

Present Situation of China Wire & Cable Industry on the Adoption of IEC Standards

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Mr. Aldo Bolza, Session chairman

Our second speaker on standardization, Professor Chen Kun, will deal with

The present situation in the Chinese Wire & Cable Industry on the Adoption of IEC Standards.

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Mr. Chairman, ladies and gentlemen.

I wish to thank the organizer of ICF for giving me an opportunity to present my opinion on the present situation of the China wire & cable industry on adoption of IEC standards.

My presentation consists of the above 5 points.

Retrospective view of the history of the development of wire & cable standardization in China

The standardization of wire & cable in China began in 1958 while the enterprise standardization began earlier.

The standardization of wire & cable in China is divided into four stages.

▪ The first stage (1958~1959)

In combination with more than 150 major projects, the China wire & cable industry adopted standards as a whole and translated and edited 155 product standards and 78 raw material standards, which played an active role in promoting the development of China wire & cable industry at that time.

• The second stage (1960~1981)

This period is mainly for drafting and revising product standards, in total 96 items of 123 national standards and industrial standards. The element standards, test methods and compound standards started a little later. We had already paid attention to adopt international standards in the product standards by the late 70's. The performance requirements of some product standards (such as paper-insulated cables with rated voltage up to and including 55 kV, shipboard cables, etc) had been close to that of corresponding IEC publications by then.

The standardization in this stage played an active role in strengthening technical management for enterprises, improving product qualities and eliminating backward products.

• The third stage (1982~1995)

The goal in this period was to fully adopt international standards and advanced foreign standards. An important technical and economic policy of our country “adopting international standards” was being pushed forward strongly in the wire & cable industry .

The elements were as follows:

- Formulating about 410 standards, which adopted international standards and advanced foreign standards in different degrees and resulted in great improvement of the whole wire & cable standard level.
- The standard system of wire & cable industry began to approach and coordinate with IEC international standard system.
- Mainly formulating test method and element standards which improved compatibility between basic standards and product standards.
- Promoting the pace of standard development. The number of standards produced in those 14 years is 3 times as much as those in the second stage (lasting 20 years).

The fourth stage (1996~now)

- The goal of this period was to implement the principles of the 4th national conference held in 1994 on the adoption of international standards, to adopt international standards identically and equivalently.
- The features are as follows:
 - The product standards for compulsory certification such as IEC 60227 and IEC 60245 shall be identically adopted and completely transformed into Chinese national standards first. IEC 60228 and IEC 60811 were adopted at the same time.
 - To transform the product standards in large quantities. IEC 60502 has been transformed already and IEC 60317 is under way.

Our policy and strategy regarding the adopting international standards

- China put forward definitely in 1994: Take initiative in adopting international standards and advanced foreign standards and identically and equivalently to formulate and revise national and industrial standards. All concerned ISO, IEC standards shall be transformed to the national standards except those owing to geographic, climatic and basic technological reasons.
- China put forward definitely in July 2002: Adopting international standards and advanced foreign standards is an important basic technical work for the development of national economy. Being a member of WTO which provides a great opportunity for wire & cable industry to adopt international standards. The strategy in adopting international standards is “being encouraged by the government, following the market, playing main roles by enterprises, being guided according to classification and being in line with international standardization”.

The target for adopting international standards

China put forward definitely in July 2002:

- The transformation rate of international standards into national standards will reach 70% within 5 years.
- The adoption rate of the major industrial products in our country's important industry will reach 75%~80% within 5 years.
- To participate in formulating 300~500 international standards.
- At least 50 national standards to be adopted as international standards, and beside striving to reach 100.
- To train a team of more than one thousand specialists with high English level, proficient professional knowledge and competence in order to take part in the activities of international standardization.

The responsibility and function of the National Technical Committee for Standardization of Wire & Cable in China

- The National Technical Committee for Standardization of Wire & Cable in China (CSBTS213) is responsible for the standardization of wire & cable, and undertaking the formulation and revision of national and industrial standards concerning bared conductors, low-voltage cables and their accessories, power cables and their accessories and winding wires etc.. The secretariat is located in SECRI.
- CSBTS213 is the authorized representative of Chinese National Committee of Standardization Administration of China (SAC) to participate in IEC wire and cable standardization including TC7 "Overhead conductors", SC18A "Shipboard cables", TC20 "Cables", SC46C "Wires and symmetric cables" and TC55 "Winding wires". It is one of 17 technical committees which are responsible for participating in activities of more than two IEC TCs and SCs.

The principle of China wire & cable industry in adopting IEC standards

- The projects which adopt international standards which shall be transformed to national standards in principle. The industrial standards which have adopted international standards shall be upgraded to national standards as soon as possible.
- To pursue the simultaneous and identical transformation of international standards including amendments into national standards.
- To initiate the formulation of technical documents which are equivalent to international standards including technical specification (TS) and public available specification (PAS).
- Technical report (TR) will not be adopted temporarily.

The situation of the adoption of IEC standards for standardization of wire & cable in China

TC7 “Overhead conductors”:

There are a total of 12 publications (except amendments) by the end of Aug. 2002.

- Basic standards: 4 publications, in which 1 has been adopted, another 2 will be finished in 2003.
- Method standards: 2 publications, in which 1 has been adopted.
- Product standards: 6 publications, in which 5 have been adopted.
- Others: 3 TR.

SC18A “Shipboard cables”:

There are a total of 10 publications (except amendments) by the end of Aug. 2002.

- Basic standards: 4 publications, in which 3 have been adopted, another will be finished in 2003.
- Product standards: 6 publications, in which 5 have been adopted.
- Others: 1 TR.

TC20 “Cables”:

There are a total of 83 publications (except amendments) by the end of Aug. 2002.

- Basic standards : 20 publications, in which 12 have been adopted.
- Methods standards : 32 publications, in which 26 have been adopted.
- Product standards : 31 publications, in which 22 have been adopted. The IEC standards listed below are related to the products not to be developed in China:
 - IEC 60141-2(1963), Ed.1
 - IEC 60141-3(1963), Ed.1
 - IEC 60141-4(1980), Ed.1
- Others: 3 TR.

SC46C “Wires and symmetrical cables”:

There are a total of 33 publications (except amendments) by the end of Aug. 2002.

- Basic standards : 7 publications, in which 3 have been adopted.
- Product standards : 26 publications, in which 4 have been adopted. IEC 61156 “Multicore and symmetrical pair/quad cables for digital communications” are under way.
- Others: 4 TR and PAS.

TC55 “Winding wires”:

There are a total of 76 publications altogether (except amendments) at the end of Aug. 2002.

- Basic standards : 17 publications, in which 14 have been adopted.
- Methods c standards : 6 publications, which all have been adopted.
- Product standards : 43 publications, in which 30 have been adopted. The IEC standards listed below are related to the products not to be developed in China :
 - IEC 60317-0-3(1997), Ed.2
 - IEC 60317-15(1990), Ed.2
 - IEC 60317-25(1990), Ed.2
 - IEC 60317-45(1998), Ed.1
 - IEC 60317-54(2001), Ed.1

Thank you for your attention.