COMSATS' STRATEGY



COMMISSION ON SCIENCE AND TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT IN THE SOUTH (COMSATS)

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PART – I STRATEGIC OBJECTIVES

May 2011



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COMSATS STRATEGY PART – I: STRATEGIC OBJECTIVES

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PREFACE

The applications of science and technology for sustainable socio-economic development are assuming a new role in the present day's fast changing world. Old and well tried technologies are constantly undergoing modifications as a result of new scientific research. This advancement is largely responding to the needs of the developed countries but is also affecting the pace of changes in the developing countries. Consequently the policies and strategies must also change at organizational and national level to keep pace with the technological advancements and to draw benefits from their prudential applications. International organizations, due to their wider responsibilities, have to be conscious of such changes and respond to the new requirement in an appropriate and timely manner.

The Commission on Science and Technology for Sustainable Development in the South (COMSATS) has decided to adopt a strategy that is expected to meet the challenges of the 21st century. This step has been taken due to two major developments. First, the world's present paradigm of socio-economic development has drawn fresh inputs from the Millennium Development Goals (MDGs) and the Millennium Declaration. The second reason is the emergence of climate change as a significant factor which has affected the world's efforts to bring about the socio-economic progress both in the developed and the developing countries. COMSATS has taken stock of this new trend and has made an endeavour to evolve a realistic strategy for technical cooperation among its 21 Member States which are passing through different stages of development. A document entitled "COMSATS Strategy (2010 – 14)" was presented in the 13th Coordinating Council meeting held in Trieste, Italy. In the light of detailed discussion, the Council decided that the document should be reorganized in such a way that the basic objectives and implementation plan are separated in two different parts.

The Secretariat was assigned the responsibility to make necessary changes and seek comments of the Centres of Excellence on the new version of the document. In the light of consultations made with Centres of Excellence, some amendments have been incorporated in the text of the document. The part – I of the strategy document provides principles and objectives which are expected to be pursued by the Centres of Excellence to achieve a successful outcome of the future technical cooperative activities in a more focused and effective manner. Based on these objectives, the Centres of Excellence will be provided with another strategy document which will deal with the implementational aspects of the strategy elements contained in part – I. This will enable the Centres of Excellence to mobilize their resources in more efficient and cost-effective manner to handle the necessary developmental requirements. The central point of the strategy remains to be the promotion and implementation of thematic programmes having significant impact on the collaborating Member States' socio-economic well-being. This coordinated approach is expected to produce more tangible results than pursuing isolated research activities.

I wish to express my profound gratitude to the members of COMSATS' Coordinating Council for their valuable help in the development of this strategy document. Thanks are also due to Prof. Dr. M. H. A. Hassan, former Chairperson, COMSATS' Coordinating Council for his continued help and advice and to my predecessor Dr. Hameed Ahmad Khan for initiating the work on COMSATS' strategy. I am also

thankful to Dr. A. Koers (TWAS) for his expert advice on re-shaping the document. I am confident that COMSATS' Centres of Excellence will find this document useful for planning their future technical cooperation programmes.

(Dr. Imtinan Elahi Qureshi, *T.I.*) Executive Director COMSATS Secretariat Islamabad – Pakistan

CHAPTER - I

INTRODUCTION

Since its inception in 1994, the Commission on Science and Technology for Sustainable Development in the South (COMSATS) has been pursuing its mission and objectives with considerable success and noteworthy achievements. However, most of the scientific and technical activities have been carried out through consultations among the member countries, based on specific requirements of individual countries. In order to meet the objectives of socio-economic development in COMSATS' member countries in a more efficient way, it was necessary to launch a systematic and comprehensive technical cooperation programme in the Centres of Excellence along with a strategy and an action plan.

- 2. In view of the above considerations, a draft proposal entitled "COMSATS" Past Activities and Proposed Future Strategies" was prepared by the Secretariat and presented to the 10th Meeting of the COMSATS Coordinating Council, held in Cairo-Egypt in June 2007 for its views, comments and suggestions. In order to assist the members of the Coordinating Council in soliciting their response on the strategy proposal in an unambiguous manner, the Secretariat had prepared a relevant questionnaire on various important and central points of the strategy proposal. This questionnaire was distributed among the member countries attending the Council Meeting and the response was obtained from them before the end of the Meeting. The response to the questionnaire provided extremely valuable information on the contents of the strategy document and on the opinions of the member countries. The output also provided a reliable base for the changes which were made in the ensuing proposal. The response to the questionnaire with its analysis is contained in Annex-l.
- The revised document was again presented and discussed in the 11th 3. Coordinating Council Meeting held in Beijing, in June, 2008 and useful views were provided by some members of the Council for incorporation in the document. The Secretariat's work on the new strategy document along with the updates was presented to the 1st Consultative Committee Meeting and the 12th Coordinating Council Meeting held in Abuja – Nigeria from 27-29 June 2009. All the above mentioned meetings agreed that the strategy would be useful for COMSATS' functions and that the strategy document may be completed by the end of 2009, if no more inputs from the Centres of Excellence are received by the Secretariat till June 2009. As no further inputs were received by that time, the Secretariat went ahead and finalized the document making it more concise, cohesive and elaborative in character. This document was presented to the 13th Coordinating Council Meeting held in Trieste-Italy in May 2010. The Meeting decided that it would be desirable to split the document in two parts, one dealing with strategic objectives and the other with the implementation of the strategy. The Secretariat, in light of this decision, prepared the required document comprising various aspects of strategic objectives for the consideration and for any inputs from the members of the COMSATS' Coordinating Council. The draft of this document (Part I: Strategic Objectives)

was conveyed to the members of the Coordinating Council in July 2010 and final inputs were obtained in writing on a proforma devised for this purpose. The response has been received. Nine Centres of Excellence have agreed with the document without any change whereas five have agreed suggesting some small amendments or additions. These amendments and additions have been incorporated in the relevant places in the text, giving the strategy document its present look.

- 4. The COMSATS' future strategy demands close cooperation among the member countries and the Secretariat for its timely implementation. Centres of Excellence and Focal Points have to play a major role for its success. The strategy requires continuous activity and interaction at the Centres of Excellence and the Secretariat level with strong networking. It is expected that member countries will be able to arrange necessary infrastructure and relevant resources to gainfully employ the provisions of the proposed strategy. The progress could be assessed through two review meetings, one at the middle of the implementation period and the second at the end of the strategy period. However, continuous monitoring would also be desirable on routine matters throughout the course of the implementation process. Secretariat will be available to the member countries for any assistance in this regard.
- 5. It is clear that the transition to new policies and procedures cannot take place abruptly. The strategy, therefore, prescribes a mode of pragmatic transition within a convenient time frame during the implementation period of five years.

CHAPTER – II

STRATEGY DESIGN CONSIDERATIONS

- 6. The COMSATS' strategy for the next five years has been designed with due considerations of several important contributing parameters. These strategic design considerations have been briefly described in the following paragraphs.
- 7. The applications of science and technology for sustainable socio-economic development are assuming a new role in the present day's fast changing world. Old and well tried technologies are constantly undergoing modifications as a result of new scientific research. This advancement is largely responding to the needs of the developed countries but also affecting the pace of changes in the developing countries. Consequently the policies and strategies must also change at organizational and national level to keep pace with the technological advancements and to draw benefits from their prudential applications. International organizations, due to their wider responsibilities, have to be conscious of such changes and respond to the new requirement in an appropriate and timely manner.
- 8. The structure, functioning and some general guidelines to achieve the objectives of COMSATS were decided in 1994 and laid down in its Foundation Documents. During the intervening fifteen years, several political, social, economic and environmental scenarios have drastically changed on the global level. It is, therefore, necessary that new strategic considerations should be given to certain provisions of the Foundation Documents to better accommodate the contemporary as well as the future requirements of the membership of COMSATS. This should not only create appropriate and tangible results but also utilize the limited financial resources of the member countries in a cost-effective manner.
- 9. COMSATS, being an international organization, has decided to bring about appropriate strategic changes to meet the challenges of the 21st century. This decision was taken due to two major developments. First, the world's present pursuit of socio-economic development has taken on board new inputs from the Millennium Development Goals (MDGs) and the Millennium Declaration. The second reason was the emergence of greater sensitivity towards climate change as a significant factor affecting the world's efforts in planning its future socio-economic development. As both these factors have far deeper implications for the developing countries than the developed ones, COMSATS has taken up the task to develop an appropriate strategy suitable for greater socio-economic progress of its 21 developing member countries on sustainable basis.
- 10. The proposed strategy takes into account the COMSATS' mission, objectives and functions related to technical collaboration for socio-economic development of its member countries in the light of emerging opportunities and challenges of the present century. The world initiatives, both national and international, taken as a result of the MDGs and Millennium Declaration,

considerations. This has been done by giving particular attention to the feasibility of actions to be taken in this regard and the scope of their easy implementation, vis-a-vis the existing competencies and technical capacities in the member countries, particularly the Centres of Excellence. Strategy also includes proposals on some structural changes in the Charter of the Network, in the organizational set-up of the Secretariat and also for the creation of the statutes of COMSATS. Further, it has been realized that the international visibility of COMSATS and the public awareness of its functions needs to be enhanced. Its experience and potential, having an edge over other organizations to successfully deal with socio- economic challenges through the applications of science and technology should be highlighted on global level by all stakeholders for the collective benefit of all COMSATS' member countries.

CHAPTER - III

STRATEGIC OBJECTIVES

11. This chapter gives a brief description of the strategic objectives which consist of two components, first the "Overall Strategies" and the second "Strategies for Specific Objectives". Both these components are described in the following paragraphs:

Overall Strategies

- The overarching objective of the strategy will be to transform the role of 12. COMSATS from a facilitator to the promoter of activities linked with the applications of science and technology for sustainable socio-economic development of its member countries, giving due importance to the MDGs and Millennium Declaration. The promotionary approach will involve proactive policies with emphasis on programme coordination, monitoring and evaluation. Emphasis has been placed on: joint technical programmes, capacity building, collaboration, possible amendments in the Charter, membership rules, funding, administrative adjustments, and organizational structure of the Secretariat. The transformation will be realized with the active participation of the member countries and the Secretariat. The member countries could mobilize resources, both internal and external, for the agreed promotional activities. Major focus will be placed on the Centres of Excellence and the Focal Points to achieve this objective. While devising the strategies to meet the goals of the mandated activities, the overarching objective will remain the guiding principle. Innovative approach will be employed, wherever possible, to enhance the value of the outcomes expected from various programme mechanisms and methodologies.
- 13. The Charter of the Network of Centres of Excellence (Articles 2 h and 17) requires the establishment of collaborative technical programmes among COMSATS' member countries. This provision requires COMSATS' role to be enhanced from a facilitator to promoter of technical programmes. The main components of collaborative technical programmes are 'joint technical projects', 'capacity building' and 'international cooperation'. An integrated approach to activate all the above mentioned areas can yield better opportunities and benefits to the programmes.
- One of the significant elements of the present strategy is the enhancement of COMSATS' visibility and public awareness of its functions. A high visibility plan for COMSATS is suggested in the document. Effective public information tools need to be employed fully in order to highlight COMSATS' achievements.

Strategies for Specific Objectives

15. Strategy for Joint Technical Projects

Introduction of joint research activity under thematic groups, constituted by clusters of Centres of Excellence, in order to achieve scientific and technical expertise pertinent to specific needs of socio-economic development.

I6. Strategy for Capacity Building

The proposed collaborative technical projects to contain components promoting effective capacity building in the participating Centres of Excellence, including education, training, seminars, symposia, workshops, exchange of scientists, sharing of equipment and materials.

I7. Strategy for International Collaboration

The joint project proposals to integrate elements of North-South and Industry-Research Organization collaboration alongwith South-South cooperation, through MOUs and international agreements.

I8. Strategy for Project Funding

To start the thematic technical cooperation programme with projects requiring affordable funding resources of the Centres of Excellence and then based on the success of such projects, to embark upon more sophisticated projects with additional resources to be secured, by Centres of Excellence with the help of Focal Points and in line with the Articles 17,19 and 20 of the Charter.

I9. Strategy for Amendments in the Charter

To enhance alignment of the relevant provisions of the Charter with new requirements of the thematic programmes and make amendments in those provisions which relate to coordination, administrative set-ups and financial health of COMSATS.

20. Strategy to Strengthen Membership of COMSATS

To facilitate and encourage new membership having strong Centres of Excellence to enhance overall level of technical competency and capacity of COMSATS with a view to fulfil its missions and objectives including the new strategic technical programme collaboration.

21. Strategy for Administrative Adjustments

To upgrade the COMSATS' Secretariat structure and strengthen its administrative functions to effectively deal with the new requirements of thematic technical programmes and other related activities in the member countries.

22. Strategy for Visibility and Public Awareness

To sufficiently raise the level of public awareness of COMSATS' role as a promoter of science and technology based programmes for socio-economic development of its member countries through effective publicity and extended outreach.

CHAPTER – IV

ACTION PLAN

23. The present chapter describes, in general terms, some methodologies and possible non-binding steps to be taken in order to realize the strategic objectives.

24. Joint Technical Projects

PROPOSED STEPS AND METHODOLOGIES:

- Clustering the Centres of Excellence.
- Networking of the Centres of Excellence and Secretariat, for coordination.
- Designation of Lead countries, coordination officers and / or Project officers.

PRIORITY PROGRAMMES:

Priority programmes in well defined thematic areas, with strong relevance to the socio-economic development of the Member States, will be pursued during the strategy period including, but not limited to, those specified during the 10th, 12th and 13th Coordinating Council meetings. The programmes will be jointly undertaken by the interested scientists in Member States constituting a team under a group leader from the lead Centres of Excellence, which will have high expertise in the areas of thematic programmes.

25. Capacity Building

- Reliable capacity assessment through Country Programme Frameworks (CPF)* which provides future socio-economic priorities of the countries, in addition to common economic data.
- Programmes for raising educational qualifications of the technical personnel.
- Project related, on-the-job trainings.
- Skill enhancement through workshops, seminars, symposia and other technology oriented moots.
- Access to the equipment in the partner institutions and shared equipment support arrangements (spares and trouble shooting, etc.).

^{*}CPF: Country Programme Framework is a description of economic and technical status of a country alongwith its future national short-term and long-term priorities linked to its socio-economic development.

- Knowledge sharing networking through ICTs.
- Intensifying the Q/A and Q/C programmes in the Centres of Excellence.
- Exchange visits of laboratory technicians, equipment operators and workshop operators.
- Retention of science and technology talent through career incentives.
- Strengthening scientific networking through posting in the Secretariat of relevant personnel from the Member States subject to the availability of funds.

26. International Collaboration

- Upgradation of South-South collaboration through the projects based on TCDC** concept (Technical Cooperation among Developing Counties).
- Establishment of a sound North-South collaboration programme through Coordinated Research Projects (CRP's***).
- Proactive interaction between the corporate sector, government, R&D entities and the Centre of Excellence.
- Specific agreements and memoranda of understanding.

27. Amendments in the Charter

- Appropriate amendments in those provisions of the existing Charter which are inconsistent with the present conditions and future plans.
- Changes in the provisions which have not remained actively operative due to various reasons or circumstances.
- Incorporation of advice rendered by the Coordinating Council (as per Annex-l)

^{**}TCDC: Technical Cooperation among Developing Countries involves joint pursuit of scientific and technical programmes or projects by the research establishments of the developing countries under a predetermined set of collaborative rules and regulations.

^{***}CRP: Coordinated Research Programme is a methodology whereby scientific and technical research is carried out jointly by the research establishments of a developing country and an advanced country to target problems of common interest.

28. Strengthening Membership of COMSATS

- Countries having COMSATS affiliated Centres of Excellence will be encouraged to join COMSATS as members.
- Increasing the membership of developing countries, especially those having good R&D institutions that can be affiliated with COMSATS.
- Membership rights through one member one vote system for all policy decisions directly related to the member countries.
- Decisions by consensus to be given priority over voting or arbitration.
- Revitalizing the participation of the less active member countries in the activities of COMSATS and requesting the countries without Centre of Excellence to identify institution that can be affiliated with COMSATS.
- Encouraging Member States to create a management model for developing countries for local and regional consolidation of capabilities, enhancement of social impact, ensuring sustainability, creation of spin – off private enterprises and widening collaboration.

29. Administrative Adjustments

- Creation and adoption of Standard Operative Procedures (SOPs) for the Secretariat's interaction with the member countries and other relevant entities.
- Creation and formalization of the Organizational Structure for the Secretariat to improve service dynamics and career opportunities for its functionaries.

30. **Project Funding**

- Appropriate upward revision of the voluntary contributions of the member countries to COMSATS' Trust Fund for their national programmes.
- Implementation of the provision of Article 17 of the Charter to create a Technical Assistance Fund for the technical cooperation programme.
- Creation of an Endowment Fund.
- Provision of extra budgetary funding by international organizations, national organizations, Academies of Sciences, Science Foundations, etc. for special projects to be undertaken within COMSATS membership.
- Outreach by the Centres of Excellence to engage business and industry for the provision of services, R&D, value addition and innovation programmes with the involvement of relevant Government organizations and Chambers of Commerce and Industry to generate funds for thematic technical cooperation programme.

- Promotion of commercial and business activities inside the Network of Centres
 of Excellence based on the technologies evolved through South South
 cooperation for long term sustainability and institutional stability of the Member
 States.
- Special grants for seminars, symposia, workshops, fellowships, trainings, etc. from Government sources and international donor agencies.

31. Visibility and Public Awareness

- Engaging the print and electronic media.
- Publications (research based books, journals, Newsletter, handouts, CDs, etc).
- Public awareness seminars, symposia, debates and other well planned knowledge dissemination campaigns.
- Exhibitions.
- Regular contacts with the relevant Diplomatic Missions in the host country and in other member countries.
- Regular interactions of the Centres of Excellence with the concerned government ministries, scientific and technical organizations, planning commissions, NGO's etc., on matters of COMSATS' interests.
- Outreach to educational institutions, science foundations, academies of sciences and learned societies.

Annex-I

RESPONSE ANALYSIS OF THE QUESTIONNAIRE

-	Need for the change	-	100% in favour
-	Improving performance quality through joint projects	-	100% in favour
-	Procedural simplifications for better results	-	100% in favour
-	Agreement on the proposed strategy changes as given In the document presented (and also with some changes)	1	62.5% in favour (37.5% in favour)
-	Changes in the Charter	-	75% in favour 25% for changes already
			anticipated in the Charter
-	Inclusion of new programmes other than IT and renewable energies	-	100% in favour
-	Enhancement of capacity building	-	100% in favour
-	North-South collaboration in addition to The South-South collaboration	-	100% in favour
-	Increase in the membership and flexibility in the rules	-	87.5% in favour
-	Improving financial strength of COMSATS	-	Through regular budget-25
			Improving present methodology – 60%
			Commercializing the Intellectual property rights (IRPs) – 20%
-	To ensure continuity of the technical programmes	-	100% in favour
-	Increasing COMSATS' visibility for donor assistance	-	100% in favour
-	Secretariats' current initiatives and efforts to review past activities and to prepare new strategies to improve programmes	-	100% in favour

COMSATS' STRATEGY

PART – II

IMPLEMENTATION AND MONITORING

May 2012



COMMISSION ON SCIENCE AND TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT IN THE SOUTH (COMSATS)

COMSATS STRATEGY PART – II: IMPLEMENTATION AND MONITORING

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COMSATS STRATEGY

PART-II: IMPLEMENTATION AND MONITORING

I. Introduction

Following a decision of the 10th Meeting of COMSATS' Coordinating Council, held in Cairo (Egypt) in June 2007, regarding the preparation of a strategy for COMSATS, a comprehensive draft of the strategy document for 5 years' period was compiled by COMSATS Secretariat. After a consultative process in the subsequent Coordinating Council Meetings, its final version was presented, to the 13th Meeting held in Trieste (Italy) in 2010.

- 2. The Trieste Meeting decided that the strategy document should be split into two parts. The first part should contain objectives and principles on which the future strategy of COMSATS would be based whereas the second part should deal with implementation and monitoring of the programmes to be undertaken with the help of this strategy.
- 3. In view of the above decision of the 13th Coordinating Council Meeting, the COMSATS' Secretariat has split the main strategy document into two parts. The first part, entitled "COMSATS STRATEGY (2011-15), PART-1: STRATEGIC OBJECTIVES" was unanimously approved by the 14th Coordinating Council Meeting (Bogotá Colombia) in May 2011. The second part has now been completed, after incorporating the suggestions, views and comments of the Council members, to the maximum extent possible. This document is entitled "COMSATS STRATEGY, Part II: IMPLEMENTATION AND MONITORING". Basically this document is also for five years' period but no dates have been mentioned in the title because implementation and monitoring of the projects and other activities given in the document, may actually go beyond five years period in certain cases.
- 4. The text of the present document has been kept as close as possible to the sequence of subjects mentioned in the first part of the strategy document (Strategic Objectives) for ease of comprehension and reference. The implementation and monitoring procedures are to be considered as flexible and non-binding for the convenience of the Centres of Excellence. The basic objective of the procedures given in this document is to strengthen the technical cooperation programmes and their successful implementation in a timely manner.

II. Implementation and Monitoring Considerations

- 5. Implementation and monitoring activities of all the strategic programmes are to be planned well in advance of the start of the relevant programmes and would be in consonance with the work-plans prescribed for each activity. It is envisaged that in most of the cases, the details of implementation and monitoring plans could be finalized at the design stage of the projects or at the planning stage of other relevant activities.
- 6. Lead institutions and Centres of Excellence will play major role in project implementation and monitoring. In case of need, the Secretariat could assist the thematic groups in the capacity of a facilitator. As far as the implementation and monitoring of other strategic objectives is concerned, the relevant Centres of Excellence and the Secretariat will closely collaborate with one another for the successful fulfillment of the objectives. The implementation and monitoring of activities related to amendments in the Charter of the Network of Centres of Excellence and administrative adjustments, will be primarily looked after by the Secretariat.
- 7. The expert advice of the members of Technical Advisory Committee and the Focal Points can be helpful in devising effective implementation and monitoring procedures for various strategic activities. Centres of Excellence and the Secretariat would be urged to establish connectivity and open dialogue with the TAC and Focal Points at appropriate times during the programme campaigns.
- 8. The success of the implementation and monitoring activities largely depends upon following sound mechanisms, appropriate performance indicators and allocating responsibilities to the concerned persons and organizations. It would be useful if Centres of Excellence and lead institutions give due consideration to these aspects and incorporate them into their implementation and monitoring procedures.

III. Joint Technical Cooperation Projects

9. The joint technical cooperation projects, under various thematic areas, constitute the core activity of the present strategy. The implementational mechanism for this activity will employ collective handling of the projects by the agreed clusters of Centres of Excellence under the supervision of a lead institution of the Member States. The initially agreed list of the thematic areas, lead institutions and the collaborating clusters, which could be modified by the consent of the Coordinating Council, is given below:

<u>No.</u>	THEMATIC AREA	<u>LEAD</u> <u>INSTITUTION</u>	COLLABORATING CLUSTER
i.	Information and Communication Technologies (ICTs)	CIIT (Pakistan)	Tanzania, Jordan, Sudan, Nigeria, <i>Syria</i>
ii.	Agriculture, Food Security and Biotechnology	NRC (Egypt)	Sudan, Tanzania, Jordan, Pakistan, Jamaica, Brazil, Nigeria
iii.	Natural Products	ICCBS (Pakistan)	Egypt, Sudan, Jordan, Tanzania, Iran
iv.	Climate Change and Environmental Protection	ICCES (China)	Jamaica, Brazil, Iran
v.	Material Sciences	RSS (Jordan)	Egypt, Nigeria, Sudan,Tanzania, Pakistan. <i>Syria</i>
vi.	Mathematical Modeling	NMC (Nigeria)	Jamaica,China, Tanzania, <i>Syria</i>
vii.	Construction Materials	ICMST (Ghana)	Egypt, Sudan, Tanzania, Pakistan
viii.	Space Technology	IROST (Iran)	Colombia, Brazil

(Proposals from Turkey to include Natural Hazards and Natural Resources as additional thematic areas were provisionally agreed in the 14th Coordinating Council Meeting. Membership of these Thematic Groups may be decided by the Council.)

10. The implementation of joint technical cooperation projects may include the following steps:

- i. Pre-project consultations among the participating Centres of Excellence.
- ii. Preparation of a concept paper of the project.
- iii. Preparation of a detailed project proposal (in a project formulation meeting).
- iv. Distribution of technical and other relevant tasks among the collaborating institutions with an agreement on responsibilities and on a suitable work-plan, for which MoUs may be signed.
- v. Execution of the agreed work-plan by each project participant.
- vi. Monitoring of the progress by the lead institution through quarterly progress reports and annual review meetings in the light of agreed performance indicators.
- vii. Adjustments and re-scheduling the project activities, whenever required during the execution phase, with the agreement of cluster organizations.
- viii. Project completion and its termination with agreement of the collaborating organizations, giving due consideration to the results, impact analysis and recommendations.
 - ix. Compilation of project reports, decisions on publications, archiving the documents and arriving at consensus on intellectual property rights.
 - x. For the project formulation meeting and the annual review meeting, the host organizations will bear the cost of local hospitality whereas the travel expenses will be the responsibility of the participant organizations. The COMSATS Secretariat may contribute suitable funding in case of special circumstances.
- xi. The project collaborating institutions will employ necessary resources, including the designation of liaison officers (contact persons), if necessary, and establishing appropriate networking mechanisms for efficient execution of the projects.
- xii. The lead institution will provide guidance and coordination in planning, execution and management of the project to the participating institutions. It will also act as the main contact point for liaison between the COMSATS' Secretariat and the cluster organizations for various aspects of project formulation, implementation and monitoring activities.
- xiii. The lead institution will keep the COMSATS' Secretariat informed about the project out-lays, outcome of the various progress monitoring activities and the project termination decisions including the publication of results, etc.
- xiv. All decisions during implementation and monitoring phases of the projects will be taken by consensus. In case of disputes, the COMSATS Secretariat will arbitrate and settle the issues.

IV. Capacity Building

- 11. Capacity building would be one of the most important benefits to be gained by the collaborating Centres of Excellence as a result of thematic project implementation programmes. In the present context, the capacity building activities in the participating institutions will mainly focus on the specific requirements of the projects. The nature of capacity building activities desired by each participating institution would become adequately clear at the time of project design. It would allow the institutions to create sound work-plans for such activities to be undertaken during the actual implementation of the projects.
- 12. The implementation and monitoring of capacity building activities by the participating institutions could include the following general aspects:
 - i. Assessment by each Centre of Excellence of available human, technical and logistical support needed for the project and identification of the specific areas where capacity building is required.
- ii. Exchange of information among the participating institutions and the lead institution on capacity enhancement requirements at the start of the project for filling the capacity gaps during the project implementation stages.
- iii. Holding of seminars, symposia, workshops, training courses and creating higher education opportunities for the researchers, experts, technicians and other staff within the Centres of Excellence or other suitable institutions in the COMSATS' Member States. For this purpose the project participating Centres of Excellence and other Member States institutions will cooperate with each other in offering fellowships, training facilities, local hospitalities and other relevant support under mutually agreed terms and conditions. Lead institutions and COMSATS Secretariat could coordinate and facilitate these activities.
- iv. Offering degree courses on S&T Project Management by concerned Centres of Excellence on concessional rates.
- v. Arranging on-the-job training courses for upgradation, repair and maintenance of the laboratory equipment and instruments in the Centres of Excellence.
- vi. Establishing effective networking facilities among participating Centres of Excellence for rapid consultations and information exchange. Lead institutions to play coordinative and facilitative role in this regard.
- vii. Participation of all Centres of Excellence in preparing a COMSATS' Directory having information on the technical and human capacities in their institutions which could facilitate various capacity enhancing programmes of

the interested Centres of Excellence.

- viii. Sensitizing the Technical Advisory Committee of COMSATS for the capacity enhancement needs of the Centres of Excellence, utilizing its influence to assist Centres of Excellence securing fellowships, placement of students in advanced countries' establishments, arranging training courses, seminars, symposia, workshops, etc., in their countries and lobbying for COMSATS at international fora for help and assistance.
 - ix. Constituting a committee from the Centres of Excellence to guide and promote various activities for capacity enhancement programmes. The composition and the functions of this committee to be decided by the Coordinating Council.
 - x. Arranging reviews for monitoring the capacity building activities and their progress. The Coordinating Council may specifically deliberate upon the capacity building needs of the Centres of Excellence and the measures to address such needs.

V. International Collaboration

- 13. The strength and effectiveness of thematic research projects and capacity building can be greatly enhanced by sharing human and institutional resources, technical know-how, and project management expertise of the COMSATS' Centres of Excellence with the countries of the North.
- 14. The implementation priorities for international collaboration may include the elements of the Millennium Development Goals and Millennium Declaration, R&D for the benefit of Small and Medium Scale Enterprises and Research-Industry joint commercial ventures. Exclusive partnerships within the COMSATS' Member States and countries of the North and international donor organizations such as UNESCO, ISESCO, COMSTECH, EU, UN system, etc., could create new but more successful implementational patterns for technical cooperation programmes.
- 15. The implementation and monitoring of international collaborative activities may include the following mechanisms and procedures:
 - i. Introducing the elements of Technical Cooperation among Developing Countries (TCDC) concept in the design of joint thematic projects. This will extend the technical collaboration beyond the clusters of Centres of Excellence to inter-regional and international level.
- ii. Establishing Coordinated Research Projects (CRPs) among the Centres of Excellence and the research organizations in the countries of the North.

- iii. Employing the assistance of the Focal Points, Technical Advisory Committee and the diplomatic channels to establish technical cooperative relationships between Centres of Excellence and R&D organizations of the scientifically advanced countries.
- iv. Entering into Memoranda of Understanding (MoUs) with international S&T organizations, universities, donor organizations and industrial enterprises to establish new relationships and strengthen the old ones. This would involve reviewing the already existing MoUs by Centres of Excellence and the Secretariat.
- v. Utilizing the assistance of COMSATS' Secretariat for coordination and facilitation of the international collaborative activities by the Centres of Excellence.
- vi. Monitoring the activities of international collaboration to be undertaken by Centres of Excellence through pre-determined criteria incorporated in the work-plans. Monitoring reports to be prepared by the collaborating organizations and discussed in the project review meetings.

VI. Project Funding

- 16. Provision of the funding for joint thematic projects and other related programmes to be implemented by the Centres of Excellence, is the most important aspect of the success of the present strategy. In this context, the Focal Points and Centres of Excellence have to play a leading role. The details of procurement and disbursement of necessary funds for the agreed projects and programmes need to be decided at the design stage of the concerned activities, preferably with an agreed mechanism. Maximum use may be made of the existing technical and financial resources of the Centres of Excellence. The following steps could be considered for adoption by the implementing institutions:
 - i. Centres of Excellence and Focal Points to increase their joint efforts to attract funds from international donors, NGOs, etc., on the basis of success stories of their past projects and programmes. Coordinating Council to constitute a task force to implement this mechanism. Help in this regard may be sought from the more resourceful members of the Technical Advisory Committee.
- ii. The Thematic Research Proposals to be re-cast in accordance with the requirements of international donor agencies in order to achieve long-term funding.
- iii. Focal Points to be sensitized by the Centres of Excellence and the Secretariat for obtaining funds exclusively for the strategy programmes.

- iv. The industrial sector to be involved by Centres of Excellence with the help of Focal Points for funding the commercially oriented projects.
- v. Fellowships, training courses and cost-free experts' services to be facilitated by the Centres of Excellence for the project implementation and capacity enhancement purposes in order to economize the strategic programmes.
- vi. The Annual Membership Contributions from the Member States to be regularized more effectively for the promotion of activities related to thematic projects and the capacity building programmes.
- vii. Centres of Excellence to increase their efforts to commercialize some of their relevant technical capabilities in order to raise additional funds for the joint projects and related activities.
- viii. A portion of income accrued by the Centres of Excellence from the commercialization of the patents to be set aside for funding the future joint thematic projects and the capacity building activities.
 - ix. An Endowment Fund to be created for the implementation of projects, capacity building programmes and other strategy related activities, alongwith the identification of possible funding resources, in consultation with the Coordinating Council.
 - x. The Coordinating Council to deliberate upon the fund raising efforts in its annual meetings and to discuss effective implementational and monitoring mechanisms in order to achieve tangible results.

VII. Amendments in the Charter

- 17. The necessary amendments in the Charter of Network of the International Science and Technology Centres of Excellence for Sustainable Development in the South need to be made and implemented in the light of decision taken by the 10th Meeting of the Coordinating Council (Cairo, June 2007) and in accordance with the relevant sections of the approved strategy (2011-15), Part I: Strategic Objectives.
- 18. The implementation procedure for amendments will be followed in accordance with the existing provisions of the Charter as given in Articles 23 and 24 of Chapter XI.
- 19. The amended version of the Charter will be prepared by a committee designated by the 15th Coordinating Council Meeting (2012). The draft will be circulated among Centres of Excellence for comments, etc., and finalized in the light of the comments received. The final draft will be presented to the 16th Coordinating Council Meeting for deliberations and approval.

20. The progress of the implementation work on the revision of the Charter will be monitored by the Executive Director COMSATS.

VIII. Strengthening Membership of COMSATS

21. The implementation of strategy for strengthening the membership of COMSATS would include adding new members as well as making the less functional members more active for participation in the activities of the organization. The process has already started and it is expected that some new members will join COMSATS in near future. Further steps will be taken by making use of the experience gained by the Secretariat from the current efforts made in this regard. It is envisaged to undertake the following steps:

New Memberships:

- i. Simplification of membership eligibility requirements via-a-vis those given in the Charter.
- ii. Campaign for new memberships through offers sent by the Secretariat and personal visits of the Executive Director to the potential member countries.
- iii. Utilization of the diplomatic channels.
- iv. Participation of the Centres of Excellence and Focal Points in membership campaigns.
- v. Using COMSATS' web-sites and publications for informing the benefits of COMSATS' membership with particular reference to the benefits of joining the thematic groups for joint technical cooperation programmes.
- vi. Motivating those non-member countries whose Centres of Excellence are affiliated to COMSATS, to become members as early as possible.

Reviving the interest of non-participants:

- i. Personal visits of the Executive Director COMSATS to the concerned Member States to address the participation issues.
- ii. Utilization of the diplomatic channels.

IX. Visibility and Public Awareness

22. The implementation and monitoring activities to address visibility and public awareness issues will require a combined and sustained action by the

Secretariat and the Centres of Excellence which will be complemented by the Focal Points. Each Centre of Excellence and Focal Point will devise its own implementation and monitoring strategy in the light of countries' policies, social and cultural background and availability of resources. It would be appropriate if activities undertaken in this regard are regularly reviewed in the Coordinating Council meetings. Main implementation and monitoring activities may involve:

- i. Strengthening media relationship and public awareness campaigns by the Centres of Excellence and the Secretariat.
- ii. Initiating outreach campaigns focusing on chambers of commerce and industry, social and cultural organizations, academia, professional societies, local governments, diplomatic missions, UN organs, donor agencies, NGOs, etc. by Centres of Excellence.
- iii. Display of COMSATS' sign-boards, plaques and logo at appropriate places in the buildings of the Centres of Excellence.
- iv. Arranging joint COMSATS Centre of Excellence exhibitions in the Member States.
- v. Creation of an essay/article writing prize for the COMSATS' Member States on the subjects relevant to the objectives of COMSATS. The details to be decided by the Coordinating Council.

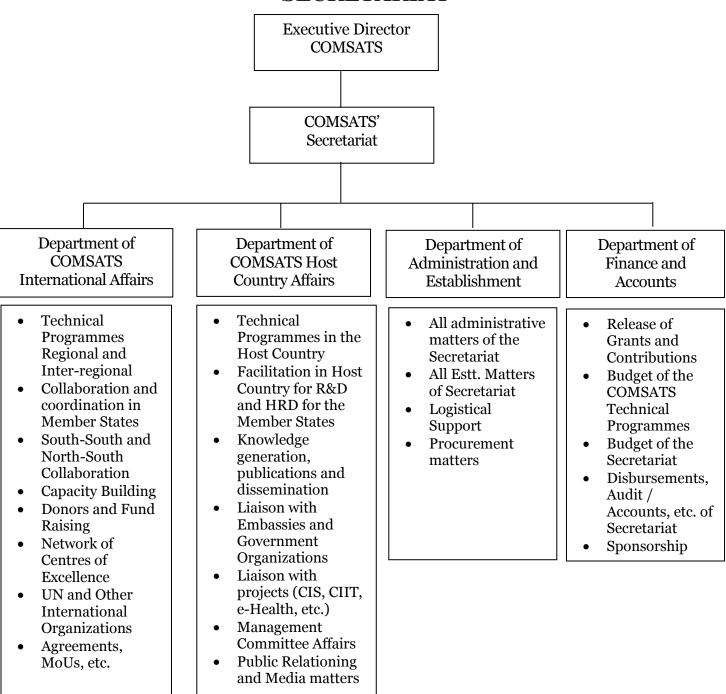
X. Administrative Adjustments

- 23. In order to efficiently carry out the various strategic objectives agreed by the Coordinating Council, it is imperative that appropriate administrative adjustments are made in the existing set-ups of COMSATS' Secretariat and the Centres of Excellence. In view of the expected enhanced role of COMSATS' Secretariat during the implementation period of the strategy, some reorganizational decisions will be required which will be fine-tuned to the requirements of the programmes and projects and their progress. No major readjustments are envisaged for the Centres of Excellence as they are already well organized to administratively control their existing technical projects and programmes. The main implementational steps needed in the above stated context would be:
 - i. Designation of liaison officers by the Centres of Excellence and Focal Points, for strategy coordination and implementation purposes.
- ii. Maintaining, as far as possible, the continuity of technical and other human resources during the project period.

- iii. Provision of some incentives to the manpower engaged in projects and programmes of the strategy.
- iv. Monitoring of progress in implementation of above mentioned administrative adjustments by the individual organizations concerned.
- v. Exchanging information about the adjustments made in the project implementation after consultation among the participating Centres of Excellence, with Focal Points and the Secretariat.

24. The COMSATS' Secretariat may consider administrative adjustments in the light of the following proposed organizational chart.

PROPOSED ORGANIZATIONAL CHART OF COMSATS' SECRETARIAT



Note: The tasks indicated in this proposed organizational chart will be managed by the existing manpower available with the Secretariat. Additional manpower could be employed as and when needed.

XI. Proposed Time-Line

Various activities mentioned in the present document have been consolidated 25. into a proposed time-frame which covers over a period of five years (2012 – 2016). It is reiterated that details of each activity in the strategy period will be decided by each Centre of Excellence in the light of its organizational resources and policies. The matrix includes the actions expected to be taken by Centres of Excellence, Focal Points, Secretariat and donors or collaborating organizations. Certain activities pertaining to project formulation meetings, capacity building programmes, international collaboration and strengthening of membership have already started, therefore they have been indicated in the year of commencement. i.e., 2012. The action plan is expected to help the thematic groups and other participants in the implementation and monitoring activities to coordinate their collaborative efforts in scheduling of resource allocations, planning processes and management policies. While devising the proposed time- line, it has been presumed that each project cycle will typically complete in 3-4 years' period. The action plan will be subject to adjustments by the Centres of Excellence in the light of their future management requirements.

Time-Line of Proposed Action Plan

C#	Activity	Action by	Year				
S#			2012	2013	2014	2015	2016
1	Project Formulation	CE, S					
2	Project Implementation and Monitoring	CE					
3	Programme Funding	CE, FP, S					
4	Capacity Building Programmes	CE, S, D					
6	Amendments in the Charter	CE, S					
5	International Collaboration	CE, S					
8	Administrative Adjustments	CE, S					
7	Strengthening Membership	S					
9	Visibility and Public Awareness	CE, FP					

Key

CE = Centres of Excellence

FP = Focal points S = Secretariat

D = Donor Organizations