Questionnaire on the application of Chinese and international technical standards in international hydropower projects[1]

Project Profile

1. **Project Name：** _____
2. **The country where the project is located：** _____
3. **Whether the company has entered the market before doing the project：** ☐ Yes ☐ No
4. **The duration of the project：** _____
5. **The contract amount of the project：**

   ☐ less than $20 million ☐ between $20 million and $50 million ☐ between $50 million and $100 million

   ☐ between $100 million and $500 million ☐ more than $500 million
6. **Sources of money (Multiple Choices)：**

   ☐ Owner's own funds ☐ Owner's loan from international financial institutions

   ☐ Owner's loan from local or international commercial banks ☐ Export credit (loans from policy banks such as China Export-Import Bank)

   ☐ Owner's loan from Chinese commercial banks ☐ Intergovernmental loans or assistance

   ☐ Financing through PPP/BOT

   ☐ Contract with capital

   ☐ Others:
7. **The role of your company：** ☐ Designer ☐ Contractor ☐ Supplier ☐ Owner ☐ Consultant
8. **Your job title and position in this project：** _____
9. **How long have you been engaged in international construction projects：** _____

Are the technical standards used in this project? (Multiple Choices)

☐ ISO ☐ IEC ☐ ITU ☐ IEEE ☐ ASTM ☐ ACI ☐ ASME ☐ ASCE ☐ USACE ☐ USBR ☐ AASHTO ☐ EN ☐ BS ☐ DIN ☐ NF ☐ AS/NZS ☐ Chinese standards ☐ Others:_____

The main differences between Chinese and international technical standards and the related impacts

1. **Are there any differences between the technical standards adopted in this project and Chinese technical standards? (1= no difference, 2= small difference, 3= neither big nor small difference, 4=big difference and 5= very big differences)**

Philosophy of standards	1	2	3	4	5
Logical structure of standards	1	2	3	4	5

[1] This is part of the original questionnaire, which only contains the questions mentioned in this article

Completeness of standards	1	2	3	4	5
Application conditions of standards	1	2	3	4	5
Calculation methods	1	2	3	4	5
Construction methods	1	2	3	4	5
Test methods	1	2	3	4	5
Equipment and material requirements	1	2	3	4	5

2. **Are these Problems related to unfamiliarity with differences between Chinese and foreign standards often happen in international hydropower project delivery? (1= never happened, 2= seldom happened, 3= sometimes happened, 4= often happened and 5=always happened)**

Lack of ways to systematically learn foreign standards	**1**	**2**	**3**	**4**	**5**
Personnel could not appropriately use foreign standards	1	2	3	4	5
Incompletely understanding foreign standards	1	2	3	4	5
Poor translation of foreign standards					
Project bidding and implementation with incomplete and outdated foreign standards	1	2	3	4	5
Technically and/or financially uncompetitive design for bidding	1	2	3	4	5
Design error or defect	1	2	3	4	5
Lack of design optimization	1	2	3	4	5
Low coordination efficiency between design, procurement and construction	1	2	3	4	5
Poor constructability of designs	1	2	3	4	5
Design's low approval rate from consultants	1	2	3	4	5
Poor communication with consultants	1	2	3	4	5
Design delay	1	2	3	4	5
Technically inappropriate procurement scheme	1	2	3	4	5
Procurement scheme not cost-effective	1	2	3	4	5
Choosing inappropriate suppliers	1	2	3	4	5
Construction delay	1	2	3	4	5
Construction cost increasing	1	2	3	4	5
Poor construction quality	1	2	3	4	5
Improper construction method	1	2	3	4	5

What are your views and suggestions on the application of international engineering construction standards?

_____