way to share our experiences around the world as China works to further develop its standards.

I would go so far as to say that it may not be possible to effectively work on policies related to SCATR without engaging Chinese manufacturers in one way or another. If you raise something to Chinese officials, they will turn right around and have it reviewed by the appropriate Chinese industry association. Remember, just as in other parts of the world, many government officials are generally not product-specific experts. They rely heavily on industry associations for technical input. We have found that if you work cooperatively—if you take the same proposal and go to manufacturers first—then you will often be able to gain support and understanding among your Chinese counterparts. Relationship building is paramount in China—if your organization wants to promote new standards

in China, there must be common understanding and support, which is only achievable by direct contact. Hiring qualified local talent to represent your interests is most effective. We have learned the importance of bringing the right expert for the right discussion. If you are discussing technical issues, don't bring in people who don't understand the technical details.

Finally, I cannot stress enough the importance of good translation and interpretation. Many people can translate, but few can do accurate technical translation. Without this support, most activities will fall short due to communication difficulties. This goes back to having competent local representation for your organization.

What lessons have you learned through your experience?

We want to ensure that China has a strong vote and that their thoughts are understood clearly in the global arena as it relates to standards. We want them to be part of the process so that they become truly invested in the resulting standards. If China does not have an active role in the development of a given standard, it is unreasonable to expect them to consider adopting it. Moreover, if a standard is adopted by China, and if they participated in the process to develop the standard, they will be in a much better position to implement and enforce the standard in the long run.

As stated above, we have recognized the importance of competent interpretation and translation while working in China. Delegates to TC meetings from China (and all other countries) need to be competent standards developers with a wide technical background. For Chinese technical experts, there exists the additional hurdle of language that becomes a huge barrier to effective engagement. I see this as one of the biggest barriers for China's participation in ISO and other global forums. While the younger generation in China is comfortable with English, the older generation is the driver and influencer in China. Recognizing this, we have offered interpreters who are qualified with relevant technical language in our ISO meetings. This has helped China participate more effectively and has ensured more active participation

from the core technical experts in China. We feel the Chinese delegation will continue to make positive developments related to language challenges, but recognize the short-term challenges and are committed to helping

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with these challenges.

Finally, we have learned not to go it alone. Our reputation and experience has given us the opportunity to share our experiences with Chinese officials. At the same time, it is important for other non-Chinese companies to consider greater engagement with Chinese trade associations. Although Caterpillar's global reputation has allowed it to have a voice in discussions with Chinese regulators and policy makers, we will increasingly focus on working through our Chinese trade association in the future.

What advice would you give to organizations interested in becoming active in China?

Working in China is all about education and communication [in both directions]. Use of and participation in global standardization is relatively new in China. When working with Chinese policy makers, communicate the standards that you support and why they are good for the country (China) and why they will fit into the U.S. and Chinese manufacturers' long-term goals. Of course, it's important to do this in a way that is respectful of current circumstances - people need to understand the specific cultural differences between China and the US and act appropriately.

I believe that if China is important, then U.S. companies need to get involved. This requires resources up front. If you can invest in the long-term, then you'll make progress. Organizations should avoid treating SCATR policy work in China as a "quick turnaround" project. U.S. organizations need to be able to find smaller stepping stones and build up progress over time. Standardization is a three- to five-year focus. If you think that

this is important to your success in the long-term, then you need long-term vision.

Looking at China with this long-term vision, we have found outreach and cooperation with Chinese universities as a high value activity. As an example, there is one specific university in China that specializes in our industries' products. We have found that the majority of the influential people we interact with [managers from local competitors, test houses, and key industry association members] mostly graduated from this specific university. Relationships are very important in the Chinese culture—college students form their first networks here and maintain them for most of their working careers.

If you are serious about being engaged in China, you will do best with a two-person team. First, a technical person that understands global standards and the goals and requirements from the home country [headquarters]. Second, a local Chinese technical person that understands the culture and understands how to appropriately interact. As a Westerner, I represent the face of Caterpillar in China standards development meetings, and am responsible for communicating our global commitment to meeting local standards and technical regulations. While I am welcomed in meetings, just as in the western world, there is always a preference to deal with local representatives due to language and cultural differences. For this reason, I recruited a Chinese staff to work through these types of issues, and to make sure that we are approaching our Chinese partners in a way that makes them feel comfortable. Between my staff and me, we are able to compliment each other's strengths and eliminate weaknesses. This allows us to communicate very complex situations in both directions effectively in the format the receiver prefers.

Can you give an example of your success in engaging Chinese manufacturers?

A recent example of effective cooperative work with Chinese industry came up last fall at a conference in Wuxi, China. This conference was set up by the local industry association's Quality Subcommittee. It brought industry together to talk about trends, and to

learn information about the direction of the construction equipment industry in China. I was asked to present the market access requirements for our industry in the U.S. Some U.S. companies might be reluctant to help their competitors in this way, but we think that showing Chinese industry how to find the U.S. regulations and how to better understand them will encourage the Chinese products to actually meet them. By making sure that Chinese manufacturers can find and know how to follow not only the U.S. technical regulations but also the voluntary standards used in our market, we are helping our domestic industry to avoid additional regulation from the U.S. government. In the U.S., regulations are not generally introduced unless there is a significant problem related to health, safety or the environment. When all manufacturers, domestic and foreign, follow the relevant voluntary standards and regulations, most EHS-related problems will be avoided.

At this seminar, I discovered that very few people in the Chinese industry knew about relevant OSHA, MSHA (mining), and other requirements for the U.S. market. We didn't give our Chinese competitors anything proprietary, just public knowledge that can be obtained from U.S. government websites. We showed them how to find the Code of Federal Regulations and other relevant information. Following the formal program, a long string of Chinese industry representatives came forward to express their appreciation to Caterpillar for taking the lead in increasing transparency in the U.S. and China. We were able to show them how having China adopt and meet international standards will allow these manufacturers to sell anywhere in the world, creating additional allies in China. As a result of this engagement, two of the leading local (Chinese) manufacturers of wheel loaders indicated that they would identify standards representatives in their own organizations to represent their views at the national and international level, supporting the adoption of ISO standards for our industry in China. So the engagement brought not only goodwill, but also practical results.

Two-way dialogue, in person, is the best way to make progress on SCATR issues in China. We learned very early in our standards efforts in China that it takes no less than three

face to face meetings before any serious negotiations to occur - the first meeting is to introduce yourself and your organization, the second is to show your commitment to the Chinese SCATR process, and finally the third meeting, where you become 'old friends' and can communicate issues and work toward win-win solutions. ■

About the Author

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