

Sendai Declaration 2000

on

Infrastructure Development and Civil Engineering Technology

- Civil Engineer's Resolution -

Infrastructure is the fundamental element to ensure public safety and welfare. Since the beginning of human history to present, civil engineering technology has made significant contributions to the expansion of economic activities and improvement of living standards along with the development of infrastructure. We are proud that the country has developed infrastructures rapidly than anywhere else in the world after the World War II, that it has made a great effort to overcome the problems due to a fragile land of the country, and that a number of civil engineers in field, laboratory and others have contributed to the enhancement of human welfare and have strived to build communication with the general public.

However, as it is continuously advanced and diversified into other forms of engineering, civil engineering technology has happened to make more sever and complicated influences upon not only the environment, but also the human society. Meanwhile, civil engineers have not gained the public's full understanding of their social and historical contributions and responsibilities for infrastructure improvement; as a result, they have faced criticism for failing to respond to the public's needs.

Japan Society of Civil Engineers (JSCE), consisted of civil engineering practitioners, researchers and others affirmed its noble mission and tremendous responsibility to the society and announced "the Beliefs and Principles of Practice for Civil Engineers" in March 1938. This was the first ethical code announced ever by a professional engineering society in Japan. It was a statement of civil engineers that they should be the persons of wisdom and highest integrity, who employ their expertise and skills to harmonize between the environment and human community.

Also, in May 1999, JSCE revised the above code and established the "Code of Ethics for Civil Engineers," which defines civil engineer's professional conducts and describes the integrity, honor and dignity of the civil engineering profession. Clause 4 states that a civil engineer shall "perform civil engineering work from a broad perspective based on his/her specialized expertise and experience regardless of his/her organizational affiliation." Clause 14 advises that a civil engineer shall "actively explain the significance and role of his/her own work and respond sincerely to any criticism of such explanation. Further, evaluate objectively the work completed by himself/herself and by others, and express positively individual opinions."

Being aware of the public's demand for reconsideration of further infrastructure developments, JSCE responded to it by issuing this Sendai Declaration 2000: It, containing the Society's philosophy, mission and strategies to enhance the welfare of society, was a pledge to enforce the Code of Ethics among civil engineering professionals.

A Civil Engineer shall:

(Significance of Infrastructure Development)

1. Engage in building, maintaining and utilizing infrastructures to create "a beautiful national land," "a safe and comfortable life," and "a prosperous society."

(Principle 1 - Harmonization with Nature and Sustainable Development)

2. Respect the nature while giving the highest priority to the safety, welfare, and health of generations today and in the future, and shall endeavor to preserve and work with nature and the global environment for the sustainable development of mankind.

(Principle 2 – Respect for Regionality)

3. Give due respect for regionality, and encourage a local community to govern itself in accordance with its own characteristics without forcing a standardized strategy for development on it.

(Principle 3 - Respect for Historical Heritage and Tradition)

4. Show due respect for historical, archeological and cultural heritage, local characteristics, culture, climate and tradition and also promote new cultures and civilizations.

(Strategy 1 - Communication and Accountability to the Public)

5. Acknowledge their professional responsibility for infrastructure development and build communication with the public in order to acquire its understanding and support and to fulfill accountability for their duties and services to the public.

(Strategy 2 – Clarification of Visions and Plans)

6. Define medium and long-term visions for national and local developments and take initiative in mapping out the directions toward these visions.

(Strategy 3 – Introduction of Time Management Concept)

7. Introduce the time management concept in all stages of infrastructure project development, from planning to operation, taking into account the opportunity losses of delayed projects and the benefits of early completion.

(Strategy 4 - Fair Evaluation and Competition)

8. Strengthen interdisciplinary and internationally competitive technologies and human resources, improve JSCE Civil Engineers' Qualification System, and promote competitive selections between individual engineers and between organizations on the basis of fair and just evaluation of skill, expertise and creativity.

(Strategy 5 – Technical Development for Infrastructure Development)

9. Improve their professional skills, knowledge and competence on a continuing basis. In particular they shall exert all efforts to improve their performance of project management, cost saving, development of new technologies including recycling ones to contribute to the benefits of the global community.

Japan Society of Civil Engineers shall:

In pursuance of the aforesaid purpose, offer suggestions for further improvements of institutions, systems and other rules concerning infrastructure development and give all possible assistance to maintain and advance civil engineers' skills, knowledge and competence. .

(Promulgated on November 22, 2000 by the Board of Directors, Japan Society of Civil Engineers)