# Initiatives on creating the original plan for building-related technical standards

ANDO Koji, Head IWATA Yoshihiro (Ph.D (Engineering)), Senior Researcher KABEYASAWA Toshikazu (Ph.D (Engineering)), Senior Researcher USUI Hiroyuki ,Researcher (\*\*) Standards and Accreditation System Division, Building Department

(\*) Position and post as of the end of December, 2014

(Keywords) Buildings, technical standards

### 1. History

Technical standards pertaining to the securing of safety in buildings are established in the Building Standard Act, however, based on the progress in investigative research and technology development and the lesson imparted by disasters etc., it is also necessary to appropriately review these building-related technical standards when required.

As a result, to push forward standardization systems based on the result of the research and building standards maintenance promotion businesses at NILIM (Ministry of Land, Infrastructure, Transport and Tourism Housing Bureau subsidized project: the nation sets investigative issues related to the maintenance of building standards, projects whose investigation costs are subsidized to the business entities selected from a public offer), the Building Structure Standards Committee (Chairman: Tetsuo Kubo, Professor emeritus at Tokyo University, fiscal 2011 -) and the Building Fire Prevention Standards Committee (Chairman: Makoto Tsujimoto, Professor at Science University of Tokyo, 2012-) will be installed inside NILIM, and with the input from outside expert opinions, a system to create the original plan for technical standards will be structured.

As well, by setting up "contact points" through collaborations with related organizations, we will support proposals for the maintenance/review of standards from the wider public sector with the aim of advancing/rationalizing the technical standards.

## 2. Building Structure Standards Committee/Building Fire Prevention Standards Committee

Based on the lessons learned from the Great East Japan Earthquake, the Building Structure Standards Committee has been involved in creating original plans of technical standards pertaining to the structural standards of tsunami evacuation buildings and ceiling collapse countermeasures, and in fiscal 2014, conducted examinations into the countermeasures of long-period earthquakes.

The Building Fire Prevention Standards Committee, based on the results of full-scale fire tests implemented on three-story wooden schools during fiscal 2011 to 2013, has been examining the reviews of fire-prevention standards pertaining to wooden buildings, and on June 2014, conducted related revisions to the Building

Standard Act. In fiscal 2014, examinations of the original plan for the following standards (government ordinances/notifications) were conducted towards the enforcement of the revised laws in June 2015.

- (1) Standards related to large-scale wooden buildings whose total area exceeds 3,000 m² (Law Article 21 Clause 2)
- (2) Standards related to three-story wooden schools etc.

#### 3. Contact point

Contact points are communication points where proposals are received from private businesses etc. regarding reviews for technical standards based on the Building Standard Act (simple regulations) and the preparation of new standards, and regarding the accepted proposals, NILIM will conduct examinations from a technical standpoint with assistance from the Building Research Institute (Figure). In fiscal 2014, replies for the examination reports of nine proposals including the positioning of ETFE film as a designated construction material, and the expansion of applicable steel materials pertaining to fire-resistance structure authorizations were sent out (as of the end of January 2015).

Opened on (General Incorporation Foundation) the Information Center for Building Administration homepage: <a href="http://www.icba.or.jp/cp/cp\_top.html">http://www.icba.or.jp/cp/cp\_top.html</a>

### 4. Future works

Taking into consideration trends in the Panel on Infrastructure Development, we will continue to examine maintenance/reviews of technical standards according to progress in investigative research and technology development.

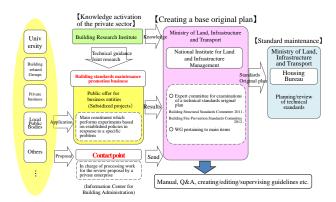


Figure: Examination system of building-related technical standards