Research on the social responsibility of China’s inspection body and laboratory

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Abstract. As a modern high-tech service industry, inspection and testing is a necessary link to ensure the safe operation of industry and the promotion of product quality. It plays a technical support for continuously improving the quality and efficiency of economic development. At present, inspection and testing has become one of the most dynamic and emerging service, but in the process of rapid development, there are also some problems. Some inspection body and laboratory use their power to seek rent or put legal coat on illegal products, resulting in lack of justice, aggravating moral hazard, disrupting the fair order of the whole inspection and testing market, and harming consumers' rights and interests, such as Sanlu group added melamine to milk power, Volkswagen played tricks on car carbon dioxide emissions testing. This essay analyzes the problems existing in the social responsibility of China's inspection body and laboratory at present, and puts forward some suggestions. On the basis of adopting the international social responsibility standard ISO 26000, the essay puts forward some suggestions on how the inspection body and laboratory fulfill the social responsibility on the responsibility management, pollution prevention, truth and accuracy of data, scientist's social responsibility and so on.

1. Introduction

The continuous improvement of people's living standards has promoted the rising demand for goods. At the same time, as consumers have higher quality requirements for all kinds of products, they not only require their functions to satisfy the use, but also consider many factors such as safety, environmental protection, hygiene and so on. The manufacturers have also begun to strengthen the performance of their products, such as environmental indicators, safety indicators, and so on, which have promoted the rapid development of the inspection and testing market. At the same time, China's manufacturing industry is in a period of rapid development and transformation, which the demand for inspection of industrial products is also rising rapidly.

As a modern high-tech service industry, inspection and testing is a necessary link to ensure the safe operation of industry and the promotion of product quality. It plays a technical support and role for continuously improving the quality and efficiency of economic development. It will play a more and more important role in strengthening market supervision, optimizing business environment and promoting high-quality economic development. Inspection and testing is a basic system to strengthen quality management and improve market efficiency under the condition of market economy. By the end of 2018, there were nearly 40,000 inspection bodies and laboratories in China, with more than
400 million testing reports issued annually; 10,439 accredited inspection bodies and laboratories; and more than 270 billion yuan in the inspection and testing certification service sector. The development scale, quality efficiency, social impact and international status of China's inspection body and laboratory continue to improve.

2. Social responsibility of inspection body and laboratory

2.1. Definition

International standards clearly define inspection, testing and social responsibility. According to ISO/IEC 17000-2004, the definition of inspection is “examination of a product design, product, process or installation and determination of its conformity with specific requirements or, on the basis of professional judgement, with general requirements”. Inspection can also be understood as the activity of making judgment on the compliance with relevant regulations by relying on people's experience and knowledge, using test data or other evaluation information. The definition of testing is “determination of one or more characteristics of an object of conformity assessment, according to a procedure”. Testing can also be understood as the activity of using instruments and equipment for evaluation in accordance with technical standards and specifications, and the evaluation results are test data. Definition of inspection body and laboratory according to Chinese national standard GB/T 31880-2015 is “A professional technical organization established in accordance with relevant standards or technical norms, using technical conditions and professional skills such as instruments, equipment, environmental facilities, etc., to inspect and test products or specific objects prescribed by laws and regulations”. Based on ISO 26000, social responsibility means “responsibility of an organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behaviour that contributes to sustainable development”. Social responsibility of inspection body and laboratory means the willingness of inspection body and laboratory to include social and environmental considerations in its decisions and to assume responsibility for the social and environmental impact of its decisions and activities.

2.2. Background and trend

In recent years, China has issued a number of incentive policies, vigorously promoting the development of inspection body and laboratory. As foreign laboratories continue to expand their territory in China, local inspection body and laboratory have also developed rapidly. In the future, the improvement of the living standards of Chinese and the rapid development of manufacturing and industrial upgrading will continue to push up the demand for inspection and testing. Sustained growth in foreign trade will also increase the demand for trade assurance testing. As a result, China's inspection and testing industry will become one of the most promising and fast growing service industries in China.

The inspection body and laboratory obtains the benefit in the market through competition, relies on high quality technology and services, provide the scientific, objective, fair inspection result and appraisal conclusions, which is an independent entity with fair positioning. In recent years, there have been a series of quality security incidents in various countries, which have raised the public's concerns about their impartiality. For example, Sanlu Group admitted that it added melamine to its milk powder to boost protein levels in food testing in 2008. German Volkswagen admitted doing a trick in testing for carbon dioxide emissions and installing emissions cheating software in 2015. Japan's automobile waste inspection fraud storm was involved in many companies, Suzuki cars and Mazda have admitted that some vehicles use false test data in 2018. In 2017, employees revealed that the landau testing service (RTS), which was employed by the British government and police, had falsified blood sample tests.
2.3. Trend

The research on the intelligent inspection and testing, the construction of public platform and the development of technical services and the realization of intelligent robot, big data, artificial intelligence and other techniques in the application of testing, which have promoted the inspection and testing industry in China. With the rapid development of modern information technology, the future inspection body and laboratory will present the following significant development trends: The management type will be transformed into enterprises and gradually decoupled, and the public interest organizations will gradually withdraw. The market oriented and socialized development direction of inspection body and laboratory is irreversible, and the cultivation and development of fair market is the development trend of China's future inspection and testing market. The future development mode of inspection body and laboratory is integration, specialization, branding, internationalization, collectivization, etc. The information platform for inspection and testing based on customer satisfaction and big data will develop rapidly. With the help of intelligent means such as robots and drones, it not only improves the precision of inspection and testing, but also strengthens the protection of human beings, effectively avoids the occurrence of danger and embodies the concern for human nature. The integration of the internal small cross border detection resources among the inspection body and laboratory with different professional and scale levels. With the development of internet technology, the value of mutual resources will be amplified.

3. Methods

ISO 26000 provides a general guide of social responsibility practices for all organizations (see Figure 1).

![Figure 1. Research framework bases on ISO 26000.](image)

The general guide includes the following two parts: one is the basic practice of social responsibility, that is, the identification of social responsibility, the identification and participation of stakeholders. ISO 26000 suggests that an organization can practice social responsibility on the basis of existing systems, policies, structures and networks.

4. Problems

4.1. Credibility decline

As China's consumers lose confidence in Chinese products after a series of quality accidents, they turn their sceptical eyes to the Chinese inspection body and laboratory. At the end, when merchants cooperate with inspection body and laboratory, they are more willing to use foreign institutions. Inadequate disclosure of nonconforming product information. Compared with developed countries and regions, the information asymmetry in China's market and the difficulty of public choice are prominent problems. They can make full use of the power of the Internet to share information on product safety, such as unqualified food that has been disclosed, foods containing certain additives harmful to the body. At the same time, avoid the duplication of waste of resources. The sharing of information among inspection organizations is a good way to prevent the non-recognition of inspection results and repeated inspection and other problems. Lack of integrity in the inspection and
testing process. For example, tampering with fabrications, piecing together other people's data, fabricating the results of the experiment. Finally, the authority of inspection and testing is questioned by the public.

4.2. Employees lack social responsibility
Lack of risk considerations. Some of employees do not know enough about the techniques in their inspection and testing activities. Its negative effect may appear delay, once it appears, the harm to human beings or itself is irreversible. Improper value neutrality in the inspection and testing process. The technicians of the inspection and testing should weigh the advantages and disadvantages to the human being, and the use of the technology should be grasped in the direction of morality. Hold due social responsibility and scientific conscience. Brain drain is serious. Due to the late start of domestic inspection body and laboratory, the salary level of the whole industry has no obvious advantages. However, the industry needs a large number of high-end talents. Contradictions are conceivable. The flow of talents is inevitable, but how to make people have a sense of fulfillment and a sense of belonging is a problem. Lack of impartiality. Some of them become the voice of the relevant interest groups. When they issue relevant inspection reports, they should put forward objective, true and fair opinions and bases. However, due to the influence of stakeholders, it is difficult for them to provide objective and impartial opinions. Some even modify the data to support certain conclusions.

4.3. Unfair competition
Competition pressure. Due to the opening of the Chinese market, competition will shift from local business to all business. First of all, the competition pattern will be broken from the original price to the high-end, that is, the competition of the core creative ability of the enterprise. Secondly, market opening will inevitably increase the pressure of international capital competition. Foreign-funded inspection and testing agencies will seize the Chinese market share through mergers and acquisitions. This has an impact on the survival of domestic institutions in the early stage. Power disparity. In recent years, the organizations have created vicious competition in order to obtain the market and win the business. The charge of each inspection organization is getting lower and lower, after the charge drops to a certain extent, the testing organization can't guarantee the quality of work, naturally appear "fake and inferior" report. Under the trend of economic interests, some organizations began to break the rules, simplify testing procedures, misreport information and other unfair competition phenomena. In order to expand economic interests, some are even at the expense of deceiving consumers with false information, and suppressing cooperative enterprises. These phenomenon not only violate the law, but also affects the legitimate rights and interests of consumers. Weak competitiveness and service awareness. As far as the inspection and testing industry is concerned, the relationship between the organization and the serviced customer should shift from service to partner, actively help the customer to find and improve its existing problems, and provide value-added service in the process of service according to the actual situation. Long-term low-price service delivery is impossible for any unit and difficult to survive. They must rely on product quality and service. Underdevelopment of innovation. With the opening of the market and the influx of more inspection and testing agencies, the profits of the same kind of inspection and testing services will gradually decline. In order to occupy a dominant position in the market, inspection and testing enterprises must study and formulate advanced, reliable and practical methods to undertake the inspection work of these new commodities and new items.

5. Suggestions
5.1. Responsibility management
Organizational governance is one of the core subjects of ISO 26000, but in addition to the generic described by ISO 26000, responsibility management has more distinctive industry characteristics. Inspection and testing business scope compliance. To carry out activities within the scope of the approved inspection and testing business and shall be responsible for the results of the inspection and
testing data issue. To establish an independent, impartial, scientific and honest social responsibility management system that adapts to its own testing activities. Make sure that management is fully responsible for social responsibility management. Responsible for the establishment and effective operation of social responsibility to ensure the resources required for social responsibility management; The highest manager, the technical person, the quality manager, the authorized signer, the department manager, the examiner, the audit personnel, the sample manager, the equipment manager, the reagent manager, and the internal auditor are responsible for the preparation of the documents. The duties and powers of supervisors and other personnel, giving them appropriate powers and resources to perform their duties, including the implementation, maintenance and improvement of the social responsibility management system, the identification of deviations from the social responsibility management system. Establish and strengthen stakeholder communication to enhance information disclosure and transparency in a clear, accurate, timely, honest and complete manner. Set up a professional committee, composed of representatives of various stakeholders, to supervise and manage the business work of the organization, and to examine the fairness of the organization.

5.2. Pollution prevention
Prevention of environmental pollution caused by inspection and testing has become an important aspect of its social responsibility. Aspects of pollution prevention in the inspection and testing process include, but are not limited to: toxic and harmful chemical reagents used in inspection; residues from testing; gases emitted from the inspection process; and waste samples. Recycle the exhaust gas from the inspection process as much as possible to avoid pollution to the atmosphere. Encourage inspection and testing agencies to explore methods of gas recovery and protect the environment. Select sustainable, renewable resources to supplement or replace non-renewable resources in detection activities.

5.3. Scientist's social responsibility
The so-called scientist's social responsibility is the scientist's responsibility or obligation to the society. If technicians fail to perform their social responsibilities well, moral hazard will arise. With regard to the social responsibility of the scientific and technical personnel of the inspection and testing institutions, relevant actions and social expectations include: The personnel of the inspection and testing institutions should constantly promote the social responsibility, establish the correct ethics and morality and assume the responsibility to the society and consumers. Scientists pay attention to identifying experimental risks, recognizing the value and significance of testing work, and putting their own safety, public safety, health and welfare in an important position. Continue to develop new technologies to promote the development of inspection and testing activities. Publicly fairly state the results of the test to the customer or public.

5.4. Truth and accuracy of data
To ensure the authenticity and accuracy of inspection and testing data and results, it requires institutions and their personnel to independently carry out inspection and testing activities, which free from internal and external pressure and influence from improper commercial, financial and other aspects. Inspection body and laboratory should establish a long-term mechanism to identify the risk of fairness and can prove that it can eliminate or reduce the risk of fairness. Ensure that there is no undue interest between the personnel and the client of the inspection and testing project in which they are engaged.

6. Conclusion
Through the implementation of ISO 26000 and the integration of social responsibility into the existing institutional management system, inspection body and laboratory can make full use of the existing management system to correctly and effectively address the themes and issues of social responsibility. This paper puts forward some suggestions how the inspection body and laboratory fulfill the social
responsibility on the responsibility management, pollution prevention, truth and accuracy of data, scientist's social responsibility and so on. If the management and awareness of China's inspection body and laboratory in the field of social responsibility continue to improve, the "Belt and Road Initiative" strategy will be a good opportunity for domestic inspection and testing institutions to become international laboratories. Social responsibility is the key to the competition in the future.

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