

## Strengthening of the Cooperative Framework for ANENT

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### 1. Introduction

The Asian Network for Education in Nuclear Technology (ANENT) was established in February 2004 to promote nuclear education and training in Asia. Initially ANENT member countries cooperated with 5 group activities encompassing broad areas. As of 2006, the cooperative framework was strengthened in a way to focus on web-based nuclear education and training for a period of several years to come. In this context, the Nuclear Training Center (NTC) of KAERI has contributed, in particular, to the development of the ANENT web-portal including a cyber platform, and making available relevant courses and materials on the web-portal.

This paper discusses details of the strengthened cooperative framework in terms of NTC's effort for realizing web-based education and training through regional networking.

### 2. Initial Approach

Initially the ANENT formulated 5 group activities to cover its specific objectives, namely 1) web-based information and material exchange, 2) exchange of students and teachers, 3) distance learning, 4) establishment of reference curricula and mutual recognition of degrees and qualifications, and 5) liaison and out reach [1].

The NTC took responsibility for coordinating the group activity on web-based information/material exchange, for which the ANENT web-portal was developed. Major functions of the web-portal included database on information of nuclear education and training systems in ANENT member organizations, group activities, and cyber platform (a draft version). While, Vietnam coordinated to draft a reference curricula for master degree course in nuclear engineering.

### 3. Strengthened Framework

The cooperative framework with the initial approach lasted for about 3 years before being strengthened. The framework covered rather broad areas, for which making progress in parallel during the initial period was rather difficult. Therefore, there was a need to strengthen the

initial cooperative framework in view of focusing on higher priority activities, the establishment of soft infrastructure of ANENT members, and promoting better interactions between sub-activities involved. This led the ANENT to focusing on web-based nuclear education and training for a period of several years to come from 2007, while maintaining the initial group activities as basis. The new framework deals with further development of the ANENT web-portal, and the establishment of open and approval courses as shown in Fig. 1, by means of interactive mechanisms including, meetings, expert missions, fellowships as well as joint development and operation of new cyber courses.

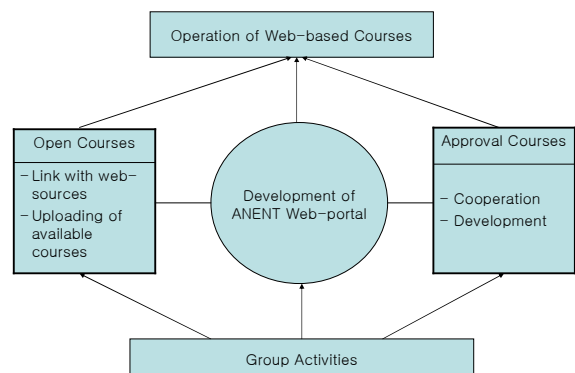


Fig. 1. The strengthened cooperative framework

### 4. Web-based System Development

The NTC's effort for the group activity of web-based information and material exchange including development of the ANENT web-portal provided good basis for strengthening the cooperative framework [2]. Further, the group activity continues to play an important role for the strengthened cooperative framework through providing web-based tools, collecting existing courses and materials, and coordinating with different activities within ANENT and IAEA as well for making relevant courses available on the ANENT web-portal.

The ANENT web-portal [3] has been developed to provide relevant information using database, facilitate the

group activities and support operation of cyber courses [4] as described in Fig.2. The nuclear education and training database was designed to upload and search information on faculty and course of ANENT member organizations, and currently provides information on 22 organizations with 943 subjects/courses. The function for group activities was designed to provide each activity with a room for information exchange and storage within the group, and now offers for instance 79 presentation materials from the activities. The cyber learning function or cyber platform was designed to provide a learning management system for multi-course operation enabling diverse delivery types (i.e. on-line, off-line and blended) and course types (i.e. open and approval). The platform is under review for improvement.

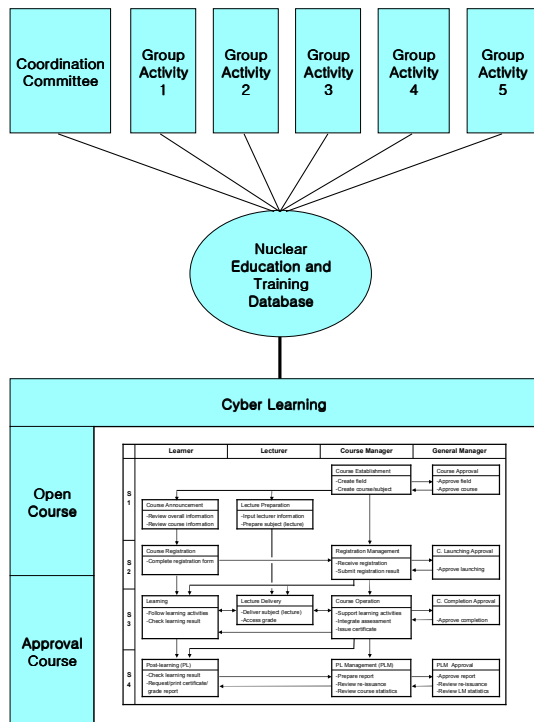


Fig. 2. The ANENT web-portal system

Collection of existing course materials is under way in cooperation with the Philippines. Then, the collected materials will be classified and selected before their conversion (in case of printed materials) and uploading onto the ANENT cyber platform as open courses. The collection began with materials from IAEA but is to be expanded to cover those from ANENT member countries. According to a survey undertaken as part of the collection

activity, a lot of course materials are available on different web-sources. The web-sources will be linked to the ANENT web-portal so that users can have a convenient and systematic access to nuclear education and training courses through the ANENT open course list.

Cooperation with IAEA officers in charge of technical areas relevant for ANENT courses is undertaken in order to bring their courses and materials in the portal to become ANENT cyber courses in the form of approval course. Examples of such courses are energy planning, plant life management, nuclear medicine, radioactive waste management and knowledge management. Another type will be courses created by ANENT. For this, a group of ANENT members is preparing a nuclear engineering course for master degree, while another group will deal with courses for non-power area.

## 5. Conclusion

The initial cooperative framework for the ANENT was strengthened as of 2006 in view of focusing on higher priority activities, the establishment of soft infrastructure of ANENT members, and promoting better interactions between sub-activities involved. This led the ANENT to focusing on web-based nuclear education and training for a period of several years to come from 2007, while maintaining the initial group activities as basis.

The NTC's effort provided good basis for strengthening the cooperative framework, and continues to play an important role for the ANENT through providing web-based tools, collecting existing courses and materials, and coordinating with different activities within ANENT and IAEA as well for making relevant courses available on the ANENT web-portal.

## References

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