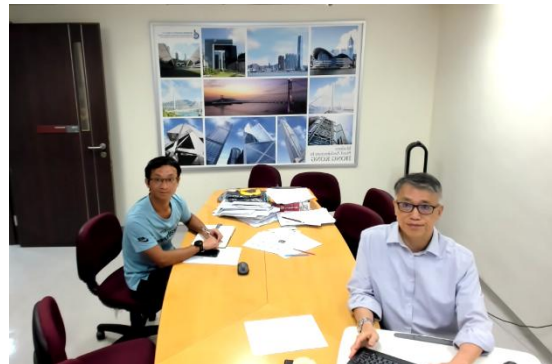


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**Mid-term review meeting on a high-level research and development project commissioned by Research Institute of Standards and Norms of Ministry of Housing and Urban-Rural Development, P. R. China 国家住房和城乡建设部 标准定额研究所**  
**2025.09.11**

Prof. K.F. Chung, Director of CNERC, and Dr. X.L. Yu, Senior Research Fellow of CNERC attended the mid-term review 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, P. R. China 国家住房和城乡建设部 标准定额研究所**. The project title is "*A comparative study on steel codes among Chinese and overseas construction industry for technical compatibility and alignment*" 《中外钢结构工程建设标准比较与互联互通研究》. It is a project under the general research theme of "Fundamental research for construction standardization 2024 工程建设标准化基础研究（2024 年）项目" of the Institute. The project is administrated by China Construction Metal Structure Association 中国建筑金属结构协会. The project principal investigators consist of:

- **Prof. Y.J. Shi**, Tsinghua University – Leading Investigator  
石永久 教授 清华大学
- **Prof. X.Y. Sun**, China Constructional Metal Structure Association  
孙晓彦 教高 中国建筑金属结构协会
- **Prof. K.F. Chung**, The Hong Kong Polytechnic University  
钟国辉 教授 香港理工大学
- **Prof. Z.M. Chen**, China Construction Science and Industry Corporation Ltd.  
陈振明 教高 中建钢构股份有限公司



The mid-term review meeting of the project was successfully held in Beijing on 11 September, 2025. The meeting was chaired by Prof. X.Y. Sun, Deputy Secretary-General of China Construction Metal Structure Association and President of the Steel Structure Division.

The meeting was officiated by

- **President Qi QU** China Construction Metal Structure Association  
曲琦 会长 中国建筑金属结构协会
- **Director Kai MAO** Research Institute of Standards and Norms,  
毛凯 处长 住房和城乡建设部 标准定额研究所



Mr. Qi QU  
President of CCMSA

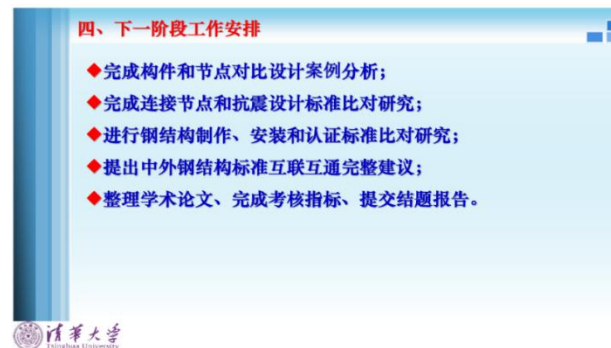
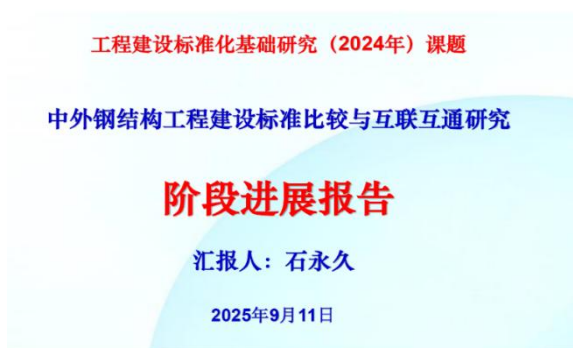


Ms. Xiaoyan SUN  
Prof. of CCMSA

The project leader, Prof. Y.J. Shi from Tsinghua University, gave a detailed and in-depth report on the research objectives and technical approaches, preliminary work and research progress, main phase achievements, and follow-up work arrangements of the project.



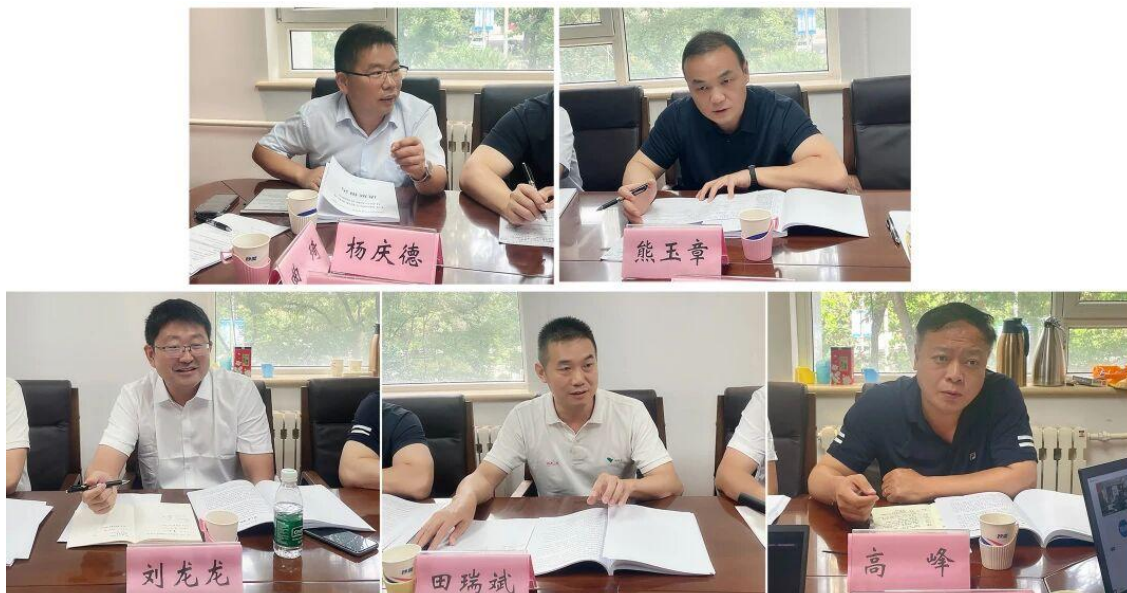
Prof. Y.J. SHI  
Tsinghua University



The principal investigator of the project, Prof. K.F. Chung from the Hong Kong Polytechnic University, made several important supplements and improvements encompassing the following issues to the project:

1. Quality control of domestic steel in terms of partial safety factor;
2. Effective design with full plasticity, and  $1.0 \times$  yield strength leading to an increased efficiency in beams;
3. Group Standard: Design of steel structures using S690 and S960 steel to EN 1993-1 is written to the EN format to allow foreign engineers to better understand Chinese practice;
4. Performance-based design on seismic resistant structures allows the use of S690 and S960 high strength steel.

The experts of the review committee then made some constructive comments.



- **Research motivation and methodology**

This project aims to review and compare the relevant standards on steel design and construction in China, the United States 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 products.

*Major tasks:*

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

- **Phase achievements**

1. Understanding technical standards for steel structures among China, the United States and Europe.
2. Literature review, enterprise visits and surveys, small-scale discussions.
3. Corporation and industry surveys.
4. Comparative analysis of standards between China, the United States, and Europe.
5. Preliminary proposals for the technical compatibility and alignment among Chinese and overseas steel codes

- **Follow-up work**

1. Completing case study on comparative design of structural members and joints.
2. Completing comparative study on connective joints and seismic design standards.
3. Conducting comparative study on steel structure fabrication, installation and certification standards.
4. Proposing complete suggestions for the technical compatibility and alignment among Chinese and overseas steel codes.
5. Publishing journal papers, completing assessment indicators, and submitting final reports.

**Research Institute of Standards and Norms of Ministry of Housing and Urban-Rural Development, P. R. China 国家住房和城乡建设部 标准定额研究所**

住房和城乡建设部标准定额研究所于 1983 年经原国家科委批准成立，为国家公益一类科研事业单位，主要承担全国工程建设标准定额的研究和具体组织编制与管理的工作，是国内唯一一家既从事工程技术标准，又从事工程经济指标研究的国家级科研单位。标准定额研究所自成立以来，工作重点一直是标准、定额及方法参数的技术管理、政策研究、重点项目编制及技术咨询服务等。

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

**工程建设标准化基础研究（2024 年）项目**

工程建设标准化基础研究项目是 2023 年首次设立的以开展工程建设标准化基础研究为主要内容的研究项目，旨在贯彻落实习近平总书记关于加强基础研究的重要指示批示精神，推动标准化与科技创新互动发展。工程建设标准化是提升工程质量、保障安全、提高效率的重要手段。随着技术进步和市场需求的变化，标准化工作需不断更新和完善，以适应新形势。项目目标为完善标准体系、提升标准质量、促进技术创新、加强国际对接。工程建设标准化基础研究对提升行业水平、推动技术进步、增强国际竞争力具有重要意义。通过系统研究，将为工程建设标准化提供科学依据和实践指导。

**China Construction Metal Structure Association 中国建筑金属结构协会**

中国建筑金属结构协会成立于 1981 年，是由从事建筑金属结构行业的企业、科研机构、设计单位及相关专业人士自愿组成的全国性、行业性、非营利性社会组织。协会的宗旨是推动建筑金属结构行业的技术进步、质量提升和可持续发展，促进行业内的交流与合作，维护会员的合法权益，为政府决策提供支持。其主要职能包括：行业服务、标准制定、技术交流、政策建议和国际合作。协会的行业管理部门为国家住房和城乡建设部，协会下设 25 个分支机构，负责不同领域的行业管理、技术推广、标准制定、培训交流等工作。中国建筑金属结构协会在推动中国建筑金属结构行业的技术进步和规范化发展、标准化建设和国际交流方面发挥了重要作用。