

Worldwide Check list toward the maintenance of the infrastructure

-Asset Management International Standard ISO55000-

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1. Introduction

“One of the typical cases is, whether or not there exists a framework that the Top can make an optimization decision anyhow when the budget was not sufficient due to financial reason though a large scale repair was required technically.” Specialists in various fields in various countries have announced his/her opinion one by one to the question raised by the Chairman.

First of all, what is the main task of the organization that manages large infrastructures? Operation of making the Asset Management International Standard ISO55000 is now coming to the last stage.

2. Task submitted to the infrastructure management in our country

Great east Japan earthquake disaster and gigantic Tsunami have asked us a question how it should be the social risk management including infrastructure and it has made clear again Japan’s weak point commencing with the energy.

While the financial situation goes down, veterans that have made a concept, created and managed it are retiring, staff number is reduced and the facility gets older, what goes on more and more is the situation necessitated to meet complicated social requirements, global address and speed-up.

2. Current of global infrastructure management

As for the infrastructure business in various fields, various management methods and management entities have been implemented in respective countries in the world as trial due to difficulty in finance and so on and there have been also implemented bold trials and errors in order to promote the service more effectively. In the 80s, USA have got to schematic maintenance management after having passed through the “devastated America,” England has practiced the Thatcherism such as privatization and New Zealand and Australia have adopted the new public management NPM that has

introduced the civilian method and the like. By country and field, experiences of various entities have been collected and discussions have been made so as to make a common index on how to implement management. Some countries have further continued discussion by cross-fields to make a common index on the essential items to recognize what should be done by the infrastructure management organization first of all. Typical case is the PAS55 issued by the British Standards Institution (BSI), which is more and more applied globally.

On 2009, based on the above, England has made a proposition to establish a new international standard called “Asset Management (AM)” to the ISO. After having had the London preparative meeting on June 2010, draft making committee ISO/PC251 has started under approval of the ISO Board of Directors and first assembly was held in Melbourne on March 2011. Experts of various fields and titles have joined there from a dozen of countries and organizations in the world, and from Japan, as the Asset Management discussion had started already in another ISO committee (water and sewage field), three members such as the Professor SAWAI Katsunori of the Kyoto university, MIZUTANI Tetsuya of the Asset Management Strategy Department of Sendai city and I myself have joined. As the result of the big discussion in the first round five days, it was decided to make a draft of the International Standard ISO55000 series to be issued in three years to regulate what should be done aiming at whatever infrastructure management organization regardless of public or private. In the airplane of coming back, we three members have made a sigh “It’s awful, we can’t deal with at all!” emerged not knowing what to say.

Toward the fourth assembly in Prague on May 2005, some dozens of members continue integrated discussions by Working Group every time to deal with opinions submitted by respective countries. Through the Work Draft WD, Committee Draft CD, opinions from

respective countries to the Draft of International Standard DIS are settled in the fifth assembly in Calgary from 29 April to 3 May, and through the definitive vote and preparation period in respective countries, it is scheduled to make effective the Standard in 2013 spring. To the present, roughly 50 experts in various fields in 20 countries have brought in their experiences, made discussions during twenty days only in the meetings, worked out, written the draft once, twice and erased every time. AS for the standard for the judge to certify it, DIS was fixed, after a big discussion, in the CASCO/WG39 first round Geneva assembly at the end of February. (Member of Japan: HORIE)

3. Outline of the Asset Management International Standard

“Asset” mentioned here means, commencing with the infrastructure resource, human resource, money, information, that is to say, various properties that the organization is able to have are included. Whole action of the organization to realize the value of the asset is called as the “Asset Management (AM),” through that the organization make a balance of the cost, risk and benefit fairly well. For that purpose, it is required to establish the AM target, policy and strategy plan along the organization target and needs of various related parties, then make a decision from both aspects of the technology and finance so as to practice this plan effectively and do monitoring in order to improve continuously on also controlling the related risk. And deciding factor is the leadership and office culture.

Combination of various factors in order to establish the policy, target and process is called as the “Management system (AMS)” by which the organization implements interactive operations. Not a simple information system, but a combination of the organization structure, function, responsibility, operation process, planning and management and so on.

The whole body is composed of three standards as described below; ISO55001 is the one that should be absolutely practiced at least to achieve effective AMS, and 02 is that description.

- 55000 “Outline, definition”: 1 Scope of application, 2 Rule, 3 Definition and reference
- 55001 “Requirements”: 1 Scope of application, 2 Reference standards, 3 Definition, 4 Organization status recognition (Needs of interested parties, AM system), 5 Leadership (Responsibility, policy, target), 6 Plan (Risk and occasion) 7 Execution support system (Various management resource,

information), 8 Business practice, 9. Results evaluation, 10 Continuous improvement and referential documents

- 55002 “Guideline for application” (Description)

Note that the risk management shall basically follow the ISO31000 Risk Management.

4. After having joined the draft making

I have so many things to make a sigh about from experiences to have engaged in the management and renovation in several official entities in Japan after having joined in the committees and WG making operation since the first round Melbourne assembly.

To meet various situations, whole states of its own facility and organization are correctly recognized everyday? Action and information in respective divisions are functioning all together? Is the plan backed up by the financial and technical strength? Is the top-down operation functioning to the task that needs swift decision and practice? (Doesn't it take too much time to continue discussion and do arrangement for everything?) Is the address policy determined to needs of every related party respectively?

Stock management can be achieved only when there was the management of the whole organization to realize it.

While various restrictions become much more harder in the drastic change of the circumstance, what is required for the leadership to swiftly make the overall optimization is that the role sharing that the responsibility is clear as well as the constant framework review based on the internal and external audit, evaluation and results are daily practiced.

Sendai city has first recognized the utility and significance of the asset management from the Australian survey to review the long-term investment several years ago, it has soon assembled a dedicated group by five members so as to begin introductive operation. It has taken a fresh look at the operation and constructed the information support system. At the time of the large earthquake disaster, it has displayed and shared various data of a channel made available by one mouse click on the GIS, which has brought an extraordinary effect on the disaster injury survey and emergency action on receiving the support team from foreign cities, together with the concept sharing through discussions with respective segments that were made for the introduction. I myself had, in the midst of dealing with the guerrilla heavy rain disaster, explosion disaster, road collapse and fare raise, an acute feeling for the necessity of making the

management policy of the department that has made clear the risk management, information and publicity strategy and long-term finance plan from the way of thinking, not but stop and think every time. In such an aspect, I consider this time standard as just the essence of what should be done including the above and think that various discussions based on experiences in respective countries are a very hard study for me, always troubled with the English wall.

5. To finish

Sorrowful accident has triggered the practice of overall check on facilities by various management entities. And next, what is needed is the one step advanced objective check on the entire management method. Begin with a simple check first, and with the speedy improvement on whatever that can be realized earlier, toward the overall check.

And finally hoped for is a day that Japan presents various successful cases at the next generation PC251 and reflects them on the global standards.

(From 2011 - ISO/PC251 Japan Judge Member)