![ANSN - Asian Nuclear Safety Network]

Generic Action Plan for Establishing the Regional Capacity Building System in Asia

- *Implementing and Achieving the Vision for the ANSN by the Year 2020 -*

(DRAFT)

April 2010

Capacity Building Coordination Group
Asian Nuclear Safety Network

EXECUTIVE SUMMARY

The Asian Nuclear Safety Network (ANSN) was launched in 2002 to pool, analyse and share information, new knowledge and practical experiences in nuclear safety in Asia. Asia is the region most actively embarking on or expanding nuclear power programmes. As a result, the ANSN is expected to continue to function as a platform for facilitating sustainable regional cooperation in strengthening capacity building and infrastructure development. To achieve this aim, the ANSN will continue expanding and enhancing human networks and establishing dynamic and interactive IT networks among nuclear safety specialists in the region.

In 2009, the ANSN entered a new era of cooperation. At the second meeting of the ANSN Nuclear Safety Strategy Dialogue in April 2009, ministers and senior officials responsible for nuclear safety expressed their high-level guidance, commitment and support in the paper entitled '***The Vision for the ANSN by the Year 2020***" (Vision 2020). At the 10th Steering Committee meeting in October 2009, the establishment of the Capacity Building Coordination Group (CBCG) was approved. The purpose of this new group was to coordinate and monitor the Topical Groups' (TGs) activities towards achieving the Vision 2020, in particular to develop the regional capacity building system in Asia.

Capacity Building is an integrated approach to developing and continuously enhancing the human, scientific, technological and managerial competence and the organizational, institutional and national capabilities needed for achieving and sustaining high levels of nuclear safety and security. The ANSN will become a leading regional model for enhancing the capacity for Capacity Building in Asia by implementing and achieving the Vision 2020.

The promotion of horizontal interaction between the IAEA and ANSN Member States is crucial to strengthening the capacity for Capacity Building in Asia. Enhancing mutual learning, coordination and cooperation among the relevant stakeholders is fundamental for implementing this horizontal interaction. Moreover, the virtual interactive network and face-to-face cooperative activities among the ANSN education and training centres of Member States, technical and scientific support organizations (TSOs) and experts community will effectively and efficiently strengthen the capacity for Capacity Building in Asia under the strategic guidance of the ANSN Nuclear Safety Strategy Dialogue (NSSD), technical supervision of the Steering Committee (SC), effective horizontal coordination of the Capacity Building Coordination Group (CBCG) and vertical involvement of Topical Groups (TGs). The strengths and expertise of the ***Network of Capacity Building Centres in Asia***, the International Capacity Building Centre of the IAEA, the activities conducted among TSOs (***the Virtual TSO***) and the nuclear safety ***Experts Community in Asia*** will combine their efforts to form the Regional Capacity Building System in Asia.

A state of the art IT technology-based knowledge sharing mechanism is pivotal to ensuring effective and efficient implementation of the mutual learning, coordination and collaboration activities in Asia. The ANSN website will need to accommodate a dynamic and interactive IT-based knowledge network in Asia. This ***Capacity Building IT Module*** will be composed of:

(1) a well-organized e-library where nuclear safety related knowledge and information will be shared virtually among experts in the ANSN Member States for self-learning and for training courses. Also, new and creative knowledge will be uploaded in a sustainable fashion (***e-library***);

(2) a database of experts who have competence in and are willing to make contributions to the ANSN activities for regional capacity building in Asia (***Experts Pool Database***);

(3) virtual communication through sufficiently high-speed internet connections by way of the ANSN website and via videoconference infrastructures in ANSN Member States organizations (***Internet and Video Network Communication***);

(4) systematic online planning of the ANSN activities based on the analysis of the current status, identification of the needs and priorities for further assistance, and planning ANSN national and regional activities, upon request, with timely clearance of these requests, taking into account identification priorities (***Online Planning System***).

The *Network of Capacity Building Centres in Asia*, the *Virtual TSO* and the *Experts Community in Asia*, using *Capacity Building IT Module*, will sustainably and timely provide ANSN Member States with supporting activities to respond to specific national and regional needs (***Solution Support Service***).

It is envisaged that the ANSN immediately takes concrete actions to integrate the key components mentioned above into a dynamic and interactive system for enhancing capacity for Capacity Building in Asia, i.e. the ***Regional Capacity Building System in Asia***. A generic action plan sets the target dates to establish the *Regional Capacity Building Centres in Asia*, the *Virtual TSO* and the *Capacity Building IT Module* by 2012. The *Regional Capacity Building System in Asia* will be fully operational from 2012 and will operate sustainably as the dynamic and interactive knowledge network in Asia from 2013.

ANSN, as a model for the regional network, will play a leading role in its outreach activities with the global and other regional nuclear safety networks. Cooperation among the global and regional nuclear safety networks (e.g. Global Nuclear Safety and Security Network (GNSSN), ANSN, Ibero-American Network (FORO), the newly created Forum of Nuclear Regulatory Bodies in Africa (FNRBA), and the Arab Network of Nuclear Regulators (ANNuR)) will be mutually beneficial for promoting capacity building activities as a network of networks.

Finally, sufficient support and commitment from ANSN Member States are indispensable for the implementation of the generic action plan and effective full achievement of the Vision for the ANSN by the Year 2020 and, inter alia, for the development of the *Network of Capacity Building Centres in Asia* and *Virtual TSO*.

CONTENTS

1. INTRODUCTION

The Asian Nuclear Safety Network (ANSN) was launched in 2002 to pool, analyse and share information, new knowledge and practical experiences in nuclear safety in Asia. Asia is the region most actively embarking on or expanding nuclear power programmes. As a result, the ANSN is expected to continue to function as a platform for facilitating sustainable regional cooperation in strengthening capacity building and infrastructure development. To achieve this aim, the ANSN will continue expanding and enhancing human networks and establishing dynamic and interactive IT networks among nuclear safety specialists in the region.

In 2009, the ANSN entered a new era of cooperation. At the second ANSN Nuclear Safety Strategy Dialogue meeting in Seoul, Republic of Korea, ministers and senior officials responsible for nuclear safety expressed their high-level guidance, commitment and support in the paper entitled ***Vision for the ANSN by the Year 2020*** (Vision 2020). The Steering Committee (SC) was charged with implementing the Vision 2020. Following the result of the SC meeting held 12–14 May 2009 in Yogyakarta, Indonesia, the ANSN Topical Groups (TGs) developed their work plans for 2010 and 3-year midterm planning, taking into account the Vision 2020.

The establishment of the Capacity Building Coordination Group (CBCG) was approved at the 10th Steering Committee meeting in October 2009 in Singapore. The purpose of the new group was to coordinate and monitor the Topical Groups' (TGs) activities towards achieving the Vision 2020, in particular to develop the regional capacity building system in Asia.

The CBCG developed a generic action plan which provided a roadmap to implement and achieve the Vision 2020. The Nuclear Safety Strategy Dialogue at its 3rd meeting, Yogyakarta, Indonesia, 22–23 April 2010 recognized the importance of the generic action plan and renewed ANSN Member States' strong commitment to taking necessary actions for its implementation and tasked out the Steering Committee for further technical details and practical implementation actions.

2. CONCEPT OF REGIONAL CAPACITY BUILDING SYSTEM IN ASIA

Capacity Building is an integrated approach to developing and continuously enhancing the human, scientific, technological, and managerial competence and the organizational, institutional and national capabilities necessary for achieving and sustaining high levels of nuclear safety and security. In capacity building action plan, five means and resources should be employed, inter alia, Safety Standards and Security Guidelines; Knowledge networks; Education and Training; International Instruments; and Peer review and Advisory (Fig. 1).

Fig. 1: Enhancing Capacity for Capacity Building
— *From Vertical to Horizontal Interaction* —
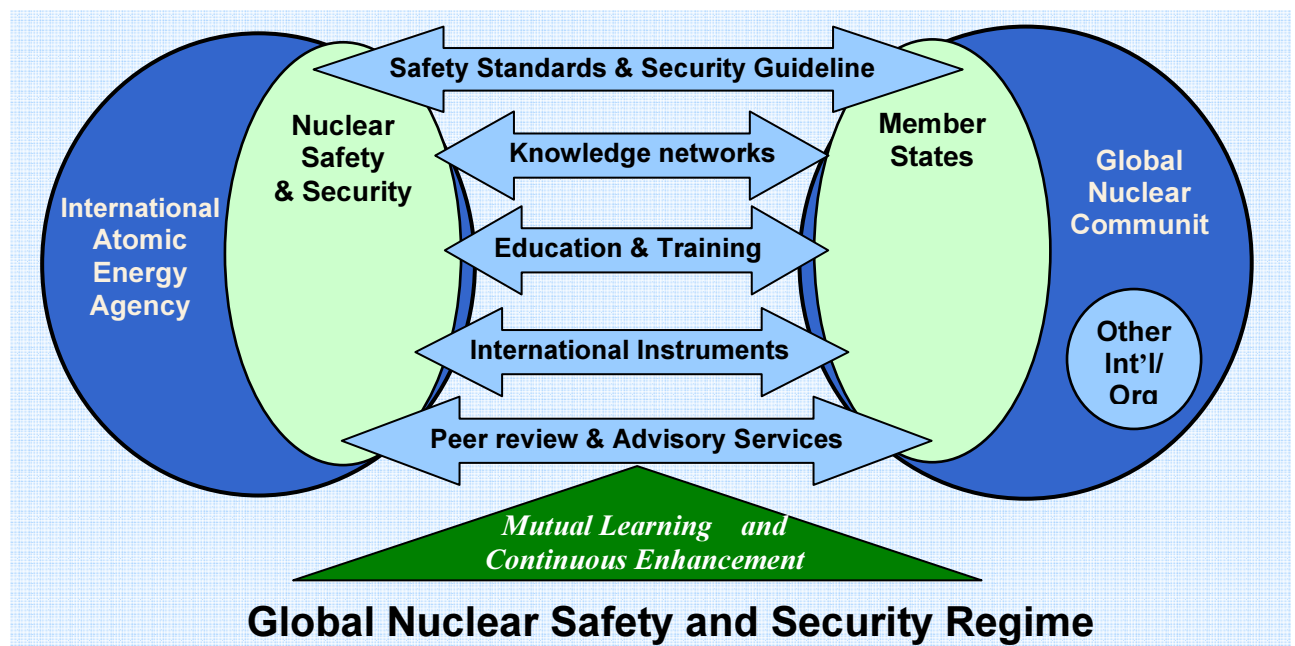
International Atomic Energy Agency

Nuclear Safety & Security

Member States

Global Nuclear Communit

Other Int'l/ Org

Safety Standards & Security Guideline

Knowledge networks

Education & Training

International Instruments

Peer review & Advisory Services

Mutual Learning and Continuous Enhancement

Global Nuclear Safety and Security Regime

The promotion of horizontal interaction between the IAEA and ANSN Member States is crucial to strengthening the capacity for Capacity Building in Asia (Fig. 2). Enhancing mutual learning, coordination and cooperation among the relevant stakeholders is fundamental for implementing this horizontal interaction. Moreover, the virtual interactive network and face-to-face cooperative activities among the ANSN education and training centres of Member States, technical and scientific support organizations (TSOs) and experts community will effectively and efficiently strengthen the capacity for Capacity Building in Asia under the strategic guidance of the ANSN Nuclear Safety Strategy Dialogue (NSSD), technical supervision of the Steering Committee (SC), effective horizontal coordination of the Capacity Building Coordination Group (CBCG) and vertical involvement of Topical Groups (TGs). The strengths and expertise of the *Network of Capacity Building Centres in Asia*, the International Capacity Building Centre of the IAEA, the activities conducted among TSOs (*the Virtual TSO*) and the nuclear safety *Experts Community in Asia* will combine their efforts to form the Regional Capacity Building System in Asia. (Fig. 3) With a comprehensive strategy to be implemented for enhancing the capacity for Capacity Building in the Asia, i.e. the Vision for the ANSN by the year 2020 (Vision 2020), the ANSN will become a leading model for enhancing the capacity for Regional Capacity Building in Asia.

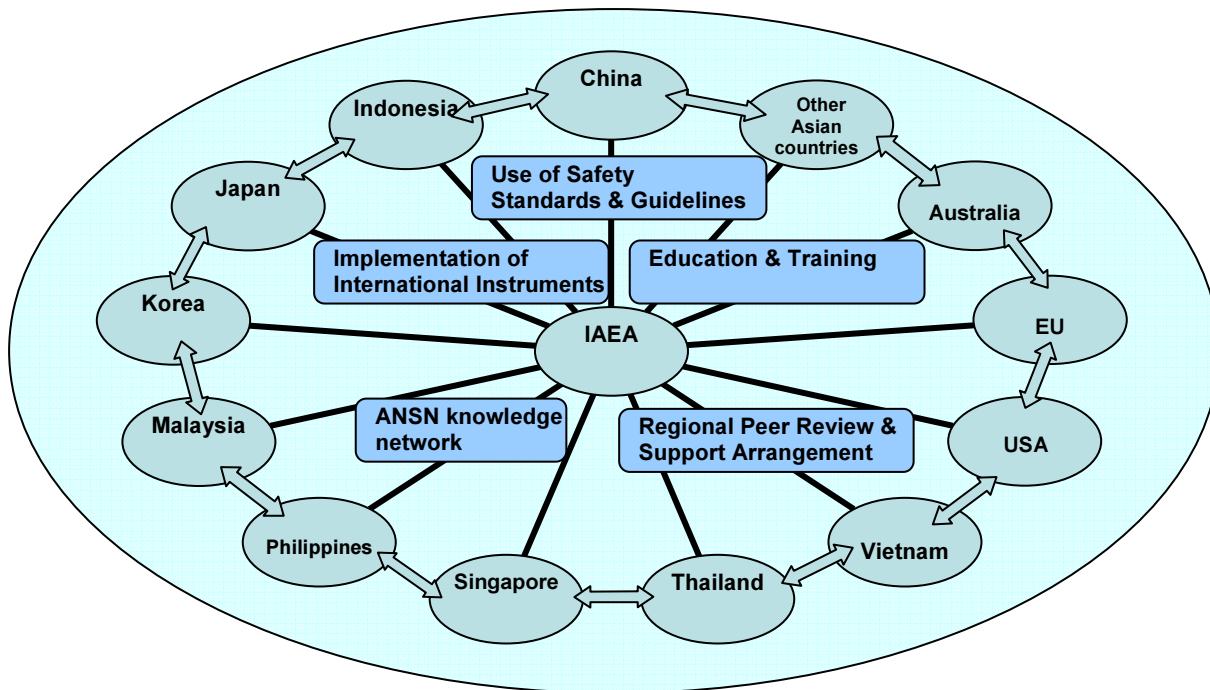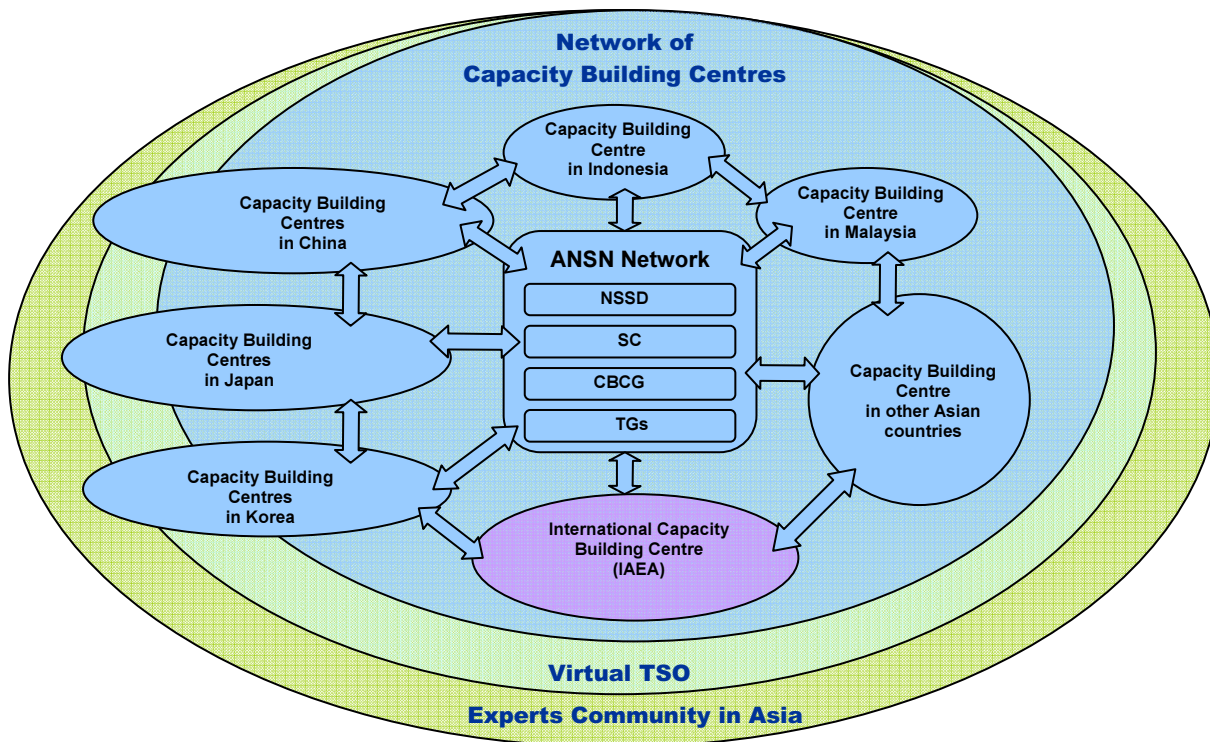**Fig. 2: Horizontal Interaction between ANSN Member States and IAEA**

Fig. 3: ANSN as a Leading Model for Regional Capacity Building

Education and Training for transferring 'Established Common Knowledge' is a basis for capacity building at individual and scientific & technical levels. However, in addition, knowledge necessary for Problem Solving and Solution Support requires broader capacity building at organizational and institutional level including 'Customised Specific Knowledge' and 'New & Creative Knowledge'.

The *Network of Capacity Building Centres in Asia*, complimenting the *Virtual TSO* and the nuclear safety *Experts Community in Asia* will be expected to respond to specific national and regional needs and problems (***Solution Support Service***) (Fig.4).

Fig. 4: Solution Support Service
— *Mechanism Facilitating Mutual Learning and Coordination and Collaboration* —
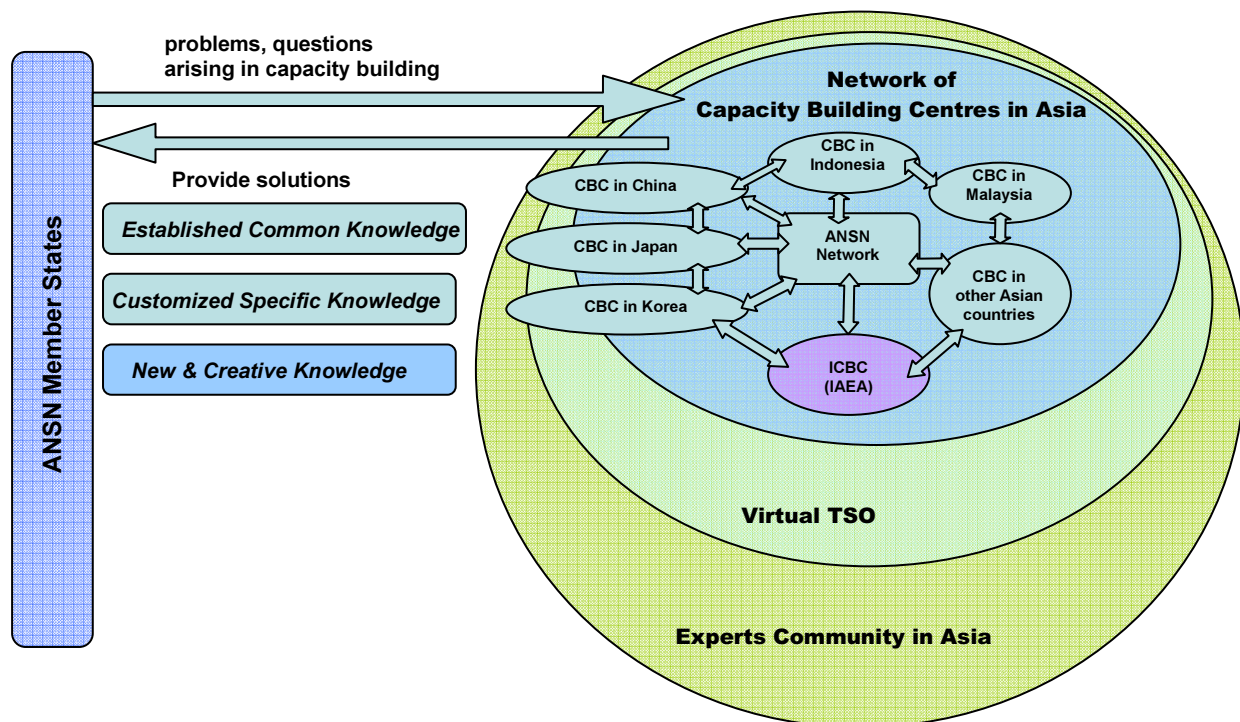
A state of the art, IT technology based, knowledge sharing mechanism is pivotal to ensuring effective and efficient implementation of the mutual learning, coordination and collaboration activities in Asia. The ANSN website will need to accommodate a dynamic and interactive IT-based knowledge network in Asia.

This ***Capacity Building IT Module*** will be composed of:

(1) a well-organized e-library where nuclear safety related materials are virtually shared among experts in the ANSN Member States for self-learning and for training purposes. New and creative knowledge will be sustainably uploaded (***e-library***);

(2) database of experts who have competence in and are willing to make contributions to the ANSN activities for regional capacity building in Asia (***Experts Pool Database***);

3) virtual communication through sufficiently high-speed internet connections through the ANSN website and via videoconference infrastructures in ANSN Member States organizations (***Internet and Video Network Communication***);

4) systematic online planning of the ANSN activities based on analysis of the current status, identification of the needs and priorities for further assistance and planning ANSN national and regional activities, upon request, with timely clearance of those requests, taking into account identification priorities (***Online Planning System***).

Fig. 5: Capacity Building IT Module

— Strengthening and Expanding IT and Human Network in Asia —
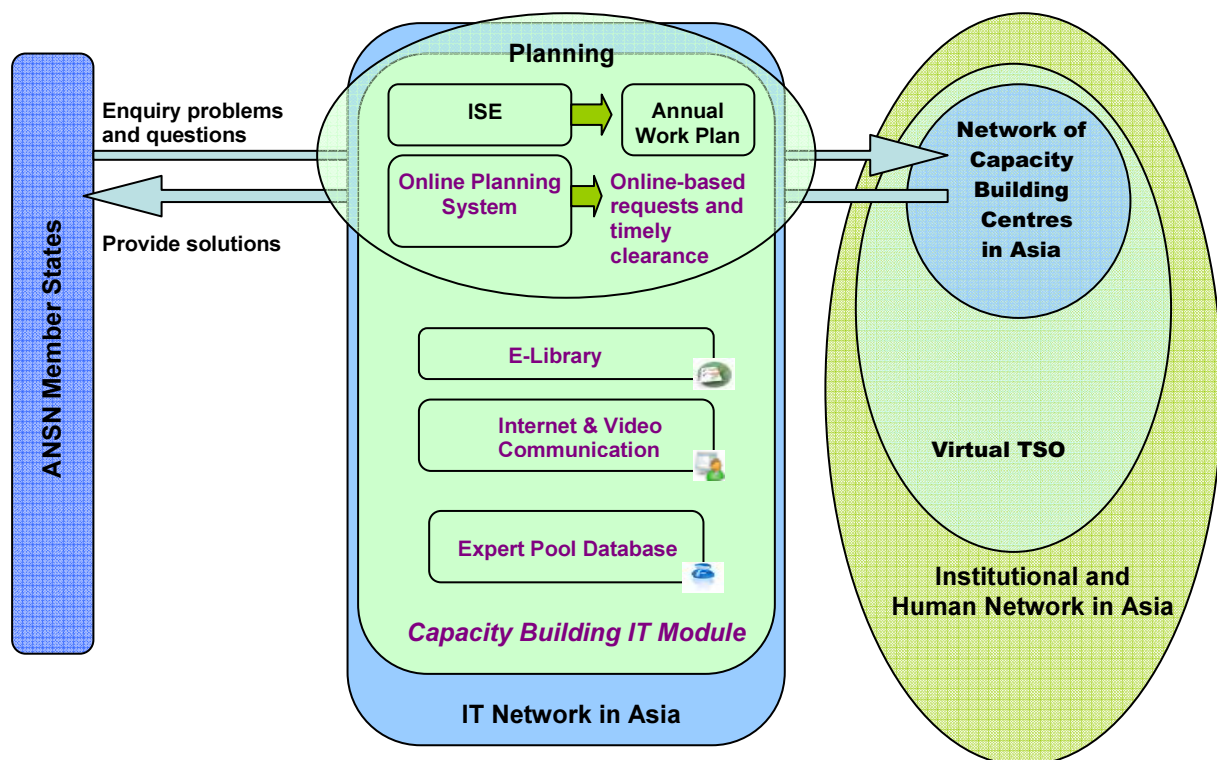

The *Network of Capacity Building Centres in Asia*, the *Virtual TSO* and the nuclear safety *Experts Community in Asia* with full use of the *Capacity Building IT Module* will sustainably and timely provide ANSN Member States with a *Solution Support Service*. To respond to the increasing needs of developing national and regional infrastructures in the ANSN Member States, they will need to support ANSN Member States for properly and sustainably applying and using the IAEA Safety Standards and Guidelines and implementing the International Instruments. It is envisaged that the ***Regional Peer Review and Support Arrangement*** will also be provided in full reliance on the *Experts Pool Database* and in support of existing education and training centres and TSOs in the region. The focus of the Arrangement will be to ensure that the current practices of safety evaluation and legislative and regulatory framework and institutional capacities of the ANSN Member States are continuously improved.

Moreover, for pursuing the Regional Capacity Building in Asia as an efficient and effective system, the outcome of the ANSN activities will need to be regularly evaluated by the

Steering Committee in support of the Capacity Building Coordination Group (CBCG) and the results of this evaluation will be fed into the planning system.

The ANSN needs to take concrete actions to integrate the key components mentioned into a dynamic and interactive system for enhancing capacity for Capacity Building in Asia, i.e. ***Regional Capacity Building System in Asia*** (Fig. 6).

Fig. 6: Regional Capacity Building System in Asia
— Dynamic and Interactive System for Planning, Implementation and Feedback —
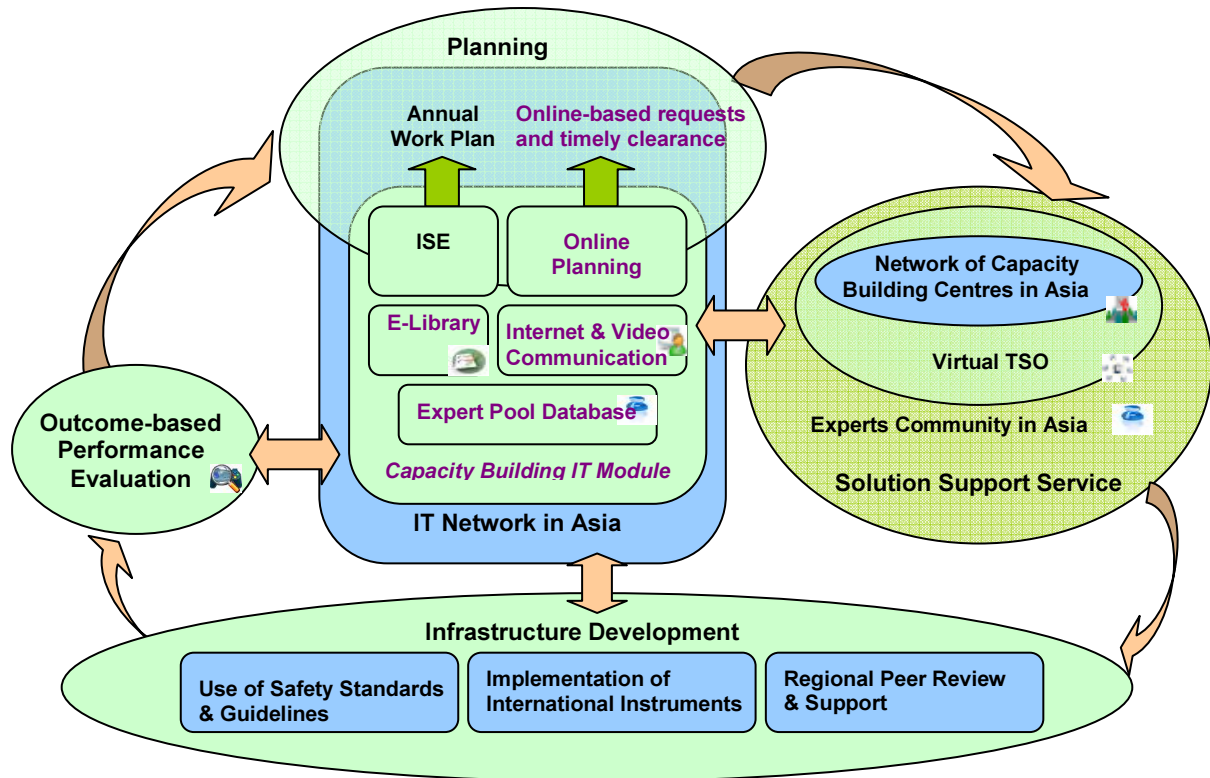
Section 3 identifies what IT modules are prerequisite for establishing the Regional Capacity Building (RCB) System, who should establish such IT modules, how to systematically identify the needs of capacity building in ANSN Member States and what activities should be pursued to respond to those identified needs. Moreover, Section 3 also describes what activities should be taken in order to strengthen and expand human networks among the ANSN Member States, and also with other regions, for facilitating effective and efficient development of the RCB system. Section 4 sets target dates to commence and/or achieve each action mentioned in Section 3.

3. OVERVIEW OF GENERIC ACTION PLAN FOR ESTABLISHING THE REGIONAL CAPACITY BUILDING SYSTEM IN ASIA

The ANSN Capacity Building Coordination Group (CBCG) developed a draft guidance document on the Regional Capacity Building (RCB) activities accomplished by Topical Groups (TGs). The guidance document identifies the overall scope of the RCB that the ANSN activities intend to develop, the scope of each TG and its interaction with the other TGs to effectively implement the RCB. With the acknowledgment of the guidance document, this Section clarifies what horizontal actions should be taken by whom for establishing the RCB System in Asia whose basic concept is described in Section 2.

A prerequisite for establishing the *Network of Regional Capacity Building Centres in Asia* and the *Virtual TSO* is the dynamic and interactive use of a well-organized e-library, with an efficient integrated search function. Via the e-library, nuclear safety related materials can be shared virtually among experts in the ANSN Member States for self-learning and for training courses or lectures. New and creative knowledge can also be uploaded sustainably (***Dynamic and Interactive Use of ANSN e-Library***) (Fig. 7).

Fig. 7: Dynamic and Interactive Use of ANSN e-Library
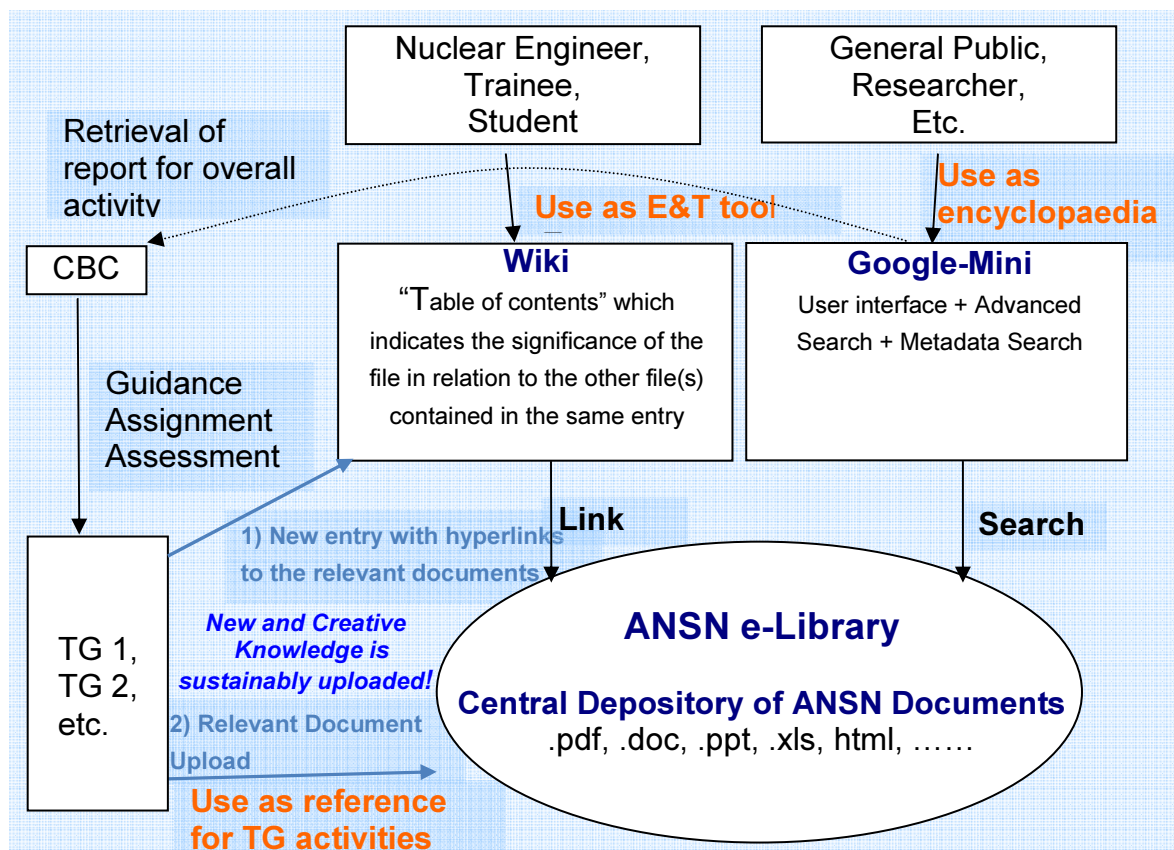
The index for the *ANSN e-Library* in the ANSN website will work as a virtual network menu. It is apparent that no effective and efficient communication in the virtual network can be expected to be achieved without any menu. In addition, it is significant that the more variety the menu has, the more visitors (namely, readers or collaborators who upload documents and add to the menu or to the content) will come to the website; it is expected that the variety of the menu will be sustainably enhanced by the visitors. The *ANSN e-Library* should aim to

realize such kind of positive spiral. The IAEA, in cooperation with the IT Support Group (ITSG) will develop a structure for the e-Library covering the scope of all the TGs in a harmonized manner. All the TGs and the ITSG should collaborate closely in this respect.

Another prerequisite for creation of networks is sharing of expertise among a pool of competent experts who are willing to make contributions to ANSN capacity building activities. The resumes of lecturers and other experts with expertise in particular field(s) of nuclear safety should be shared (***Expertise Sharing by Use of ANSN Experts Pool Database***). The IAEA will develop user-friendly software for the *ANSN Experts Pool Database* in cooperation with the ITSG. For efficient maintenance all the participants in the ANSN workshops and training courses have the responsibility to register and keep up to date their individual information in the *ANSN Experts Pool Database* themselves (Fig. 8).

Fig. 8: Expertise Sharing by Use of ANSN Experts Pool Database
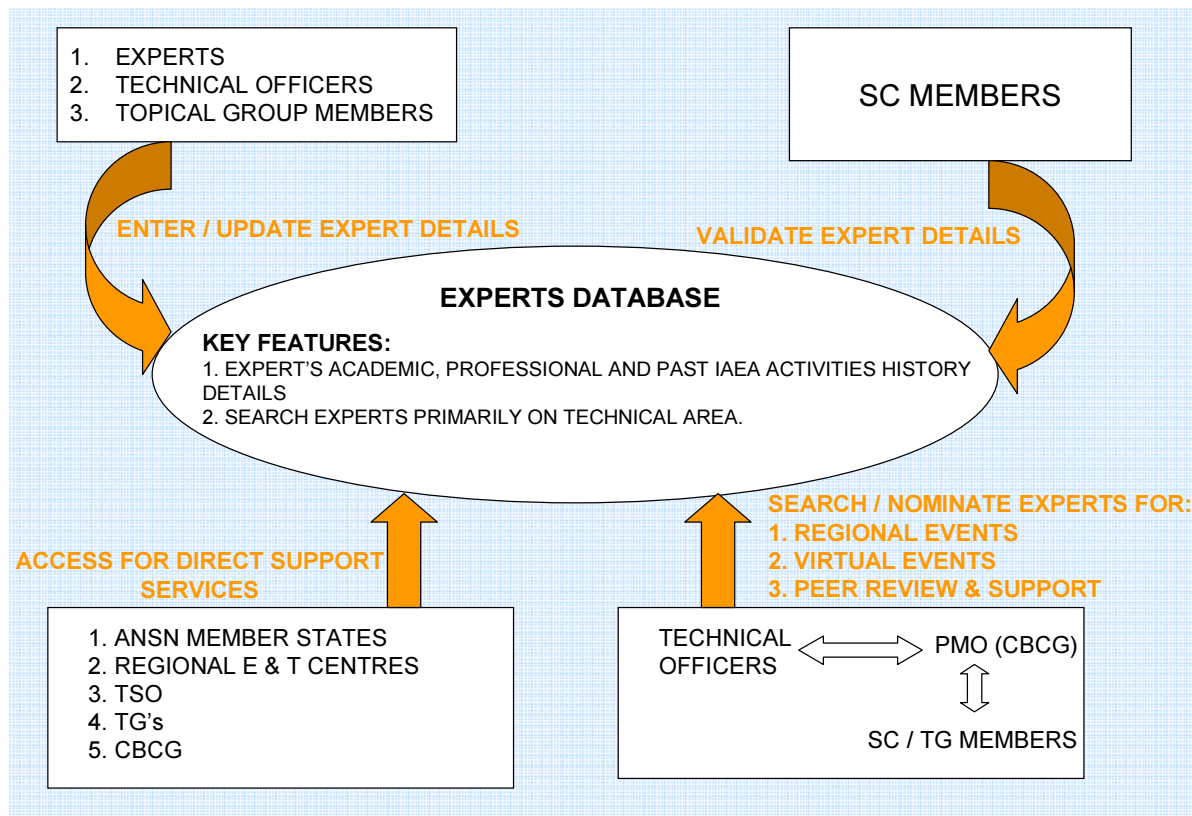
In order to have an effective and efficient virtual communication in particular by using the *ANSN e-Library* and the *Experts Pool Database*, user organizations and institutions of these IT modules in ANSN Member States have to accommodate sufficiently high-speed internet connections with the ANSN website and for their video conference infrastructure, e.g. Webinar (***ANSN Internet and Video Network Communication***). Otherwise the *ANSN e-Library* and the *Experts Pool Database* cannot be used in a practical sense. It is vitally important that ANSN Member States commit to help their relevant organizations and institutions to be able to equip the *ANSN Internet and Video Network Communication* system. The IAEA will evaluate and assess potential options for the development of the *ANSN*

Internet and Video Network Communication system in cooperation with the ITSG and in collaboration with ANSN Member States.

Once the *ANSN e-Library*, the *ANSN Experts Pool Database* and the *ANSN Internet & Video Network Communication* are ready in a well-coordinated and structured manner, virtual education and training courses can be conducted by relevant experts in the ANSN Member States; and virtual meetings and workshops among TSOs in Asia can be conducted upon request, without any costly travel to other countries. It should be noted, however, that there is another prerequisite from the financial point of view. The ANSN budget should be able to be used in a more flexible and timely manner during the course of a fiscal year to remunerate those experts and lecturers who contribute to ANSN activities.

To ensure that the ANSN activities accommodate the particular national and regional needs in a sufficiently flexible, timely and well-coordinated manner, there is a need to establish and implement the virtually integrated ANSN management system of planning the ANSN activities by using the ANSN website: (1) to analyse the current status based on the results of Integrated Safety Evaluation (ISE), (2) to identify the needs and priorities for further assistance and (3) to plan ANSN national and regional activities upon request, with a timely clearance of those requests taking into account the identified priorities (*ANSN Online Planning System*) (Fig. 9).

Fig. 9: ANSN Online Planning System
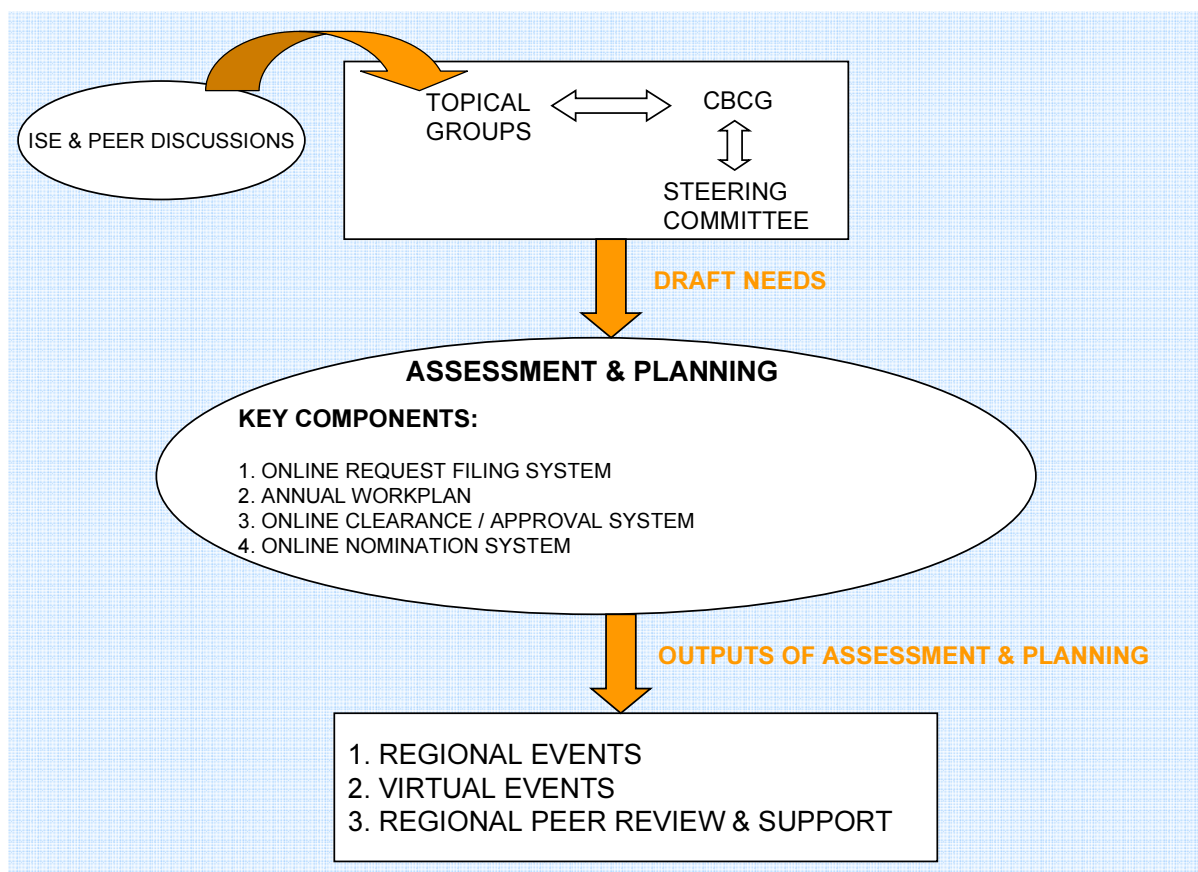
When the ANSN activities have been organized in a sustainable manner by utilizing the *Capacity Building IT Module* composed of the e-library, Experts Pool Database, Internet and Video network Communication, and Virtual Planning System, underpinned by closer cooperation and collaboration in the human network among education and training centres and TSOs in Asia, it can be stated that the *Regional Capacity Building System* in Asia, inter alia, the *Network of Regional Capacity Building Centres in Asia* and *Virtual TSO* have been established in Asia. When implementing the RCB system, IT and human networks in Asia will be expanding in a dynamic, interactive and sustainable manner and seamless connections will be established.

When implementing ANSN activities by utilizing the *Capacity Building IT Module*, the CBCG will take a leading role for facilitating those activities. The CBCG will define the scope of activities and the roles of each TG, pursue the assessment and planning based on the ISE and monitor and coordinate the TGs' activities for improvement. The CBCG will also take the leadership to promote the TGs' effective and efficient use of the *Capacity Building IT Module* for the TGs' capacity building activities. In particular, the CBCG will play a role of a coordination group for nominating experts from the *Experts Pool Database* in coordination with the relevant ANSN Member States for *Regional Peer Review and Support Arrangement*. In parallel, the CBCG will encourage TGs to take their initiatives to upload new and creative knowledge into the *e-Library*.

In addition, further initiatives for strengthening and expanding ANSN human network through face-to-face communication at physical meetings, workshops, conferences, and so on, should be pursued. It is worthwhile organizing a regional conference on the establishment of the RCB System in Asia as the first opportunity to establish a core human network involving in the RCB activities in Asia through discussing how effectively and efficiently the RCB System inter alia, the *Network of Regional Capacity Building Centres in Asia* and the *Virtual TSO* should and can be developed. It is also effective to regularly organize follow-up events to strengthen and expand the human network of the RCB System in Asia.

As the leading model regional network the ANSN will promote outreach activities among the global and other regional nuclear safety networks. Cooperation among the global and regional nuclear safety networks (e.g. Global Nuclear Safety and Security Network (GNSSN), ANSN, FORO (Ibero-American Network), the newly created Forum of Nuclear Regulatory Bodies in Africa (FNRBA), and the Arab Network of Nuclear Regulators (ANNuR)) would be mutually beneficial as a network of networks for promoting capacity building activities.

Finally, it should be emphasized that sufficient support and commitment from the ANSN Member States are indispensable for full implementation of the generic action plan and in effect full achievement for the Vision for the ANSN by the Year 2020, inter alia, the development of the *Network of Regional Capacity Building Centres in Asia* and the *Virtual TSO*. It should be highlighted that achieving the targets specified above would take many years. Some could be reached in a mid-term, while others need a long-term to achieve. More effort and support from the ANSN Member States apparently is needed for achieving all the targets specified in this generic action plan both from the mid-term and long-term perspectives. Section 4 describes in details which kinds of action are needed from the mid-term and long-term perspectives.

4. MID-TERM AND LONG-TERM GENERIC ACTION PLAN FOR ESTABLISHING THE REGIONAL CAPACITY BUILDING SYSTEM IN ASIA

4.1 Developing and Using the Capacity Building IT Module

Developing and effectively and efficiently using the integrated IT module in the ANSN website for practically implementing ANSN online activities for capacity building in Asia. The IT module is composed of the e-Library, the Experts Pool Database, the Internet and Video Network Communication, and the Online Planning System.

4.1.1 Dynamic and Interactive Use of the ANSN e-Library

Dynamically and interactively using a well-organized e-library for virtually sharing nuclear safety related materials among experts in the ANSN Member States, for self-learning and for training courses or lectures, and also for autonomous uploads of new and creative knowledge.

4.1.1.1 Mid-term Generic Action Plan

The IAEA develops a user-friendly and well-structured IT module for the *ANSN e-Library* in the ANSN website in collaboration with the IT Support Group (ITSG) *by the end of 2011*.

All the existing TGs start to collect useful materials developed by ANSN Member States and produced at past TGs' activities to be uploaded or linked in the *ANSN e-Library* and to upload or make linkages of those materials in the *ANSN e-Library from the beginning of 2012*.

4.1.1.2 Long-term Generic Action Plan

All the existing TGs complete the collection of the useful materials and develop the initial full scope version of the *ANSN e-Library by the beginning of 2013*.

All the existing TGs continue collecting and uploading or linking new materials available in the *ANSN e-Library*.

In parallel, the ANSN Member States encourage experts in their countries to make the best use of the *ANSN e-Library* by virtually sharing nuclear safety knowledge with other experts in the region and by uploading new and creative knowledge in a dynamic and interactive manner.

4.1.2 Sharing Expertise through the ANSN Experts Pool Database

Sharing expertise by using a pool of experts who have competence in and are willing to make contributions to ANSN activities for the regional capacity building in Asia

4.1.2.1 Mid-term Generic Action Plan

The IAEA develops a user-friendly and well-structured IT module for the *ANSN Experts Pool Database* in the ANSN website in collaboration with the IT Support Group (ITSG) *by the end of 2011*.

The Capacity Building Coordination Group in collaboration with the ITSG develops a rule for entering and maintenance of the *ANSN Experts Pool Database* and gets approval from the Steering Committee and endorsement from the ANSN Nuclear Safety Strategy Dialogue *by the end of 2011*.

Entering individual information in the *ANSN Experts Pool Database* initiates in accordance with the rule *from the beginning of 2012*.

4.1.2.2 Long-term Generic Action Plan

Entering all the agreed individual information in accordance with the rule into the *ANSN Experts Pool Database* to be completed **by the beginning of 2013**.

Entering and updating individual information into the *ANSN Experts Pool Database* continues in accordance with the rule.

In parallel, the ANSN Member States are encouraged to make the best use of the *ANSN Experts Pool Database* for organizing ANSN network activities in an autonomous and sustainable manner.

4.1.3 Facilitating ANSN Internet and Video Network Communication

Virtually communicating through sufficiently high-speed internet connections with the ANSN website and their video conference infrastructures of the relevant organizations and institutions of ANSN Member States

4.1.3.1 Mid-term Generic Action Plan

The IT Support Group (ITSG) investigates the current situation of the IT Infrastructure of those organizations and institutions in the ANSN Member States that intend to use the *ANSN e-Library* and the *ANSN Experts Pool Database* and participate in ANSN online activities **by the end of 2010**.

The ITSG defines the minimum IT infrastructure requirements for *ANSN Internet and Video Network Communication* for the participating organizations and institutions in order to use the *ANSN e-Library* and the *ANSN Experts Pool Database* in a practical sense and effectively and efficiently participate in the ANSN activities online **by the middle of 2011**.

4.1.3.2 Long-term Generic Action Plan

The participating organizations and institutions complete the equipment of their IT infrastructure of *ANSN Internet and Video Network Communication* **by the beginning of 2013**.

The ITSG regularly reviews the minimum IT infrastructure requirements for the *ANSN Internet and Video Network Communication* and informs the participating organizations and institutions of necessary upgrades and changes.

In parallel, the ANSN Member States encourage relevant organizations and institutions in their countries to make the best use of their IT infrastructures to actively pursue *ANSN Internet & Video Network Communication* among experts in the region.

4.1.4 Timely Providing Solution Support Services through the ANSN Online Planning System

Systematically planning of the ANSN activities online, i.e. by utilizing the ANSN website, by (1) analysing the current status based on the results of Integrated Safety Evaluation (ISE), (2) identifying the needs and priorities for further assistance, and (3) planning requested ANSN national and regional activities, with timely clearance of those requests taking into account the identified priorities.

4.1.4.1 Mid-term Generic Action Plan

The IAEA develops the *ANSN Online Planning System* in the ANSN website in collaboration with the IT Support Group (ITSG) *by the end of 2011.*

The Capacity Building Coordination Group (CBCG) develops a draft implementation rule for the *ANSN Online Planning System* in collaboration with the ITSG *by the end of 2011*.

The CBCG operates the *ANSN Online Planning System* on a trial basis in accordance with the draft implementation rule for checking the workability of the new draft rule and the newly created IT module in collaboration with the ITSG *during 2012*. The CBCG finalizes the new implementation rule in consultation with the Steering Committee (SC) *by the end of 2012*.

4.1.4.2 Long-term Generic Action Plan

The newly established *ANSN Online Planning System* is applied *from 2013*.

The CBCG regularly reviews the planning system and makes necessary modifications and improvements in collaboration with the ITSG and in consultation with the SC.

4.2 Mobilizing the Regional Capacity Building System in Asia

Mobilizing the Regional Capacity Building System in Asia, inter alia, establishing the Network of Regional Capacity Building Centres in Asia and the Virtual TSO by effectively and efficiently utilizing the Capacity Building IT modules, i.e. the e-Library, the Experts Pool Database, the Internet and Video Network Communication, and the Online Planning System.

4.2.1 Mid-term Generic Action Plan

The Capacity Building Coordination Group (CBCG) takes initiatives to organize advance online-based ANSN activities as test cases in cooperation with those organizations and institutions in the ANSN Member States that are ready to participate in the activities, in collaboration with Topical Groups (TGs) and the IT Support Group (ITSG), as soon as technically ready to do so, *during 2010 to 2011*.

In parallel, the relevant ANSN Member Sates take initiatives to establish the *Network of Regional Capacity Building Centres in Asia by the end of 2011* in coordination and collaboration with the CBCG and the IAEA. More specifically, the relevant ANSN Members establish an excellence of education and training centre in each ANSN Member State and establish a network of all the existing national centres at ANSN Member States, in coordination and collaboration with the International Capacity Building Centre (IAEA) *by the end of 2011*.

In addition, the relevant ANSN Member States also take initiatives to establish the *Virtual TSO by the end of 2012* by encouraging TSOs in their countries to perform interactive virtual networking and face-to-face cooperative activities among TSOs, in collaboration with the ANSN Topical Groups in particular technical fields.

The *Regional Capacity Building System in Asia*, inter alia, the *Network of Regional Capacity Building Centres in Asia* and the *Virtual TSO* fully operate *from 2012*.

4.2.2 Long-term Generic Action Plan

The *Regional Capacity Building System in Asia*, inter alia, the *Network of Regional Capacity Building Centres in Asia* and the *Virtual TSO* operate sustainably **from 2013**.

4.3 Strengthening and Expanding Human and IT Networks

4.3.1 Regular Meetings of Experts Involved in the Establishment of the Regional Capacity Building System

The Capacity Building Coordination Group (CBCG) organizes an initial regional conference on the establishment of the Regional Capacity Building (RCB) System in Asia **in 2010**.

The CBCG organizes regular follow-up events to strengthen and expand the human network of the RCB System in Asia.

4.3.2 Collaboration with the Global and Other Regional Nuclear Safety Networks (ANSN outreach activity)
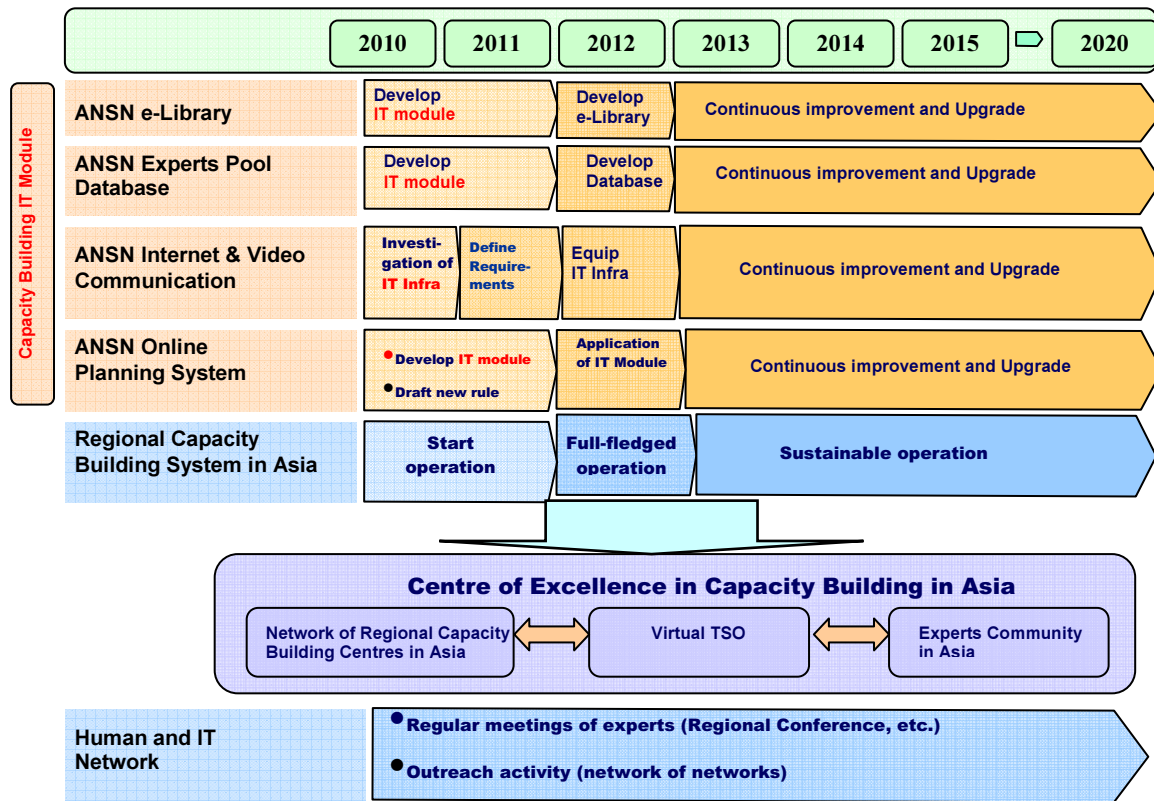
The IAEA continues to take initiatives to facilitate cooperation among the global and regional nuclear safety networks (e.g. Global Nuclear Safety and Security Network (GNSSN), ANSN, FOPO (Ibero-American Network), the newly created Forum of Nuclear Regulatory Bodies in Africa (FNRBA) and the Arab Network of Nuclear Regulators (ANNuR)), inter alia, regularly organizing round table discussions among the nuclear safety networks during the General Conferences of the IAEA.

5. MONITORING AND EVALUATING THE IMPLEMENTATION OF THE GENERIC ACTION PLAN

It is of utmost importance to implement the generic action plan in a timely manner once the plan is established. The Capacity Building Coordination Group (CBCG) has been charged by the Steering Committee (SC) to develop appropriate outcome-based performance indicators for the ANSN activities in cooperation with the ANSN Topical Groups (TGs) and the IT Support Group (ITSG). These performance indicators will allow to evaluate ANSN activities on the basis of the outcome of the programme implemented, and to review the activities annually and report back to the SC.

The CBCG will prepare draft outcome-based performance indicators to be approved by the SC and finalize the indicators **by the end of 2010**. The CBCG will start annual reviews of the ANSN activities, including the implementation of the Generic Action Plan, **from 2011** for annual evaluation by the SC and for annual report to the ANSN Nuclear Safety Strategy Dialogue meeting.

Fig. 10: Timetable for the Generic Action Plan

	2010	2011	2012	2013	2014	2015	2020

Capacity Building IT Module

ANSN e-Library
- Develop IT module
- Develop e-Library
- Continuous improvement and Upgrade

ANSN Experts Pool Database
- Develop IT module
- Develop Database
- Continuous improvement and Upgrade

ANSN Internet & Video Communication
- Investigation of IT Infra
- Define Requirements
- Equip IT Infra
- Continuous improvement and Upgrade

ANSN Online Planning System
- ●Develop IT module
- ●Draft new rule
- Application of IT Module
- Continuous improvement and Upgrade

Regional Capacity Building System in Asia
- Start operation
- Full-fledged operation
- Sustainable operation

Centre of Excellence in Capacity Building in Asia

Network of Regional Capacity Building Centres in Asia	⟷	Virtual TSO	⟷	Experts Community in Asia

Human and IT Network
- ●Regular meetings of experts (Regional Conference, etc.)
- ●Outreach activity (network of networks)

REFERENCES

[1] Vision for the ANSN by the Year 2020.

[2] Terms of Reference of the ANSN Capacity Building Coordination Group (Final Draft).

[3] Guidance on Regional Capacity Building activities accomplished by TGs (Draft).