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SCAN AROUND THE GLOBE

Argentina-Chile

Chile and Argentina will pool resources to jointly produce defense equipment. An agreement signed between officials of the two G-15 countries on 23 April 2010 would cover Chile for shipbuilding contracts it is struggling to complete because of extensive damage to its shipyards in the Feb 27 earthquake that had wrecked Chilean shipyards and other infrastructure.

Under the agreement, Chile's National Aeronautics Enterprise and Argentina National Airplanes Factory will also explore the possibility of manufacturing a training aircraft that could be deployed in both air forces.

(UPI – Apr 26, 2010)

Ethiopia - Turkey

The Ministry of Science & Technology, Ethiopia and the Turkish government signed in June, 2010 a Memorandum of Understanding (MoU) on the development of research projects, the dissemination of the results of the projects and exchange of scientists. The ministry has previously signed a similar agreement with the governments of Switzerland, Egypt and Israel and plans to do the same with the governments of Japan, China, South Korea, South Africa and Brazil, countries which are registering sharp growth in science and technology.

The agreement comprises the exchange of researchers, technologists and specialists from both countries. It also covers the organization of meetings, conferences, symposiums and trainings. Exchange of equipment that assist the innovation of new ideas in science and technology is further provided for in the agreement. Turkish investment in Ethiopia is increasing from time to time, not only in terms of capital transfer from their

investors, but also in creating employment opportunity and technological transfer via Foreign Direct Investment (FDI).

The cooperation is aimed at harnessing the scientific knowledge of the two countries to promote technological advancements. Turkish investors are involved in various development sectors of Ethiopia. The government of Turkey has allotted a total investment of about USD 800 million for Ethiopia. This will allow Turkish investors to broaden their investment in industry, agriculture and technology.

(Ethiopian Business News – Jun 5, 2010)

Hungary – US

In February, 2010, Hungary and US signed a new science & technology agreement that replaces the one from the year 2000. Also a new income tax treaty has been signed. This new co-operation will cover basic research, applied research, development work and innovation activities. It may be carried out in the form of coordinated programs, and joint research projects, including joint scientific workshops, conferences and symposia and the exchange of scientific and technological information and documentation.

The agreement also envisages the exchange of scientists, specialists and researchers and as well as the exchange or sharing of equipment and materials. This new agreement is believed to help ensure that US – Hungarian collaboration in this global age of discovery is at the very cutting edge of technological and scientific development.

The second document signed was a new tax treaty for “the avoidance of double taxation and the prevention of fiscal evasion with respect to taxes on income. These agreements are substantive and symbolic representations of close relationship between the Republic of Hungary and the United States.

(Embassy of US, Jul 2010)

Indonesia – Malaysia

Indonesia and Malaysia have broadened their financial co-operation. They have signed a memorandum of understanding on transnational banking monitoring involving a heightened exchange of information on international bank transfers. According to a press release of Bank Indonesia dated 20 April 2010, the agreement was signed by acting Bank Indonesia Governor Darmin Nasution, and Malaysian State Bank Governor, Zeti Akhtar, in Kuala Lumpur, Malaysia. In another development, the two G-15 countries are likely to back their bilateral trade with currency swaps to ease currency volatility against the dollar. According to Indonesia's central bank, with bilateral currency swaps in support of trade, both countries can avoid the use of a third currency such as the dollar.

(VIV News, Apr 20, 2010)

Iran Zimbabwe

Economic and political relations between Iran and Zimbabwe received further boost when two countries, in Apr 2010, signed 11 cooperation agreements and issued a joint statement of solidarity. The agreements envisage bilateral cooperation in the fields of tourism, science, technology, youth affairs, transportation, aviation and education as well as easing political and service category visas.

Furthermore, Iran's Export Guarantee Fund and Zimbabwe's Finance Ministry signed a Memorandum of Understanding on the formation of mutual investment companies.

(BBC News, Apr 23, 2010)

Kazakhstan – US

In April 2010, Kazakhstan and US have signed science, technology cooperation accord to expand partnership, facilitate joint activities across multiple fields. Negotiations for a bilateral Science and Technology Cooperation Agreement have been ongoing since 2003. The accord, the 51st of its

kind, the United States has reached with participating countries-creates a structure that will allow Kazakh and US government agencies, ministries, institutes, universities, and research centers to collaborate on science and technology efforts through a Memorandum of Understanding. The agreement exempts cooperative activities from taxation, customs duties, and fees.

The partnership is expected to open the way for Kazakh and US entities to engage in joint activities in education, health, biotechnology, energy, seismic research, water resource management, information technology engineering, and the environment.

It is believed that this partnership recognizes Kazakhstan's existing and emerging expertise in many key areas where it can contribute and make a difference.

(Embassy of Republic of Kazakhstan, Apr 10, 2010)

Venezuela – Brazil

In April 2010, Venezuela and Brazil signed 22 agreements in the areas of energy, housing, agriculture, culture, tourism and more. Among the agreements was one under which the Venezuelan state-oil company, PDVSA agreed to increase its supply of gasoline to the Brazilian petrochemical company, Braskem, up to 750,000 barrels a month. Venezuela's Housing and Public Works Ministry also signed an agreement with the Brazilian company, Norberto Odebrecht, for the construction of public housing in Venezuela's poor barrios.

Other accords included one for the construction of a Brazilian ship-building factory in Venezuela for which Brazil's National Economic and Social Development Bank (BNDES) plans to provide \$1 billion of financial assistance. Trade relations between Venezuela and Brazil grew to \$4.2 billion in 2009, of which \$3.6 billion came from Brazilian exports.

(Venezuela analysis, Apr 29, 2010)

IN FOCUS

INDO-GERMAN TECHNOLOGY CENTRE

India and Germany have mutually agreed to set-up Indo-German Science and Technology Centre (IGSTC) in India to be jointly supported by Indian and German Governments. Government has approved the establishment of Indo-German Science and Technology Centre. It will be located in National Capital Region and will be registered as “Society” under Societies Registration Act (Act XXI of 1860, Punjab Amendment Act 1957) as extended to Delhi. The Indo-German Science and Technology Centre will be jointly supported by Government of India (Department of Science and Technology) and Government of Germany (Federal Ministry of Education and research). Each will contribute equivalent amount of 2 million euro per year for 5 years.

The centre’s mandate is to bring together scientists and industry from both countries to carry out R&D projects in a “2+2” collaborative arrangement. That is, scientists from India will identify a partnering Indian firm to collaborate with a corresponding German scientists-industry partnership group. Already a programme on ‘Lean Manufacturing’ has been launched among IIT Delhi, PSG College of Technology (Coimbatore) and the Institute of Production Management, Technology and Machine Tools, Darmstadt. A programme on ‘Automotive Resource Policy’ has also been taken up in collaboration with the Fraunhofer Institute as part of which three workshops were held in the last year-and-half, according to Dr. Ramasami secretary DST.

Already both countries have traveled a long distance together in the last 5 years of collaboration of strengthening S&T cooperation. In the years 2009, as many as 1700 scientists moved between the two countries as part of the scientists exchange programme marking an increase of 35 percent over the previous year. Real hallmark of the cooperation has been the symmetry and co-sharing of resources, says Dr. Ramasami, Secretary DST.

The main objectives of the Centre are to support flagship joint research projects involving academic/research institutes and a private industry from both sides and to extend financial support for industrial Research and Development, technology commercialization and partnership development activities to foster Science and Technology cooperation between two countries as per our national priorities.

Innovation House

Further German Education and Research Ministry proposed to set up a German House of Science and Innovation (GHSI) in New Delhi, an entity distinct from the IGSTC. The GHSI, an initiative of Chancellor Angela Merkel and German Federal Foreign Officer’s Research and Academic Relations Programme, will be a platform for interaction among Indian and German collaborating scientists and technologists. This will be one of the five Houses being established in five cities on four continents to create a global network that will showcase German competence and innovative strength in science and technology: in New Delhi, Tokyo, New York, Moscow and São Paulo. The Indian GHSI will be the third innovation house to be established around the world; the first one was in São Paulo, Brazil and the second was in the in New York.

The House is being established in conjunction with 6-7 major German universities and German research foundations such as German Research Foundation, German Academic Exchange Service, the Max Planck Society, the Fraunhofer Society, the Helmholtz Association and the Alexander von Humboldt Foundation. This forum will also help to avoid overlap and repetition in the collaborative research being undertaken as part of programmes separately under these agencies.

Germany has announced that the year 2011-12 will be a German-Indian year by showcasing German politics, culture, arts and Science & Technology. India too has patronized the idea by announcing an India-German year that would project Indian achievements in Germany during 2012-13.

(The Hindu and India Education Diary.com-May 5, 2010)

SPECIAL FEATURE

INDIA CANADA COLLABORATION**Introduction**

India and Canada have signed bilateral science & technology agreements to encourage develop and facilitate co-operation between two countries for peaceful purposes in fields of common interest and on the basis of equality and mutual benefit. Within the context of the S&T agreement, funding mechanisms have been created, through which industry, universities/colleges and research organizations may seek support for joint bilateral research and development (R&D) projects and other activities intended to generate new or expanded international research and technology-based partnerships (termed as Partnership Development Activities). For India, funding and other services are provided through by the Global Innovation & Technology Alliance (GITA), a non-governmental organization, engaged by the Department of Science and Technology (DST), Government of India. For Canada, the same is provided through International Science and Technology Partnerships Canada Inc. (ISTPCanada), a non-governmental organization selected by the Government of Canada for this purpose. Special Feature in this Newsletter endeavours to bring out the salient features of arrangement between the two countries.

The fundamental principles that guide the Implementation Organizations in their delivery of joint funding and support for joint R&D collaboration are: Scientific and technological excellence; Shared benefits; Prospects for economic returns; Equality; Protection of intellectual property; Respect for the applicable laws and regulations in the two countries; and Peaceful uses.

Supported Activities

Under the agreement, support is available for two categories of collaborative S&T

related activities: Collaborative R&D Projects and, Partnership Development Activities. Priority sectors are periodically identified. However, for general calls-for-proposals (CFPs), applications are considered from all areas of research. From time-to-time targeted CFPs are issued, with applications limited to the identified sector(s).

Collaborative projects

- (i) Collaborative research - planned research or critical investigation aimed at the discovery of new knowledge, with the objective that such knowledge may be useful in developing new knowledge, products, processes or services, or in bringing about a significant improvement to existing knowledge, products, processes or services;
- (ii) Collaborative pre-competitive development - translation of research findings into a plan, blueprint or design for new, modified or improved products, processes or services.

Both in India and in Canada, collaborative R&D projects can be led either by industry or academia with the mandatory active participation of industry.

Besides collaborative R&D projects are required to satisfy number of basic requirements such as:

- (i) Projects must include participants from the two countries;
- (ii) Industry participation from both countries in collaborative R&D projects is mandatory, including university, college or research institution led projects;
- (iii) Proposals must clearly demonstrate that they respond to and address identified needs and interests in the two countries;
- (iv) Applicants must demonstrate the capacity to manage, conduct and benefit from the proposed research and development;

- (v) Proposals are expected to include clearly identified commercial goals and commercialization strategies;
- (vi) Proposals must include an intellectual property management plan;
- (vii) Projects should provide the opportunity for young researchers to participate, both within their own country and through exchanges with the partner country.

In addition to above common requirements for both India and Canada, certain specific requirements separately for applicants from two countries are also laid down.

Partnership Development Activities (PDA)

These are designed to foster relationships and partnerships leading to the development of collaborative research and development projects and other forms of research collaboration. Such activities might include, but are not limited to scientific seminars, workshops, symposia, conferences and activities that involve exchange programs.

Like Collaborative R&D Projects, Partnership Development Activities also have some common requirements to be met by applicants from both countries.

These are:

- (i) Activities must include participants from both countries;
- (ii) Applications will be strengthened by the inclusion of participants from both industry and academia. In Canada, government laboratories may participate but are not eligible to receive funding;
- (iii) Activities will be funded by each country on a 50/50 cost shared basis. Canadian participants must fund at least 50% of Canadian eligible expenditures;
- (iv) Activities should provide the opportunity for young researchers to participate, both within their own country and in activities hosted in the partner country;

- (v) Proposals should identify the objectives of the activity and how the activity fits into the applicants' strategic plans for collaboration with the partner country.

Evaluation

Implementing organizations review EOIs to determine and identify those which best meet the basic requirements and objectives of the program. They are then asked to submit full proposals.

All proposals are evaluated against three fundamental criteria. These are:

- (i) The scientific merits of the project and the degree of innovation inherent in the product or service being developed;
- (ii) The business opportunity of the proposed project and its capacity for commercial success in the near future; and
- (iii) The capacity of the participants to manage and conduct the project, including commercialization thus leading to clear benefits to both countries.

Review committees consisting of independent experts in each country evaluate the proposals. Based on the results of the evaluations, Implementing Organizations will make a common decision regarding successful proposals. For partnership development parallel evaluation process is conducted by the Implementing Organizations. Typically, within Three months of receiving a proposal, results are communicated to the co-applicants by their respective Implementing Organizations.

Concluding Remarks

As a follow up of above collaboration, joint call for proposals for Partnership Development Activities was recently made by both countries in June 2010 for submission of proposals. Implementing organizations for these are Global Innovation & Technology Alliance (GITA) on behalf of the DST, India and on the Canadian side by International Science & Technology Partnership Canada Inc (ISTP, Canada) incorporated in Canada.

SCAN AROUND US

India - Brazil All Round Cooperation

Bilateral relations between India and Brazil are further strengthened. Bilateral trade in recent years had reached US\$5.6 billion in 2009, the need for increased efforts to achieve the bilateral trade target of US\$ 10 billion by 2010 is stressed. Both G-15 leaders from India and Brazil note that bilateral investments were growing in diverse areas and called on business and industry in both countries to utilize the opportunities available in the areas of energy, agriculture, mining, pharmaceuticals, infrastructure and construction, among others, to further expand bilateral investments.

Both Heads of State welcomed the appointment of Defence Attaches in their respective Diplomatic Missions in Brazil and in India and noted the increasing contacts between the Brazilian firm, EMBRAER, and the Indian Defence Research and Development Organization (DRDO) towards the joint development of high-technology military aircraft. The Brazilian side welcomed India's decision to open a cultural center in Sao Paulo, the first of its kind in the Americas.

(Ministry of External Relations Brazil – Apr 15, 2010)

India – Czech Republic

Recently India signed three agreements with Czech Republic including one on social security. Two other agreements were signed by the two countries – on Economic Cooperation and one on a protocol on Amendment of the Agreement between India and Czech Republic for the promotion and protection to investments signed on October 11, 1996. Both the nations emphasized on greater cooperation on diverse sectors like trade and commerce, engineering technology, nano-technology, agriculture etc.

Czech engineers have contributed to India's industrialization and BATA, Yezdi and Skoda are well

known brand names in India. Many Indian companies are present in the Czech Republic in diverse sectors such as software, trucks, pharmaceuticals and textiles. There is also scope for co-operations between universities and cultural institutions of two countries. Indian institutions who have shown interest in co-operating in science and technology are CSIR and IIT Mumbai.

Bilateral trade between India and in the Czech Republic is a little over USD 1 billion. Two way investments by companies have also been made. Czech investments in India are in automobile and power sectors, whereas from India, companies from automobiles and IT sectors have made investments in the Czech Republic.

(Press Trust of India)

India - Iran Agreements

The Islamic Republic of Iran and India signed six co-operation agreements in July, 2010, at the end of their 16th Economic Cooperation meeting in Delhi recently.

Besides Air Service Contract and agreement on transfer of sentenced persons other significant scientific co-operations include memorandum of understanding (MoU) on cooperation in New and Renewable Energy, MoU on cooperation in small scale industry signed by Dy. Minister of Economic Affairs and Finance, Iran and Chairman and Managing Director of Indian National Small Industries Corporation (NSIC). Program of cooperation in Science and Technology and MoU on cooperation between Central Pulp and Paper Research were also signed between the two countries.

(IMRA Search – Jul 10, 2010)

India - Korea Programme of Co-operation

The Programme of Cooperation (POC) in Science & Technology with the Republic of Korea for the period of 2010-12 was signed recently by Shri Prithviraj Chavan, Minister of State (I/C) for

Science & Technology with his Korean counterpart H.E. Byong Man Ahn. The new POC would provide opportunities in working on application oriented joint research projects of mutual interest in the following areas:

(i) Transportation, (ii) Robotics & Engineering Sciences, (iii) Nutrition & Food Safety, (iv) Renewable Energy, (v) Chemical & Biochemical Technologies, (vi) Health & Medical Science, (vii) Material Science & Technology, (viii) Water Resources & Environment, and (ix) Information Technology.

The POC will also provide opportunities to scientists of both the countries to visit each other's laboratories. To further intensify present level of ongoing bilateral cooperation, the new POC has been signed.

(DST Press Released – Jan 25, 2010)

India-Saudi Arabia

Towards end of February, 2010 India and Saudi Arabia signed five agreements after extensive delegation talks between the two countries. Agreement on scientific cooperation include a Memorandum of Understanding (MoU) between Indian Space Research Organization (ISRO) and King Abdul Aziz University of Science and Technology on cooperation in peaceful use of outer space, an MoU on cooperation in Science and Technology for joint research and development and a MoU on cultural cooperation.

Two other memoranda of understanding are between Centre for Development of Advance Computing (C-DAC) and King Abdul Aziz University for science and technology and other is media cooperation between Press Trust of India and Saudi Press agency. Non-governmental agreements were also signed between TATA motors and Hotil transport for Supply of buses worth 80 million dollars and the other MoU was between Gulf Buma and DFL.

(ANI – Mar 1, 2010)

MoU Between NGRI India OGS Italy

An MoU was signed between National Geophysical Research Institute (NGRI), Hyderabad, and Istituto Nazionale di Oceanografia e di Geofisica Sperimentale – OGS, Trieste, Italy on 30 November 2009 to establish a firm collaboration among the scientists of these two Institutes for research in 'Gas Hydrates'. Scientists working on gas hydrates research from OGS, Trieste, Italy visited NGRI recently.

During their sojourn, they installed the ISTRICI software at NGRI, free of cost, for processing the marine Multi-Channel Seismic (MCS) data for the investigation of gas-hydrates, and imparted training to the personnel working in gas-hydrates project. Visit is believed to enhance the working of NGRI scientists in handling the marine MCS data, and producing better image and velocity model of hydrate-bearing sediments.

(CSIR News – Feb 2010)

India-Turkmenistan Pacts

In May 2010, India and Turkmenistan have inked two pacts on cooperation in the education and science and technology sectors. A joint statement signed by the two sides expressed satisfaction over the signing of the Education Exchange Programme and the Agreement on Cooperation in the field of Science and Technology. The science and technology agreement would facilitate interactions in the spheres of science and technology, organizing visits of students and faculties, development of links between educational and scientific institutions and implementation of joint scientific and research projects.

Both sides noted with satisfaction the positive experience of cooperation in the field of education within the framework of the programmes implemented by the Government of India and welcomed the establishment of an Information Technology Centre in Ashgabat with India's development and technical support.

(ANI – May 26, 2010)

CALL FOR PROPOSALS

India – Japan Co-operative Science Programme (IJCSP)

The Department of Science and Technology (DST), Ministry of Science & Technology, Government of India, New Delhi and the Japan Society for the Promotion of Science (JSPS) conduct the India-Japan Cooperative Science Programme (IJCSP) to promote bilateral scientific collaboration between Indian and Japanese scientists. Applications are invited from eligible Indian researchers/scientists to submit proposals for joint projects and joint workshops under IJCSP. Last date for submitting proposals is 13th September, 2010. The support is available for scientific areas namely, Molecular and Supramolecular Science, Advanced Materials, including Polymers and Nano-materials, Modern Biology and Biotechnology, Manufacturing Sciences, Astronomical and Space Science and Surface and Interface Science including Catalysis.

The joint application must include one Indian and one Japanese Principal Investigators, who would be responsible for technical as well as administrative co-ordination of the project and its periodic scientific and financial reporting to the DST/JSPS respectively.

Support provisions include cost of international airfare to and from the designated research location, visa fee, air port taxes, overseas medical insurance premium for the approved visit duration and airport transfers in India. For joint workshops/seminars to be organized in India, local travel cost of selected Indian participants and organizing expenses may also be considered for support as per DST norms. For Indian Researchers and for Japanese Researchers – Costs of accommodation in a guest house, per diem and domestic travel expenses in India including airport transfers as per DST norms.

The formats for joint project/seminar proposals and other details are available at the websites: www.stic-dst.org.in or www.dst.gov.in. Japanese Researchers are requested to contact JSPS for their application submission period, documents to be submitted etc. The website: <https://www-shinsei.jsps.go.jp/jsps1/kikanList.do> (available only in Japanese) may be referred for details.

EXPERTS CONVERGE

International Cancer Genome Consortium

The third scientific workshop of International Cancer Genome Consortium (ICGC) program was held during 21-23rd March, 2010 at Madrid, Spain. The workshop was attended by all stakeholders of the ICGC. Experts from about 11 countries participated during the meeting and presented the status on implementation of country-specific projects. Indian representatives from National Institute of Biomedical Genomics, Kolkata and Advanced Centre for Treatment, Research and Education in Cancer, Mumbai presented the implementation strategy of India-specific project on oral cancer including sample collection and sequence facility. The DBT participated in the executive committee to finalize the policy and strategy to implement the consortium including funding.

Seminar on Magnetic Ore Deposits

The Institute of Minerals and Materials Technology (IMMT), Bhubaneswar; Geological Society of India, Bangalore and National Geophysical Research Institute (NGRI), Hyderabad, jointly organized an international Symposium on Magmatic Ore Deposits (ISMO-09) in December 2009. Platinum group elements present in magmatic ore deposits are today assuming an increasingly important role for their use in automobile emission control, fuel cells, catalysis, electronic components and cancer treatment. In the past decade, there has been a surge in the exploration for PGEs all over the world, including the Indian subcontinent. This is reflected in the continuing growth of research and exploration efforts for magmatic Ni-Cu-(PGE) sulphide deposits hosted in maficultramafic rocks in India.

The incidence of platinum group of elements (PGES) has been reported in Orissa and other States of India over last two decades. The present International Seminar was aimed at bringing together academicians, geologists, researchers, metallurgists and engineers from around the world to Bhubaneswar, with a view to understand the recent global advances on this front.

KNOWLEDGE SPREADS

Cleaner Production and Energy Conservation for Sustainable Development

Cleaner production is a continuous application of an integrated environmental strategy to processes, products and services for increasing the efficiency and reducing the risks to humans and environment. It aims at minimizing the wastes and emissions and maximizing the product output by analyzing the flow of material and energy inside a system. The polluting companies generally concentrate on treating the waste generated by an industrial process in an attempt to reduce its impact on the environment, but often no efforts are made by them to reduce the overall level of waste at source. With cleaner production techniques, industrial processes can be improved by eliminating or reducing pollutants at the source during the course of the production processes itself. The increasing energy demand is presently mostly met by burning of coal and petroleum products. This dramatically leads to another major problem of gaseous pollution that need to be curbed mainly through energy conservation and replacement of non-renewable resources. In fact, energy conservation and cleaner production must go hand in hand with a single combo-solution. The former is an important element of energy planning and policy as it leads to reduction in energy consumption and energy demand per capita. It facilitated the replacement of non-renewable resources with renewable energy. It is often the most economical solution to energy shortages, and is a more environmentally benign alternative to increased energy production.

Keeping above in view the NAM S&T Centre has recently brought out above named publication which is a compilation of the papers presented during an international workshop on Cleaner Production & Energy Conservation held sometime back at Cochin. Contents of the publication include: (i) Energy policies and strategies, (ii) Cleaner production, (iii) Renewable energy, (iv) Energy Efficiency and (v) Case studies on the subject. It is expected that information provided therein will serve as a valuable material for the

concerned scientists and professionals and would provide guidelines for policy makers, management & technical personnel on the subject.

Knowledge, Productivity and Innovation in Nigeria - Creating a New Economy

Nigeria has a bold vision of becoming one of the top twenty economies in the world by the year 2020, as per its Nigeria Vision 2020 strategy. Although currently 8th in the world in terms of population, the country ranks 41st in terms of GDP and 161st in terms of GDP per capita. But Nigeria is also a powerhouse on the African continent by virtue of its size and its vast oil wealth. How can this enormous potential be realized and what policies are needed to achieve this ambitious dream of economic growth and prosperity? The authors believe that the goal of becoming a top-twenty economy can only be achieved if Nigeria makes the transition to a new economy based on knowledge, productivity and innovation in order to be competitive in a 21st century context. Above titled book is published in March 2010 by World Bank. For further details contact:

ISBN: 0-8213-8196-2

ISBN-13: 978-0-8213-8188-5

SKU: 18188

Options to Increase Access to Telecommunication Services in Rural and Low-Income Areas

Above paper published in March 2010 by World Bank provides a review of telecommunications instruments and their range. It goes on to identify a number of them that are worthy of further consideration by policy-makers and regulators while demonstrating that the effectiveness of the identified instruments can be greatly enhanced by the establishment of a conducive legal, regulatory and institutional framework. The paper concludes by confirming that while no single instrument taken in isolation can provide a full solution to universal access, a mix of the measures identified can be devised to achieve specific policy objectives in a particular country environment. For further details contact:

ISBN: 0-8213-8140-7

ISBN-13: 978-0-8213-8140-3

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