

## **POTENTIAL SYNERGIES BETWEEN BUSINESS DEVELOPMENT UNITS IN NUCLEAR INSTITUTIONS**

**and the**

### **RCA REGIONAL OFFICE**

**A Discussion Paper for the RCA Meeting of National Representatives,**

**Colombo, Sri Lanka, 26-28 May 2003**

#### **Background**

The technical and financial sustainability of nuclear institutions is a key objective of the 2002 Review of Technical Co-operation (TC) Strategy issued by the IAEA Board of Governors. An increase in utilisation of nuclear technologies is regarded as essential to achieve sustainability and greater self-reliance<sup>1</sup>.

Institutions in a few RCA member states have considerable experience in developing links with government and private sector organisations that can lead to new applications, new products and services, and increased revenue. Other member states, however, noted at a Regional Seminar in Kuala Lumpur in August 2000 (K-L 2000) that the staff in their nuclear institutions had insufficient experience and managerial skills to develop and market products and services that are suited to the needs of potential end users. Project RAS/0/032 on Enhanced Self-reliance and Sustainability of Nuclear Institutions in Asia & the Pacific aims to contribute to the ability of the institutes to increase the utilisation of nuclear technologies through improved managerial competence. One target outcome for RAS/0/032 is the development or enhancement of Business Development Units (BDUs) within nuclear institutions.

This paper outlines the status of BDUs in the region, and then examines some commonalities between the roles of the BDU and the RCA Regional Office and the potential for synergy between them.

#### **BDU: General Information**

The term BDU is not commonly used within nuclear institutions. It is used in this paper and RAS/0/032 to denote *any* unit or capability within the institutions for technology transfer, marketing or managing projects carried out for end users. The following summary of the role and probable activities of BDU is taken from a Regional Workshop on Business Leadership in Nuclear Institutions, held in Beijing, China in November 2002.

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<sup>1</sup> Definitions used in this paper:

Sustainability = the ability to maintain or keep going continuously or to continue to represent adequately.

Self-reliance = trusting to one's own abilities; reliance on one's own resources.

Sustainable Institutions = institutions that have the resources, infrastructure and technical capabilities to contribute fully and over the long term to the economic, environmental and social needs of the nation.

### ***BDU: Role & Activities***

The role of a BDU is to:

- Act as a 'bridge' between the R&D in an institute and potential users.
- Provide overall management and co-ordination of client relationships, particularly in the private sector, and of the process of technology transfer and the provision of products and services.
- Provide assistance in the assessment of the technology transfer potential of research portfolios.

A major activity of the BDU is the provision of expertise in creating better awareness among potential users of the services and products available within the institute. While creating this better awareness, staff of the BDU must inevitably become more aware of user needs. Therefore, the BDU will also gain information that can be used to guide the R&D programme of the institutions in directions that will be in harmony with the future needs of their users. These activities could be described in broad terms as 'marketing' nuclear methods in order to increase their utilisation and to provide opportunities for the provision of more products and services that are a result of successful R&D. The outcome will be greater self-reliance and sustainability of the institutions.

In order to carry out their role effectively, BDU staff require certain specialist skills. These include the abilities for good communication with end users, writing proposals and reports for clients, negotiation and contract drafting, and project costing and management. As recognised by K-L 2002, most research scientists lack these skills, and often resist acquiring them.

Therefore, the BDU may be seen as an essential support unit for –

- The technical divisions, by facilitating the pathway for the adoption of successful R&D by end users.
- The leadership of institutions and Atomic Energy Commissions, by providing advice on which research programmes will best serve end user needs, and by providing a uniform, specialist approach for the institution to "marketing" and to project management.

### ***BDU: Situation in RCA Member States***

Twelve RCA member states participate in RAS/0/032, and the situation regarding their BDU can be summarised as:

***BDUs established:*** China, India, Indonesia, Malaysia, Pakistan and Vietnam. For Indonesia, the BDU was only recently formalised and much remains to be done to implement it fully. For Vietnam, a single BDU is very active in a commercial irradiation facility but plans exist to extend the BDU concept to other institutes of the VAEC. All these institutes agree that their BDUs needed further enhancement.

***BDUs in process of establishment:*** Bangladesh, Philippines, Sri Lanka and Thailand. In Bangladesh, the Philippines and Sri Lanka, establishment of a BDU and staff training is proceeding. In Thailand, the BDU concept is agreed but has not yet been

formalised since OAEP is in the process of the separation of OAEP into a regulatory authority and an agency for research, development and applications.

***BDU not yet appropriate:*** Mongolia and Myanmar. These countries have yet to develop a sufficient range of services and products to justify a specialist BDU. However, they are participating in the project so that staff will gain experience in the principles of marketing and client responsiveness.

Five RCA member states do not participate in RAS/0/032 (Australia, Japan, Korea, New Zealand and Singapore). However, all but Singapore have nuclear institutions with very strong commercial or technology outreach programmes. These institutions have within their organisation the required skills in marketing and project management to support such programmes. Therefore, four member states (**Australia, Japan, Korea and New Zealand**) have the equivalent of BDU already established and operating to their satisfaction.

In summary, the role of BDU is to link the technical capability of the institutions to the needs of end users and to increase the utilisation of nuclear methods (i.e., marketing). BDU staff have (or will develop under RAS/0/032) professional management skills in ‘marketing’ and in managing client/user relationships, skills that are not commonly found among the research scientists and technical divisions of many nuclear institutions in the region.

### **Objectives of the RCA Regional Office**

Some of the objectives set for the RCA Regional Office indicate that it could be considered as the BDU for the RCA. Part of its mission is to increase awareness of technology available within RCA member states and to seek new funding sources from regional agencies. The Regional Office is a “BDU” with a regional focus as opposed to the BDU within RAS/0/032 that have a focus that is based more on national institutions.

To achieve its objectives the RCA Regional Office will need to ‘market’ the nuclear technologies available throughout RCA member states. It will, therefore, need the same type of information and skills that the BDUs will need to market individual institutions. The RCA Regional Office may require information in the form of brochures and may need to assemble client-friendly project proposals using skills available from a number of institutions.

Recently, the RCA Regional Office requested information from RCA National Representatives on the programmes and activities conducted within national nuclear institutions. This is the first essential step in increasing the profile of the RCA within the region.

### **Potential for Synergy between BDU and the RCA Regional Office**

The Regional Office is in an establishment phase, and at present has relatively few staff to carry out a challenging brief. The Regional Office could therefore use the BDUs in the institutions as an extra resource for information and staff. Established BDUs will have the national information that the Regional Office needs to assist its

work. BDUs that are in process of being established are in the process of gathering the national information as part of their training programme.

There are at least two ways in which the RCA Regional Office could be assisted by the considerable national and institutional information and knowledge available in the BDUs.

1. the RCA Regional Office could access the BDU information via requests to the RCA National Representative. This is probably the most appropriate mechanism at present.
2. the RCA Regional Office could work directly with the BDU as and when necessary. This is the most direct and efficient mechanism and could be utilised for institutions that have well established BDUs.

Whatever the mechanism chosen, great care must be taken to ensure that there is good communication between the RCA Regional Office, the Agency and the institutions. The RCA Regional Office has links with RCA National Representatives and the RCA Co-ordinator. Institutes that participate in RAS/0/032 have nominated a Project Counterpart who has links with the BDU and the National Technical Co-Operation Liaison Officer. Good internal co-ordination is required between all these positions.

## **Conclusion and Recommendations**

There is a recognised need for nuclear institutions to increase the utilisation of nuclear applications both on a national and regional basis. This requires a marketing or business development capability within the institutions. In some RCA member states this capability is well established. In others, a capability is being established or enhanced within RAS/0/032. The development of greater regional awareness of available nuclear technology, led by the RCA Regional Office, would be facilitated through harnessing the skills and information available within the BDU.

It is recommended that RCA National Representatives and the Director, RCA Regional Office:

1. consider how the skills and knowledge available in the national BDU can be utilised to assist the RCA Regional Office in any awareness campaigns or proposals for regional projects.
2. note the Project Counterparts for RAS/0/032 and the key staff that have been identified as being involved with the BDU (see Annex).
3. consider representation of the RCA Regional Office at the next meeting of BDU leaders within RAS/0/032, scheduled to be held in Indonesia in the second half of October 2003.

## ANNEX

### Project Counterparts for RAS/0/032 and Participants who attended the Regional Workshop on Business Leadership as Senior Members of Institutional BDUs

Country	Project Counterpart	Senior BDU staff
Bangladesh	<b>Mr. Fariduddin QUAZI</b> Director International Affairs Div. Bangladesh Atomic Energy Commission 4, Kazi Nazrul Islam Avenue G.P.O. Box 158 Dhaka 1000	<b>Mr. Fariduddin QUAZI</b>
China	<b>Mr Yang YU, Director</b> Management Department, Business branch; Beijing Institute of Nuclear Engineering No 1, Ma Shen Miao Fucheng Road PO Box 840 Beijing 100840	<b>Mr Yang Chuande</b> Senior Engineer Beijing Institute of Nuclear Engineering No 1, Ma Shen Miao Fucheng Road PO Box 840 Beijing 100840
India	<b>Dr RAGHURAMAN</b> Strategic Planning Group Department of Atomic Energy Government of India Anushaki Building C.S.M. Marg Mumbai-400-001	<b>Mr. Ajit Madhav PATANKAR</b> Head of Technology Transfer & Collaboration Division Bhabha Atomic Research Centre Department of Atomic Energy Trombay Mumbai - 400 085
Indonesia	<b>Mr Rill ISARIS</b> Director Centre for Management and Guidance for the Industry Kawasan Pusptek Serpong, Tangerang 15310	<b>Mr. Ferly HERMANA</b> Head of Partnership Division PMBI- BATAN Center for Management and Guidance for the Industry GD. 90 Kawasan Puspiptek Serpong Tangerang, Banten 15310

Malaysia	<b>Dr Hj DAUD Mohamad</b> Deputy Director General (Corporate) Malaysian Institute for Nuclear Technology Research, Bangi 4300 Kajang	<b>Mr. Iberahim B. ALI</b> Manager, Customer Service Unit Malaysian Institute for Nuclear Technology Research Kompleks Bangi 43000 Kajang, Selangor
Mongolia	<b>Dr Sereeter Lodoysamba</b> Nuclear Energy Commission Sambuugiin Gudamj-11 P.O.Box 46-856 Ulaanbaatar 210646	N/A
Myanmar	<b>Dr Ko Ko OO</b> <i>Deputy Director</i> Department of Atomic Energy Ministry of Science & Technology No 6, Kaba Aye Pagoda Road, Yankin P.O. Yangon	<b>Mr. Thant Zin MYO</b> Department of Atomic Energy Ministry of Science and Technology No. 6, Kaba Aye Pagoda Road Yangon 11081
Pakistan	<b>Dr.Munim AWAIS</b> Director International Affairs and Training Pakistan Atomic Energy Commission P.O. Box 1114 Islamabad	<b>Mr. Abdul GHAFAR</b> Director General Pakistan Institute of Nuclear Science and Technology (PINSTECH) Pakistan Atomic Energy Commission P.O., Nilore Islamabad
Philippines	<b>Dr. Alumanda DELA ROSA</b> , Director Philippine Nuclear Research Institute Commonwealth Avenue P.O. Box 213, Diliman Quezon City	<b>Ms. Elvira SOMBRITO</b> Chemistry Research Section Head and <b>Mr. Reynaldo P. JACINTO</b> Planning Officer IV Philippine Nuclear Research Institute Commonwealth Avenue P.O. Box 213 Diliman, Quezon City 1101
Sri Lanka	<b>Dr Prinath DIAS</b>	<b>Mr. D.G. Lakshman</b>

	Chairman Atomic Energy Authority 60/460 Baseline Rd Orugodawatta Wellampitiya	<b>WICKRAMANAYAKE</b> Head Industrial Applications Division Atomic Energy Authority 60/460, Baseline Road Orugodawatta, Wellampitiya
Thailand	<b>Mr. Pathom YAMKATE</b> Deputy-Secretary General Office of Atomic Energy for Peace Vibhavadi Rangsit Road Chatuchak Bangkok 10900	<b>Mr. Sakda CHAROEN</b> and <b>Mr. Sirichai</b> <b>KEINMEESUKE</b> Office of Atomic Energy for Peace Ministry of Science, Technology and Environment 16 Vibhavadi Rangsit Road, Chatuchak District Bangkok 10900
Vietnam	<b>Dr. Bui Van TUAN</b> Vice-Chairman Vietnam National Atomic Energy Commission 59 Ly Thuong Kiet Hanoi	<b>Mr. AN Tran Khac</b> Director Research and Development Centre for Radiation Technology Viet Nam Atomic Energy Commission Truong Tre St. Linh Xuan Ward Ho Chi Minh City