OIC STI AGENDA 2026

First OIC Summit on Science & Technology
Astana, 10-11 September 2017
This is an exciting time for science, technology and innovation (STI).

Its influence on the way we live and work and communicate with one another is enormous and a new relationship is emerging between science and society, whose morphology is as yet unclear.

The pursuit of knowledge and the new frontiers which follow naturally will witness an ever increasing impact on all of humanity in the 21st century.

Scientific discoveries and the technology innovations help in improving our quality of life

Mankind is on the threshold of settlements in space at the same time as poverty eradication is within our grasp.

Science is disruptive, and flourishes in an environment of irreverence.

Science and technology offer the tools for making change as well as managing it.

As Muslims with a great tradition of seeking knowledge wherever it is available,

Let us prove worthy of this great human enterprise.
Science and Technology for the Ummah

1. Introduction

Science and technology will play a critical role in addressing contemporary challenges of development across multiple dimensions including poverty alleviation, health, environmental preservation, and ensuring security of food, water, and energy - today and in the years to come.

Knowledge and critical thinking, of which science and technology are the most visible symbols, are key drivers of change, not just in terms of economic growth and development, but in all human enterprise in this century; this includes creating and managing the tools for change.

Encouraging advances have no doubt been registered in Member States in the areas of higher education, science, and technology. This is reflected in the tripling of scientific publications and researchers, and major investments by several Member States in education and scientific infrastructure. However, the OIC countries generally lag behind other fast developing nations.

The Document proposes a mechanism for building collective competence in a wide array of themes ranging from water, food and agriculture to energy, the basic and applied sciences, and large multinational projects, in addition to strengthening international linkages with the best in the world.

Recommendations and Targets in this document are defined as aspirational targets, with each government setting its own national targets guided by global level of ambition, but taking into account national circumstances.

This Document has focussed on ‘high technology’ within the context of the ongoing global imperatives and the accompanying techno-economic-information revolution. This transition has resulted in a massive realignment and shift in centres of economic activity and relocation of manufacturing, services and design from developed to developing countries, globally and regionally. The key features of this revolution are:

a. The nature of work and workplace is changing, leading to a 24 / 7 society.

b. Technological and organisational changes have reduced the relative demand for unskilled labour in developing countries since the 1980s. The skilled worker may actually be more sought after than the scientist, with the result that SMEs (Small and Medium Enterprises) in emerging economies are evolving into global players offering complete supply chains.

c. New centres of power are emerging because of urban concentrations and growth of large cities and demographic transitions with completely different dynamics, which have important implications for society.

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2. **Fundamental Priorities**

Meaningful collaboration among Member States can take place only after good science and education is available in these countries. Priorities are identified which are already being implemented with variable degrees of success in several Member States. These need to be strengthened further by employing modern tools and methodologies.

**Priority # 1: Nurture the Thinking Mind: Build a Culture of Science and innovation**

Notwithstanding some important gains in the past decade, a true scientific culture is conspicuous by its absence. There should be no fears about the disruptive nature of knowledge and science, as this has been part of our heritage and traditions for centuries.

Science is nurtured as much by governments as by the social norms of a country, which must be willing to embrace the pursuit of knowledge and its accompanying disruptions. Building a true scientific culture in Muslim countries would require a paradigm shift and greater commitments from governments for building an enabling eco-system.

➢ **Recommendations and Targets**:

  i. Ensure universal, equitable and inclusive quality education at all levels of education, and promote life-long learning opportunities that advance knowledge and skills needed for gainful employment, entrepreneurship, innovation and sustainable development.

  ii. “Catch them young” at the school, so that critical thinking, integrity, curiosity, and creativity can flourish in the school systems.

  iii. Select teachers and develop curricula with care, especially the former. Critical thinking skills can only be taught to students if teachers go through effective communication training.

  iv. Provide broad based quality education, including the social sciences, which includes appreciation of one’s own cultural heritage and that of others.

**Priority # 2: Making People Employable: Education and Skills.**

Every OIC Member State shall increase public investments at all levels. It is imperative to ensure universal and equitable access to education up to the secondary level, irrespective of gender, coupled with major investments in development of skills and vocational training for the youth as well as adults. A better balance also needs to emerge between graduate and post graduate education. There is a general consensus that proficiency in mathematics and science, as well as computer skills are essential enablers for learning, generation of new knowledge, enhanced competitiveness, and providing decent employment with decent jobs and wages, leading to a new set of entrepreneurs.

➢ **Recommendations and Targets**:

  i. Consider increasing the allocation for all tiers of education to a minimum of 8% of annual national budgets in accordance with the relevant national legislation in each member state.

  ii. Focus on the technical and vocational levels and development of common curricula and standards for enhanced productivity in agriculture, industry and service sectors, with a target of minimum 20% enrolment in technical / vocational education among
the 15-19 year age cohort. In this regard it is important to engage industrial and professional organizations.

iii. Elevate STEM education (science, technology, engineering, mathematics), as a key priority in OIC Countries, while skills in ICT and digital technology must be made compulsory at all tiers of education, especially in high schools, where appropriate.

**Priority # 3: Safety of Water, Food and the Environment**

Food safety and security is affected by several factors. First, the “green” revolution is essentially over and high growth rates in agriculture will not be sustained through current technology, practice and attitudes alone. Second, the use of genetically modified seeds is increasing. Third, climate change has increased the vulnerability of farming communities. Fourth, food processing is widespread. This brings about long shelf life of products.

➢ **Recommendations and Targets;**

a) **Water Use, Re-cycling, and Management:**

i. Increase efficiency in water use and combat desertification through the use of new technologies and farming methodologies;

ii. Aim for maximum recycling of urban waste water;

iii. Prepare national water budgets at the ‘local’ levels where possible, supplemented by monitoring of sub-aquifers, glaciers, and loss in canals;

b) **Farm Productivity and Plant Biodiversity**

i. Encourage setting up National Gene Banks for conservation and exchange of PGR (plant genetic resources) with research centres in Member States;

ii. Undertake legal and other measures in Member States for protection of the ‘geographical’ origin’ of their traditional foods and crops;

iii. Increase farm productivity through sharing and adoption of modern and indigenous technology, based on specific case studies and best practices in the world;

iv. Promote cooperation in the development and adaptation of the concept of “personalized agriculture”, which is the transfer of knowledge and experience of modern sciences to a specific genotype of crops based on its response to a specific environment, soil, fertilizer, water and bio-stimulators”.

c) **Food Safety and Halal Standards:**

In concert with the Islamic Organization for Food Security (IOFS) and Standards and Metrology Institute for Islamic Countries (SMIIC) and national legislations;

i. Re-organise National Food Safety Authorities for integration of safety and security of the entire food chain, from the land to the factory and the table by verification of hygienic, nutritional and organoleptic qualities;

ii. Ensure proper identification to avoid adulteration and misrepresentation;

iii. Encourage Member States to consider implementing International Standards such as IFS (Food Safety initiative), BRC (British Retail Consortium), EurepGAP (European Retail Protocol for Good Agricultural Practice), and ISO 22000 (Food Safety
Management System) as well as the OIC/SMIIC standards and national legislations of the Member States.

Priority # 4: Ensure Healthy Lives for all Citizens.

Together with education and skills, and food security, it is necessary to ensure that the determinants of effective public health are firmly in place to ensure well-being of citizens.

- **Recommendations and Targets:**
  
  i. Strengthen commitment for developing public health systems;
  
  ii. Consider increasing health financing in order to raise it to a minimum of 10% of national budgets by 2025 and allocate nearly half to cover essential scientific healthcare and financial risks in accordance with the relevant national laws in each member state.
  
  iii. Improve training of all para-medics and technicians in conformity with the best international practices;
  
  iv. Consider providing reliable access to safe, effective, quality and affordable essential medicines and vaccines for all, and increase the capacity for their indigenous production;
  
  v. Promote rational use of drugs as a public health priority to confront the challenge of antimicrobial MDR (multiple-drug-resistance);
  
  vi. Create a cadre of trained epidemiologists to reduce the burden of communicable / non-communicable diseases;
  
  vii. Implement fast and cheap diagnostic systems allowing early disease prognosis and containment of epidemic cases;
  
  viii. Promote healthy lifestyle to prevent chronic diseases that would help in reducing expenditure on health;
  
  ix. Encourage R&D in neglected tropical diseases in the OIC Member States;
  
  x. Promote cooperation in alternative healthcare/medicines; tele-medicines; epidemiological studies and R&D for healthcare and pharmaceuticals.

Priority # 5: Improve the Quality of Higher Education and Research.

With the foundations of education and skilled healthy manpower firmly in place, it will be possible to focus on promotion of higher education and research in emerging areas of science and technology. This requires building up sustainable infrastructure in universities and research institutions, and preparation of programmes for building domestic innovation and technology capabilities.

In an environment of rapid growth in enrolments and expectations from higher education, it is emphasised that these challenges will basically have to be managed by each and every member state itself.

Although several OIC Member States have developed and strengthened national policies in recent years, the quality of higher education and research intensity still lags behind the developed countries.
University education in Member States must move beyond simple expansion in enrolment and faculty numbers or publications, and shift the focus towards contemporary knowledge generation, excellent teaching, expanded international linkages and societal impacts.

**Recommendations and Targets:**

i. Consider doubling the annual expenditure by 2025 on scientific infrastructure and R&D in those countries which spend less than 0.3% of GDP, and aim for a target of 2.0% in countries which are at a relatively advanced level, in accordance with the relevant national laws in each member state.

ii. Increase the share of Member States in global scientific output (publications and patents) by 100% in the next ten years.

iii. Double the number of R&D workers (all levels of scientific manpower, including certified technicians) per million population.

iv. Increase the share of high technology goods and services in the economies and trade of Member States, aiming for 10% by 2025.

v. Encourage Technology Parks adjacent to leading universities in OIC Member States. This will promote linkages with industry and business.

vi. Aim for a minimum of 50 universities for inclusion among the top 500 universities according to recent international ranking by 2025.

vii. Support the basic sciences and develop ethics and social responsibility;

viii. Make faculty the ‘long pole’ in the tent of education and research and allow time to build a critical mass of teachers and research groups in key areas, especially for fresh PhDs;

ix. Promote networking and linkages within OIC and with leading world universities for research partnerships sharing of knowledge and experience and best practices.

x. Reduce exclusive dependence on government financing or student fee, by returning to the traditional ‘Waqf’, as is the case in many universities in the developed countries.

xi. Establish centres for Young Scientists to share their experiences and knowledge and to carry out joint research projects.

**Priority # 6: The Case for Mathematics and Physics; Biology and Biotechnology; and the Chemical Sciences.**

Basic sciences have quite often been neglected at the altar of patents and economic gains, even though these have unintended disruptive consequences for society at large.

The trend is now for multidisciplinary research with mathematics, physics, biology, chemistry, material science, and computers coming together to create a complete new value set, including exciting new measurement and characterisation tools for industry and the sciences.

At the theoretical level, mathematics and physics have always produced excellent science in areas of general relativity and gravitation, cosmology, particle physics, group theory and nonlinear problems.
The 21st century will probably belong to biology and new materials. The drug discovery paradigm has shifted from the traditional hit-and-miss affair to computer aided drug design for target-based discovery to improve bioavailability and biological activity.

The excitement in recent years is the application of quantum mechanics to molecular and chemical systems resulting in designer molecules. Computational chemistry and computational biology now offer the possibility of manipulating atoms and molecules to create totally new entities, systems, membranes, materials, and also fuel cells, which are critical for energy storage.

**Recommendations and Targets:**

i. Promote physics and mathematics at all levels, from the school to the university, since their rigorous foundations provide excellent applications in research and industry.

ii. Invest in the better physics centres in OIC Member States to enable them to grow into ‘Mother Institutes’, focusing on specific groups of activities, which can be shared by other countries.

iii. Encourage designing and development of modern teaching equipment and aids for schools and universities (this capability exists already in some countries, and can be shared).

iv. Expand work on biotechnological tools, using novel strategies and animal models;

v. Support and leverage indigenous knowledge and medicine;

vi. Expand research in genomic and proteomics studies, regenerative medicine for congenital defects, disease, trauma and ageing, and cultivation of medicinal plants;

vii. Apply biotechnology and Next Generation Sequencing for personalized medicine, and development of antibodies and recombinant antibodies for disease detection and theranostics;

viii. Initiate and expand research and development of biosensors and rapid and cheap disease detection kits (real time monitoring, serologic detection system, DNA/RNA arrays);

ix. Manage issues related to patents for bio-similars, or indefinite extension of pharmaceutical patents through 'data exclusivity';

x. Support nanosafety as a means for safer design of nanomedicine;

xi. Assist academia and industry for research in industrial high value-added chemicals, catalysts, polymers, composites/non-composites, nano-materials;

xii. Expand research in fuel cells as priority;

xiii. Employ regional high performance computation centers (HPCCs) in Member States to be shared by researchers from all Member States.

xiv. Encourage research in the design of electrical and mechanical systems.
Priority # 7: Managing Big data with security in the digital economy.

Information and Communication Technology (ICT) is a major catalyst and enabler for socio-economic development with a strong footprint in many sectors where it can directly add value. ICT is also a unique factor in the emerging relationship between science and society in the 21st century digital economy, whereby physical proximity is no longer necessary in making key decisions, or implementing them. This requires seamless matching of transnational skills, which can facilitate low cost solutions in developing countries.

However, availability of wider bandwidth, cheap storage and easy access to the digital media, the internet, and social networking and personal management, has exposed the vulnerability of individual privacy and privileges, especially the well-being of young children.

➢ Recommendations and Targets:
   i. Review cyber security strategies, programmes and laws and best practices in leading OIC countries for their uniform adoption and to cooperate in case of cyber-attack.
   ii. Counter the adverse effect on young children, and protect them by disseminating awareness about better parental control/ child protection tools;
   iii. Review curricula and delivery of IT education, in order to bridge the academia / industry gap, and undertake ‘train the trainer’ courses, workshops and security exercises.
   iv. Harmonize regulatory policies, frameworks and IP laws to facilitate easier sales, and commissioning of IT products and services across Member States.
   v. Connect OIC Member States through secure, high speed, fibre-optic land and sea based networks and satellite links. This would need to be a secure intra-OIC network in addition to SEAMEWE 3 and SEAMEWE 4, with service nodes within the OIC Member States, in order to avoid disruption and enhancing security;
   vi. Ensure faster transition to e-government for faster and more transparent decision making;
   vii. Protect TLDs with Islamic identities at the Internet Corporation for Assigned Names and Numbers (ICANN) through a coordinated approach by all OIC Member States.
   viii. Establish additional library to collect information about ancient manuscripts and historical works in the OIC Member States.
   ix. Consider establishing a consultative mechanism to periodically review ethical and legal issues emanating from the growth of technology and developments in the field of medicine, with a view to evolve consensus positions on these issues.

Priority # 8: Managing Energy Requirements

The quality of modern human life has been and always will be completely dependent on the availability of affordable energy. There are serious concerns, however, that consumption of water, land, and fuel resources may become unsustainable at the present rates of consumption.
The priority everywhere remains the assurance of universal access to affordable, reliable and modern energy services. More people are moving out of poverty and are demanding and gaining access to energy. Several studies suggest that global energy demand will double by 2040 vs 2000 levels, and emerging economies will be responsible for 90% of growth in energy demand caused by rising populations and a fast growing middle class.

The goal of energy autarky will be met through diversification of primary resources which, in turn, is governed by national domestic resources, policies, and programmes, within the impact of volatility in global pricing, and geo-politics or competition for resources.

**Recommendations and Targets:**

i. Move towards high efficiency electricity generation systems.

ii. Upgrade national T&D (transmission and distribution) systems and introduce flexible two-way T&D systems and distributed micro-grids to integrate renewable energy (RE).

iii. Promote passive houses, efficient cooling and heating systems, and energy efficient appliances which are certifiable internationally.

iv. Increase the number of human settlements which adopt and implement integrated policies for energy, resource efficiency, mitigation and adaptation to climate change.

**a) The Case for Renewable Energy**

The move towards RE (renewable energy) will be sustained, although its share in the primary energy mix will still be over-shadowed by fossil fuels which are predicted to have a 60-65 % by 2040.

The problem with RE (solar, wind) is that it does not offer ‘base-load’ supply, which is only available through fossil or nuclear fuels. The RE output is intrinsically variable and even intermittent, which is the biggest challenge for its integration with existing systems.

There is a need to focus on designing large scale storage technologies, such as covering peak demands and improved power quality and frequency regulation. These requirements are already having major impact on the evolution of flexible two-way T&D (transmission and distribution) systems and grids of the 21st Century.

Another significant source of renewable energy which has lagged behind solar and wind energy is geothermal energy, perhaps due to uncertainties in reservoir capacity even though this source has a greater base-load capability and potential.

**Recommendations and Targets:**

i. Target a RE share of at least 10% in national energy mix of OIC States by 2025.

ii. Introduce micro-grids and integrate them into national systems, and encourage distributed standalone systems for small communities;

iii. Consider enhancing national research for increasing solar cell efficiencies to reach commercially deployable conversion factors of 40%;

iv. Design and develop energy storage systems such as fuel cells (5 MW for 2 hours) and batteries (such as Lithium Ion and Vanadium Redox) for small storage applications;
v. Design and develop at least 60 MW molten salt storage tank with steam turbine systems, compatible with concentrated solar power (CSP);

vi. Exploit recent advances in geophysical and reservoir engineering for using geothermal energy in OIC countries where it is possible and available;

vii. Enhance intra-OIC and international cooperation to facilitate access to clean energy research and technologies.

b) The Case for Nuclear Energy

There is a revival of interest globally in nuclear power. Many OIC Member States are planning to start constructing nuclear power plants. Excellent opportunities exist for cooperation in peaceful applications of nuclear technology in power and non-power sectors.

➢ Recommendations and Targets:

i. Initiate peaceful applications of nuclear technology in power and non-power sector, consistent with respective obligations of Member States, and their commitments under regulatory safety/security standards as enunciated by the IAEA (International Atomic Energy Agency).

ii. Establish joint projects among Member States for nuclear power plant equipment.

iii. Initiate programmes for manufacturing radio-pharmaceuticals, and using radiation for sterilisation of medical and food products, as per IAEA norms.

iv. Encourage preparing multinational programmes for safe disposal of highly radioactive waste under IAEA guidelines.

Priority # 9: One Planet: The Environment, Climate Change and Sustainability.

Climate change is of particular concern for OIC Member States lying in climate-sensitive regions which are already aggravated by desertification, drought, sand and dust storms degradation of land and water, especially the marine environment and fisheries therein.

➢ Recommendations and Targets:

It is recommended to set up an OIC Advisory Group with experts drawn from the Member States to prepare a detailed plan of action including mitigation options in line with the commitment made under the Paris Agreement on Climate Change. It would help the Member States in:

i. Preparing national policies for effective planning and management for the protection and restoration of ecosystems, including the marine environment.

ii. Establishing stations which monitor and collect detailed local data over time for integration into system models, instead of remote foreign studies.

iii. Prepare a template of ‘green technologies’ which encompass the human habitat;

iv. Encourage Member States to adopt voluntary national targets to achieve land degradation neutrality.

v. Strengthen policy-making by supporting integrated land use planning in the Member States vulnerable to drought.
vi. Exchange experiences among Member States to accelerate the integration of UN Sustainable Development Goals 2030 into national policies in accordance with national legislations, values and priorities and how to track progress in this area.

vii. Strengthen the capacity of the Member States to tackle the adverse impacts of climate change.

viii. Extends support to Climate Vulnerable States to easily access available Climate Financing and to extend Forest and Carbon Sink for mitigation.

ix. Facilitate technology transfer at cheap and affordable cost to enhance mitigation and adaptation capabilities of the Member States.

**Priority # 10: Enhancing Intra-OIC Cooperation**

There is little scientific cooperation among OIC Member States, due to lack of awareness among academics and scientists of the expertise available in different countries, coupled with the heterogeneous nature of educational quality. It is important to build smaller linkages first, which may be bilateral or trilateral initially, and subsequently grow into regional groupings over the next ten years.

- **Recommendations and Targets:**
  
  i. Strengthen the Concept of ‘Mother Institutes’; Centres of excellence exist in many OIC countries in all fields of education and S&T. These Centres are expected to emerge as ‘Mother Institutes’ which will be at the centre of collaborative efforts in OIC Member States and ‘transfer’ of knowledge in OIC Member States.

  ii. There is very little mobility among faculty and researchers in OIC countries. There is urgent need to consolidate and expand the OIC Educational Exchange Programme through a special programme, which would promote exchange of students, faculty and researchers. The OIC Educational Exchange Programme may be named as the Al Haytham Programme, after the Muslim scientist Ibn Al Haytham, regarded as the father of modern optics.

  iii. Commend the kind acceptance of His Highness Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah, the Amir of the State of Kuwait, may Allah protect him, to host an international conference to support Education in Somalia, as announced by His Highness at the opening session of the 27th Ordinary Session of the Council of the League of Arab States held at the Summit level in Nouakchott, Mauritania, on 20-21 Shawal 1437 A.H., corresponding to 25-26 July 2016.

**Priority # 11: Big Science Programs**

The present trend in scientific research is for joint ‘big’ science programmes which encourage multidisciplinary frontier research in basic and applied sciences. All of them have important spill overs in technological innovation and industry.

Several countries can pool their human and financial resources for joint designing, implementation and operation of large programmes which can reduce financial burdens on individual states. This will also lead to better collaboration and collective capacity building which is the Vision of all OIC Member States.
a) **Space:**

Space has become very important field for R&D which necessitates to explore those horizons for further progress of OIC Member States.

- **Recommendations and Targets:**
  i. Design and launch small satellites singly or jointly, for elegant experiments in low orbit;
  ii. Jointly design and launch remote sensing satellites for observation, crop estimation and disaster management, rescue at sea, and weather prediction.
  iii. Consider establishing a network of remote sensing centres among OIC Member States.
  v. Centers for Space Technologies may be established. This may lead to an Inter-Islamic Space Agency, focusing on projects from space launch systems to manned vehicles.

b) **Astronomy:**

There are no reasonably sized, functional astronomical telescopes in Member States, whereas this is one area where Muslim scientists made seminal contributions in the past.

- **Recommendation:**
  A ground-based 4m telescope using adaptive mirrors and laser ‘guide stars’ can now provide the same or better resolution as the Hubble space telescope. There is need for at least 3 - 4 such observatories in different OIC regions.

c) **Accelerators and Synchrotron Light Sources:**

Accelerators and synchrotron light sources permit multidisciplinary research at the frontiers of human scientific knowledge in multiple fields, as well as handling of extremely large data, apart from excellent opportunities for technological and industrial development.

- **Recommendation:**
  Member States should work to build at least one new 2-4 – 2.7 GeV accelerator. It would provide excellent opportunities for technology and industrial development.

d) **Mapping the Marine Environment:**

The majority of Member States are maritime states, and are interconnected from the Atlantic to the Pacific Ocean through the Mediterranean, the Red Sea, Arabian Sea, and Indian Ocean. The maritime jurisdiction of OIC Member States needs to be mapped extensively.

Collaborative and cross-disciplinary research is the key to providing the knowledge and tools that we need to achieve ecosystem-based management and protection of valuable marine resources and services.
Recommendations:

We must initiate programmes for reviewing and compiling bathymetric data of the marine environment under the jurisdiction of Member States. The data and map products will provide information on the sea-bed substrate including rate of accumulation of recent sediments. All interpretations and primary information regarding mineral wealth will be owned by the country whose area is mapped, except that in the public domain. Four vessels and 5 years will be needed for the entire exercise (2-3 partners in each sub-region). 21 countries already possess 39 oceanography institutes, with 42 research vessels, and cover the entire OIC region from the Pacific to the Atlantic).

e) The Minerals Directory of OIC Member States:

Apart from oil and gas, the OIC region is blessed with large mineral deposits. The uncharted coastlines promise much more. All this needs to be mapped and disseminated.

Recommendation:

i. It is recommended to prepare a Minerals Directory of OIS States OIC Member States; enhance capabilities of OIC Member States for sustainable exploration and mining, and development of high-value added products, research, training, and safety; and jointly prepare a series of Geological and Geophysical Surveys for more effective site classification and monitoring of geo-hazard assessment of major settlement areas in OIC countries.

f) High Performance Computer Centres (HPCCs):

Modern research demands high performance computing for simulation and modelling of complex systems. It will benefit basic and applied sciences, big science and climate modelling and industry.

Recommendation:

It is recommended to set up at least six HPCCs in the major regions of the OIC.

g) Increasing Public-Private partnership for Science and Technology Projects with Economic Potential:

OIC Countries are major importers of communication and industrial equipment and associated software. It is important to encourage the growth of private sector consortiums specialising in one or more types of equipment. This includes digital equipment (communications, computers, and sensors), power plants and their modules (boilers, generators, turbines, and control rooms, and modern laboratory equipment and associated teaching aids.

h) Harmonising Trade Laws, Industrial Standards and IP:

As trade develops among OIC Member States, it will be necessary to harmonise legal and regulatory framework to facilitate this process. Intellectual Property Laws will be a priority.

Priority # 12: Funding, Implementation and Monitoring:

No programme would be sustainable without adequate funding and its effective implementation. The goals and work plans listed in this Document are extensive, but they are desirable and implementable if Member States can pool the available expertise.
Implementation of the programs for advancing STI should be owned by the Member States for ensuring their effectiveness and sustainability, while the OIC institutions will undertake the monitoring, support and facilitation of such programs. OIC Member States and OIC institutions have to demonstrate solidarity and provide committed support and resources to implement the comprehensive strategic road map outlined in the Document. Its key features are:

I. Member States will be at the centre of the entire process.

II. There will be a Steering Committee comprising all relevant OIC institutions and organs and headed by COMSTECH for overall supervision. The Steering Committee is meant to ‘steer’ only, not to ‘row’. It will also provide directions and guidelines on all major programmes requiring funds. Existing OIC agencies and organs will be directly involved wherever relevant.

The Committee will meet every six months to review the progress on the implementations of the proposals adopted by the Summit and make necessary recommendations to the Member States.

➢ **Recommendation:**

Encourage the OIC Member States to establish science and technology funds for joint bilateral and multilateral projects.