

INTRODUCTORY REMARKS

by

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Honourable Federal Secretary, Ministry of Science and Technology, Government of Pakistan, Mr. Fazal Abbas Maken

Honourable Minister for Higher Education, Research, Science and Technology, Islamic Republic of The Gambia

Prof. Dr. Aboubacar Senghore,

Rector, COMSATS Institute of Information Technology, Dr. Syed Muhammad Junaid Zaidi

Honourable delegates of COMSATS Coordinating Council

Honourable members of academic and diplomatic community

Excellencies, Distinguished Guests,

Ladies and Gentlemen,

I am very pleased and honoured to welcome you all this morning in the inaugural open session of the 19th Coordinating Council meeting of COMSATS. The meeting of the Council is held annually in one of COMSATS' Centres of Excellence, in different countries of the world. This year it is being held for the first time in COMSATS Institute of Information Technology, Islamabad. I can see a good representation of the academic staff of the university present here. I also recognize that a number of ministries, S&T organizations and universities in Islamabad have sent their representatives to attend this function. I thank all those who have joined us today from Islamabad-based institutions, government organizations and diplomatic missions of COMSATS' Member States.

One of the advantages of holding the meeting in COMSATS' host country is that we could invite former Executive Directors of COMSATS. I am glad to see that all of them are present here. In fact there are only two full-time former Executive Directors, Mr. Parvez Ahmad Butt and Dr. Hameed Ahmed Khan. I am thankful to them for disturbing the quietness of their daily routines and coming to this bustling function. Of course, most of the Members of the Council who will be attending the closed technical sessions have travelled from different parts of the world to participate in this annual gathering. I sincerely thank them for making special effort to attend the Council meeting, which shows their strong attachment with COMSATS and the commitment towards its objectives.

One of the organs of COMSATS is its 'Technical Advisory Committee' (TAC). This 10-member Committee comprises of renowned scientists from developing as well

as developed countries. We invited two of the most influential scientists of the developing world, who are members of TAC, Dr. Ishfaq Ahmad, former Chairman Pakistan Atomic Energy Commission and Prof. M. H. A. Hassan, former Executive Director, 'The World Academy of Sciences' (TWAS). Unfortunately, there was a last minute development due to which Prof. Hassan could not travel to Islamabad, but Dr. Ishfaq Ahmad has been kind enough to honour us with his presence, in spite of frail health. I take this opportunity to thank him for his consistent support and patronage of COMSATS.

In line with our policy of openness and cooperation with international organizations having similar mandates as that of COMSATS, we have invited partner organizations to participate in the technical sessions of the meeting as observers. Some of them have come from abroad and some are participating from Islamabad. We are glad to have with us representatives of UNESCO, SESRIC, ECO-SF, COMSTECH and ICGEB. I appreciate their presence and thank them for accepting COMSATS' invitation.

I am particularly thankful to the honourable Chief Guest, the Federal Secretary for Science and Technology, who has kindly spared time from his busy schedule to preside over this function. He too is a great friend of COMSATS and has always taken keen interest in its progress. His presence is also indicative of the strong support of the Government of Pakistan for COMSATS and its international activities.

Ladies and Gentlemen,

COMSATS Coordinating Council occupies a pivotal position in the affairs of this organization. It will be fair to say that all other organs of COMSATS play a supportive role for the programmes initiated and steered by the Council. It is a body that comprises of the Heads of R&D organizations, which are affiliated with COMSATS as Members of its world-wide Network of Centres of Excellence. This Network has presently 20 nodes, spread across four continents. We are privileged to have the representation of 16 of these Centres of Excellence in this year's meeting. The Members of COMSATS' Council are renowned scholars, with wide experience and strong influence, well-recognized at national level in their respective countries and in some cases at international level. Acting as a group on COMSATS' platform, their outreach is expanded many-fold. Thus, the real-time interactivity among them afforded by the Council meeting, offers invaluable opportunities of cooperation and exchange of ideas and sharing of human and material resources. There are over 15000 working scientists in COMSATS' Network Members. This is a big pool of human resource that is available to COMSATS for its international activities, which are geared towards two objectives: firstly, to enhance the research capacity of individual scientists; and second, to provide them opportunities of cooperation with other R&D organizations in developing countries. These activities are built around COMSATS core mission of providing assistance for socio-economic development to the countries of the global South. Whereas the overall national development plans of any country always depend on a number of factors that involve a multitude of institutions and policy instruments, however, COMSATS focuses on one sector that is indisputably the most crucial element of any development plan; namely, the scientific and technological capacity. This is what is considered as the

most profound lesson of history, and this is what COMSATS is exclusively concerned with.

Ladies and Gentlemen,

It would be an understatement to say that the world is passing through a period of rapid transformation. In fact, the transformation is so extensive and taking place at such a breath-taking rate, with its impact so phenomenal that we may as well call it an unprecedented epochal phenomenon. Never before in the history of civilization, mankind has explored so far in the deep recesses of universe, observing mysterious forms of matter, finding exo-planets in abundance, detecting gravitational waves and encountering dark energy that is causing accelerated expansion of the universe. On the other hand, scientists have created on earth, at least during fleeting moments, such conditions that existed seconds after the creation of the Universe. After having understood the nature of fundamental building blocks of matter, they are now at the verge of deciphering the very essence of mass itself, with clear signals observed in CERN, the European Laboratory for Nuclear Research, which could be the long sought after Higgs bosons. The understanding of the composition of complex matter has advanced to a stage where ever new forms of matter, with bespoke properties are being synthesized in laboratories. One such class of materials comprising organic and inorganic hybrids, dubbed as Metal Oxide Frameworks, being prepared in thousands of varieties using synthetic chemistry has put at man's disposal what nature had shied to offer. These developments have immense economic and social consequences. Concurrently, the advances in robotics, drones, 3-d printing, and high-powered lasers, accompanied with remote sensing and internet of things are tools of unprecedented political and military power. However, these forays into material world pale before the ability to break into the secret vaults of life itself. Today, biotechnology has advanced to a stage where human beings are able to control their own evolution. The ethical dilemmas of this kind of power are stupendous for humanity as a whole, but there are also monstrous consequences when it is realized that the world is strongly polarized with respect to haves and have-nots of these technologies. The have-nots are predominantly the countries of the South. The question is how long they will be able to survive in the face of this technology onslaught. The clarion calls have been sounding for decades now from many platforms, including COMSATS. Who is paying heed and who is not, that will be known in not in too distant future, because those who will stumble on the path of acquiring modern technology will be crushed and will become part of history.

To avert this existential threat COMSATS has been doing its bit since 1994, through various innovative means. One must salute the policy makers in Pakistan, in realizing the importance of creating an organization that can mobilize political support at the highest level and energize scientific activity at the grass root level. The former, due to the fact that the Members of the Commission are Heads of State/Govt., and later due to an affiliated Network comprising of R&D organizations in different developing countries. COMSATS has stuck to its job in spite of strong financial constraints. Among other factors, the steadfastness of the Government of Pakistan in providing establishment expenditure, in-kind contributions and intellectual inputs through Centres of Excellence and dedicated hard work of about a dozen officers working in its

Headquarters is a major contributor of its continued success, of which all COMSATS community is proud of.

COMSATS is helping its Member States through various programmes in education and training, research and development, dissemination of information and publications, and consultancy and advocacy. In educational sector, support is available through offers of graduate and postgraduate scholarships mainly at COMSATS Institute of Information Technology. Last year 12 students from Bangladesh, Ghana, Nigeria and Palestine were admitted for the award of scholarships. Training opportunities available at other COMSATS' Centres of Excellence include ICCBS (Pakistan), IROST (Iran), and ICCES (China). COMSATS supports research activity by holding seminars and conferences in cutting-edge technologies such as nanotechnology. Fifteen conferences on a variety of advanced topics were held during 2015, benefitting more than 625 participants. COMSATS organizes workshops that provide hands-on training in areas of research productivity such as workshops on "Repair and Maintenance of Scientific Engineering Equipment in Universities, Research Institutions and Small Scale Industries". So far eleven workshops have been held during the period 2004 – 2015, creating 350 master trainers, resulting in immediate as well as long-term benefits by restoring working conditions of malfunctioning equipment worth millions of dollars. Overall 245 national and international capacity-building events have been organized. COMSATS not only supports but also manages research groups through its very unique programme of International Thematic Research Groups. These are multinational groups conducting research on specific topics under the guidance of Group Leaders, who are senior scientists from different Centres of Excellence. At present, five Groups are actively engaged in research that is most relevant to socio-economic needs, covering studies in Environment Sciences, Natural Products, ICTS, Agriculture, and Mathematic Modeling. Serial training programmes on 'Internet Security' have been hugely successful. So far, five meetings have been organized in different countries, during the period 2011-2015 benefitting 250 experts in this highly specialized area. Partnership with UNESCO has led to two mega conferences celebrating the International year of Crystallography in 2014 (held at ICCBS) and International Year of Light in 2015 (held at CIIT). COMSATS serial workshops on Science Policy held in different regions have led to the formation of a permanent panel of five experts for advice on Science Policy to all Member Countries. COMSATS has set up a panel of three Distinguished Science Professors, who are available for state-of-the-art lectures. Currently Biosciences, Mathematics and Computer Sciences are included in the Professorship Scheme. Dr. Iqbal Choudhary, Director ICCBS, has been invited to give a series of lectures in Nelson Mandela University, Tanzania, this summer. COMSATS has been pursuing a programme of Science Diplomacy whereby policy makers, diplomats and politicians will be regularly sensitized about the scientific underpinnings of current and emerging national and international challenges in the sectors of health, communications, environment and food security. Three lectures have been held under this programme, and more are on the way. As a measure of the surge in COMSATS international role, I am glad to report that the number of COMSATS' Centres of Excellence has significantly increased in recent years. During the last five years five new Centres have been added to the Network, one each from Senegal, Bangladesh, Sri Lanka, Tunisia and Kazakhstan. Two more centres in Palestine and Morocco have been nominated by their respective governments. The addition of new State Members has been slow, but last

year the accession of Palestine and Morocco was formalized, with Turkey and Brazil in the process of completing legal formalities. I am proud to say that this inaugural function will be followed by a ceremony, in which the Islamic Republic of the Gambia will be inducted as a Member State. The Honourable Minister for Higher Education, Research, Science and Technology, Government of the Gambia, H. E. Dr. Aboubacar Abdullah Senghore, has kindly travelled to Islamabad, especially for the signing of Accession Agreement. Welcoming the Honourable Minister in the Capital of Islamic Republic of Pakistan, I assure him that COMSATS will use all its resources to help in the development of education and scientific research in the Gambia. COMSATS will be honoured to have the Gambia as its 24th Member.

In the end, let me say that the extent to which COMSATS has achieved its objectives is a reflection of how much Member States have utilized the resources available at COMSATS disposal. Please note that it is an organization of the developing countries, run by developing countries for the benefit of developing countries. In that sense it is one its kind, being non-political, non-regional, and non-denominational working outside UN system. The ownership of the organization is collective, so responsibilities have to be shared in order to reap equal benefits by all. I have great faith that the scientific leaders of Member States who are attending Council meeting will come up with an effective agenda to energize their respective governments to elevate the standards of their own R&D institutions and contribute towards those forums which provide facilitation for South-South Cooperation.

On the part of COMSATS, I assure you that the Secretariat will never slacken its efforts of enhancing the impact and outreach of the organization. We have full confidence that the generous support of COMSATS by the Government of Pakistan will continue and I sincerely hope that enthusiastic participation of Member States will grow more and more with the passage of time. Let me thank all of you once again for being with us this morning. Those who have come from abroad have endured travelling inconvenience, but once here, I assure you that you are in very good hands. COMSATS Institute of Information Technology has a strong tradition of well-organized event management and generous hospitality. I am sure you will be provided best possible care by CIIT to make your stay enjoyable and productive.

Thank you for your attention.