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**Inaugural meeting on a high-level research and development project commissioned by Research Institute of Standards and Norms of Ministry of Housing and Urban-Rural Development, China**  
**2025.02.26**

Prof. K.F. Chung, Director of CNERC, and Dr. X.L. Yu, Senior Research Fellow of CNERC were invited to contribute to a high-level research and development project commissioned by **Research Institute of Standards and Norms of Ministry of Housing and Urban-Rural Development, China**. The project title is “*A comparative study on steel codes among Chinese and overseas construction industry for technical compatibility and alignment*”. It is a project under the general research theme of “Fundamental research for construction standardization 2024” of the Institute. The project is administrated by China Construction Metal Structure Association. The project team consists of:

- **Prof. Y. J. Shi**, Tsinghua University – Principal Investigator
- **Prof. X. Y. Sun**, China Constructional Metal Structure Association
- **Prof. K. F. Chung**, The Hong Kong Polytechnic University
- **Prof. Z. M. Chen**, China Construction Science and Industry Corporation Ltd.

The inaugural meeting of the project was successfully held in Beijing on 26 February 2025.



The meeting was officiated by:

- **President Qi QU** China Construction Metal Structure Association
- **Director Bo CHEN** Research Institute of Standards and Norms,  
Ministry of Housing and Urban-Rural Development



Mr. Qi QU  
President of CCMSA



Mr. Bo CHEN  
Director of RISN, MHURD

The meeting was also attended by the following experts:

- **Chief Engineer Yinquan YU** China Design and Research Institute of Building Standards
- **Chief Engineer Lijun WANG** Huachengboyuan Engineering Technology Group
- **Deputy Chief Engineer Yaohua WU** Central Research Institute of Building and Construction Co., Ltd., MCC Group
- **Chief Engineer Qingde YANG** International Business Department of Beijing Urban Construction Group Co., Ltd.
- **Chief Engineer Qiang ZHANG** Jinhuan Construction Group Co., Ltd.



A detailed presentation of the project was made by Prof. Shi together with Prof. Sun and Prof. Chung.



Prof. X. Y. SUN



Prof. Y. J. SHI



Prof. K. F. CHUNG



### ● Research motivation and methodology

This project aims to collect relevant standards on steel design and construction in China, the United States, Japan and Europe, and also to assess their technical differences. It is important to propose improvements to Chinese standards to facilitate export of Chinese steel materials and structures.

Major tasks:

1. Establish a system for structural steel standards appropriate for various "Belt and Road" countries, i.e. internationalized Chinese standards.
2. Develop technical guidelines and application documents for these Chinese standards.
3. Formulate technical promotion for a wide adoption of these Chinese standards.

- **Expected deliverables**

1. To summarize key strengths and weaknesses of current Chinese and international standards for steel design and construction.
2. To identify major discrepancies among key technical rules for steel design and construction in Chinese and foreign countries.
3. To appraise current situations of internationalization of Chinese standards.
4. To propose improvements to Chinese standards for technical compatibility and alignment with those of foreign countries.

- **CNERC contributions**

Prof. K. F. Chung reported in the meeting that CNERC has been committed to promote innovation in steel construction, and to develop modern steel construction technology. CNERC has developed expertise on structural design and construction to both Chinese and European standards, in particular, on high strength S690 to S960 steel. Many technical and professional papers have been published on both European and Chinese practice based on a comprehensive research and development programme over the past few years.

### **Research Institute of Standards and Norms of Ministry of Housing and Urban-Rural Development, China**

The Research Institute of Standards and Norms of Ministry of Housing and Urban-Rural Development was established in 1983 with the approval of the former Ministry of Science and Technology Commission. It is a national public welfare first-class scientific research institution, mainly responsible for the research and specific organization and preparation and management of national engineering construction standards and quotas. It is the only national scientific research institution in China that is engaged in both engineering technical standards and engineering economic indicators. Since its establishment, the Standard and Quota Research Institute has focused on the technical management of standards, quotas and method parameters, policy research, key project preparation and technical consulting services.

### **Project of Fundamental Research on Standardization of Engineering Construction (2024)**

The Project of Fundamental Research on Standardization of Engineering Construction was established for the first time in 2023 with the main content of conducting basic research on engineering construction standardization. It aims to implement the important instructions and instructions of General Secretary Xi Jinping on strengthening basic research and promote the interactive development of standardization and scientific and technological innovation. Engineering construction standardization is an important means to improve engineering quality, ensure safety and improve efficiency. With the advancement of technology and changes in market demand, standardization work needs to be continuously updated and improved to adapt to the new situation. The project goals are to improve the standard system, improve the quality of standards,

promote technological innovation, and strengthen international docking. Basic research on engineering construction standardization is of great significance to improving the industry level, promoting technological progress, and enhancing international competitiveness. Through systematic research, it will provide scientific basis and practical guidance for engineering construction standardization.

### **China Construction Metal Structure Association**

The China Construction Metal Structure Association was established in 1981. It is a national, industry-based, non-profit social organization voluntarily formed by enterprises, scientific research institutions, design units and related professionals engaged in the building metal structure industry. The association's purpose is to promote technological progress, quality improvement and sustainable development in the building metal structure industry, promote exchanges and cooperation within the industry, safeguard the legitimate rights and interests of members, and provide support for government decision-making. Its main functions include: industry services, standard setting, technical exchanges, policy recommendations and international cooperation. The association's industry management department is the Ministry of Housing and Urban-Rural Development. The association has 25 branches responsible for industry management, technology promotion, standard setting, training and exchanges in different fields. The China Building Metal Structure Association has played an important role in promoting technological progress and standardized development, standardization construction and international exchanges in China's building metal structure industry.