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IMPLEMENTATION OF THE INTERNATIONAL COVENANT ON ECONOMIC,
SOCIAL AND CULTURAL RIGHTS

Second periodic reports submitted by States parties
under articles 16 and 17 of the Covenant

Addendum
TUNISIA */ **/

[2 August 1996]

*/ The initial reports concerning rights covered by articles 6 to 9 (E/1978/8/Add.3) and by articles 10 to 12 (E/1986/3/Add.9) submitted by the Government of Tunisia were considered by the Sessional Working Group of Governmental Experts at its 1980 session (see E/1980/WG.1/SR.5-6) and by the Committee on Economic, Social and Cultural Rights at its third session (see E/C.12/1989/SR.9).

**/ The information submitted by Tunisia in accordance with the guidelines concerning the initial part of reports of States parties is contained in the core document (HRI/CORE/1/Add.46).

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2. Right to enjoy the benefits of scientific progress

(a) Protection of scientific productions

424. The protection of the moral and material interests resulting from any scientific production includes the measures taken to protect literary and artistic property, including by means of the patents and standards system.

(i) Protection by the patents system

425. Discoveries and inventions are protected in Tunisia by patents. As long as a century ago, in 1888, a battery of texts already regulated the procedures and formalities for acquiring patents and keeping them in force. Today these texts are the following:

Decree of 26 December 1888 on patents to inventions;

Decree of 8 July 1899 on general measures for implementation of the preceding Decree;

Decree of 22 September 1892 setting the expiry date of the annual payments of royalties;

Decree of 31 August 1902 amending article 3 of the Decree of 26 December 1888;

Decree of 17 May 1932 revoking article 2 of the Decree of 22 September 1892;

Decree of 26 December 1939 extending the maximum duration of patent protection from 15 to 20 years;

Decree of 1 March 1956 amending articles 6, 28, 31, 38 and 41 of the Decree of 26 December 1888;

Act No. 82-66 of 6 August 1982 on standards and quality (art. 4);
Decree No. 83-894 establishing the nature, rates and collection modalities industrial property royalties.

426. With regard to the registration of patents in Tunisia by foreigners wishing to protect their inventions, in addition to Tunisia's own regulations there are the safeguards provided by the Paris Convention for the Protection of Industrial Property, signed on 20 March 1883 and amended inter alia by the Stockholm Convention of 14 July 1967, to which Tunisia has acceded.

427. It is clear that Tunisia has encouraged intellectual production by guaranteeing it comprehensive protection. "Any new discovery or invention, in any branch of industry, confers on its author the exclusive right to exploit the said discovery or invention for his profit." This right is recognized by the titles issued by the Government under the name of patent to invention. Recognition of this right constitutes recompense for the creative effort of the patent holder; and in the case of an enterprise, of the research and development effort.

(ii) Protection by the standards system

428. The Tunisian economy, which is relatively limited in natural resources, needs to remain open to external markets, and to confront new competitive situations in which quality and price competitiveness are a condition of survival not only in external markets but in the domestic market as well. This is why Tunisia must make major efforts to establish standards to guarantee the quality of its products. Here, quality is understood in a broader sense than mere conformity to norms or standards and means satisfying the needs and expectations of users with respect to product design, packaging, delivery times, price, sales outlets, after-sales back-up, and the quality of customer and all other services.

429. Within this framework the authorities have attached the necessary importance to the various institutions responsible for supporting programmes of action with the necessary back-up measures. To this end the Act of 6 August 1982 commissioned the National Institute for Standards and Industrial Property (INNORPI), created by the Act of 6 August 1992 and organized by Decree No. 82-724 of 4 August 1983 establishing the administrative and financial arrangements for INNORPI, to take all necessary action concerning standardization, the quality of goods and services, metrology and protection of industrial property.

430. Standardization is the business of establishing standards. The commonly accepted definition of a standard is the result of well-reasoned collective choice designed to serve as the basis of understanding for the solution of recurring problems; a standard represents a balance between the requirements of users and workers and between the technological and social possibilities of these two groups and the public interest which the authorities must safeguard. A standard which describes the characteristics of a product or service in relation to the current state of the art constitutes a common reference point which clarifies transactions concerning the product or service. By taking into account the requirements of regulation, a standard is a decisive factor in the solution of problems of the hygiene and safety of goods and persons. Standardization covers all areas of social and economic life either directly or indirectly.

431. By virtue of its principles and its participatory approach standardization makes it possible to establish a dialogue between partners having divergent interests but whose actions are joint and complementary. It entails negotiation to find ground for understanding and compromise acceptable to all the parties by encouraging the search for a balance. It is thus an effective means of managing conflicts, a regulator of trade and a powerful factor for cohesion among the various economic operators.

432. In many cases standardization constitutes a genuine support for technological progress and plays a favourable role in innovation by virtue of the interdisciplinary and intersectoral transfers which it allows. It provides a support for study and research activities with respect to the experimental standards, testing methods and search procedures which are important tools in the service of laboratories.

433. Standards which make it possible to keep ahead of industrial developments thus facilitate the choice of investments and enhance productivity, forming new links between research and development and the industrial production sector.

434. Standardization constitutes a factor of progress for individuals and the community by helping to protect the physical and mental integrity of workers. When well designed and well understood, standards also work to the benefit of consumers. And they make a large contribution to the protection of workers through the establishment of safety policies and the application of hygiene, safety and environmental regulations.

435. The Tunisian standards system is characterized by a determination to harmonize and coordinate matters so as to ensure a unity of viewpoint. It is based on the active participation and consensus of all the parties concerned. The harmonization of agreed conclusions with centralized regulation is achieved by means of technical standards committees, whose members are drawn from all the parties concerned: INNORPI prepares a draft standard and submits it to a technical committee for examination and adoption. The draft standard is made available by the Institute for public examination with a view to comment. On the conclusion of this stage the draft standard, if the committee decides to make its application mandatory, is submitted to the Ministry of Industry with a view to its introduction by means of an order published in the Journal Officiel de la République tunisienne.

436. It must also be pointed out that in 1980 Tunisia acceded to the agreement on the technical barriers to trade (Standards Code) and opted for harmonization of standards at the international level in order to encourage the reciprocal recognition of national certification systems and prevent the use of standards as a technical barrier to international trade.

437. Standards play an increasingly important role in the world economy. They are a tool of industrial management which is necessary, even decisive, for a country's economic progress and they help to "make the difference" between products, both within a country and abroad. Standards play a direct part in the development of foreign trade and the reconquest of the domestic market; they thus promote job security as well. They are also a means of securing progress for individuals and the community. They are a tool which contributes to the protection of workers by promoting safety and quality-control policies which have an impact from the human, social and economic standpoints. They also provide information for consumers at the point of purchase.

438. The national standards system is both flexible and efficient and thus guarantees the necessary balance between protection of industrial

property rights and the requirements of the community as a whole and of the consumer in particular. But, as an instrument of arbitration and reference, the Tunisian system requires a number of improvements in order to:

- Restore balanced negotiation and agreement of standards;
- Enhance the skills of the persons involved;
- Facilitate access to standards;
- Ensure the application and observance of standards;
- Provide the necessary technical assistance;
- Produce technical information and disseminate it to users.

(b) Conservation, development and diffusion of science and culture (scientific research policy)

439. For a very long time economic and social development was perceived in most countries, and more particularly in the "developing" ones, as something determined largely by natural resources. Today it is virtually taken for granted that a nation's progress - whatever its size and resources - depends essentially on its mastery of scientific and technological progress on the one hand and on its social and political environment on the other.

440. Tunisia has made considerable progress in all areas, thanks in particular to the development of its human resources, and since 7 November 1987 it has enjoyed "a climate of confidence, security and tranquillity" never achieved before. It is today aware that the acceleration of its development requires it both to intensify its scientific research efforts and to give emphasis to the mastery of technology, which as the century ends has become an essential weapon in the battle for competitiveness.

441. For all these reasons the President of the Republic, Zine El Abidine Ben Ali, decided to equip the country with the necessary tools to promote scientific progress and technological innovation. This is the framework of the affirmation and protection of human rights in scientific and technical progress in Tunisia. It explains why the Tunisia of the new era has opted for a national scientific development policy targeted on the needs of Tunisian society and guaranteeing increased protection of human rights conceived as an essential condition of economic, social and cultural progress.

442. Tunisia has made many efforts to ensure the conservation, development and diffusion of science. They have covered both the institutional and the financial aspects.

443. From the institutional standpoint, many different reforms have been introduced in order to restructure the scientific research sector as a means of improving its performance, developing scientific knowledge and facilitating its applications in the economic, social, cultural and environmental fields. Act No. 89-70 of 28 July 1989 on higher education and scientific research led to reform of the organization and management of university and research institutions so that they could play their vital role as promoters of human and economic development and enhance the exercise of the human right of access to knowledge and enjoyment of its benefits.

444. The role of the universities, equipped with scientific councils representing the teaching and research institutions and research

personnel and elected under a democratic system independent of the Administration, has shown considerable improvement over the earlier situation (regulated by Act No. 86-80 of 9 August 1986). The functions of the university councils and the scientific councils of teaching and research institutions have also been strengthened. The elected deans, or the institution directors appointed after consultation of the scientific committee and the president of the university, constitute the scientific and administrative authorities whose powers are established by Act No. 89-70 of 28 July 1989 and by Decree 89-1939 of 14 December 1989 on organization of universities and higher education and scientific research institutions.

445. Earlier, Act No. 87-83 of 31 December 1987, the Finance Act for the 1988 financial year, had restructured the University of Tunis by establishing the University of Science, Technology and Medicine of Tunis, the University of Law, Economics and Administration of Tunis, and the University of Arts and Social Sciences of Tunis. This decision had the effect of bringing the number of universities in Tunisia from three up to five, thus giving effect to the political will to decentralize learning and disseminate science to all regions of the Republic. The same legislation had reestablished the "Ezzitouna" University, an ancient institution which had made Tunis an important centre of learning, especially during the Middle Ages. This University has been furnished with three institutes of higher education.

446. University reform has also brought changes to the institutes of higher education and the content of their curricula designed to ensure that the scientific training is tailored to the needs of society and the economy and up to international scientific standards.

447. The scientific research sector has undergone equally remarkable development. University research, long neglected and focused essentially on training needs alone, was first reorganized under Act No. 89-70 of 28 July 1989 and Act No. 90-72 of 30 July 1990 on establishment of the Institute of Higher Agricultural Research and Education. In the early 1990s the research system saw the creation of:

(a) The National Scientific Research Foundation (Act 89-70 of 28 July 1989) attached to the Department of Higher Education and having the principal function of promoting research in the universities for which the Department is responsible;

(b) The Institute of Agricultural Research and Education, attached to the Ministry of Agriculture and having the function of promoting agricultural research in the higher agricultural education institutes and agricultural research establishments operating under the Ministry;

(c) The Agency for Agricultural Training and Extension Work, established by Act No. 90-73 of 30 July 1990 and having the main function of helping farmers to benefit from scientific and technological progress achieved as a result of the work carried out by the universities and the research establishments.

448. New vigour was injected into the national research system by the creation, under the auspices of the Prime Minister, of a Secretariat of State for Scientific Research (20 February 1991), which was renamed Secretariat of State for Scientific Research and Technology in May 1992 in order to highlight the essential technological dimension of research. This Secretariat of State is a governmental body responsible for the development, planning, coordination, funding, monitoring and evaluation of research.

449. The Tunisian Government is convinced that scientific and technological progress constitutes a fundamental right of Tunisians and

it intends by these institutional measures to increase the efficiency and effectiveness of the national research system in order to promote rapid development of science and technology and their dissemination throughout Tunisia's society and economy, thus binding Tunisia firmly to the world economy and preventing its marginalization from universal progress. Thanks to these institutional reforms it has been possible in particular to:

(a) Identify, thanks to the combined efforts of the authorities and the researchers, the national research priorities within the framework of the Eighth Economic and Social Development Plan (1992-1996), which has seen for the first time in the history of Tunisian planning, which began in the early 1960s, the creation of a scientific commission responsible for the research sector;

(b) Prepare and implement "national mobilization programmes" in conjunction with all the ministries concerned, in order to link the research teams with each other, combine the research efforts, and bring the financial resources under the control of the body responsible for implementation.

450. The effort to coordinate the needs of the economy and society on the one hand and the needs of university training on the other has reconciled the freedom of the researcher with the requirements of the economic and social environment and has instituted a long-sought harmony.

451. Where funding is concerned, the State has made a major effort to provide researchers with sufficient resources to enable them to carry out the research freely chosen by them in the scientific councils of the establishment or those to which they belong (national mobilization programmes); the resources are decided upon by scientific commissions and approved by the administrative authority. Thus the public research budget, which was only 32.9 million dinars in 1992, had increased by 1995 to 57.9 million dinars. It amounted to 0.25 per cent of GDP in 1991 (0.8 per cent of the State budget) and 0.39 per cent in 1995 (0.94 per cent of the State budget). The goal under the Eighth Plan was to have a national research budget of 0.5 per cent of GDP by the end of the Plan in 1996.

452. At the same time, the policy of promoting scientific and technological development for the benefit of the whole of Tunisian society has sought, on the one hand, to encourage enterprises to develop scientific research and turn technological development to better advantage by means of appropriate incentives and, on the other hand, to encourage research establishments and researchers to step up their efforts to secure scientific and technological progress by means of an appropriate profits-sharing policy.

453. The Investment Code, approved by Act No. 93-120 of 27 December 1993 and Decree No. 94-536 of 10 March 1994 establishing the amounts and the modalities for awarding the subsidy for investments in research and development activities by enterprises active in the industrial, agricultural and fisheries sectors, and Decree No. 94-1192 of 30 May 1994 establishing the list of equipment and the conditions governing the incentives established in article 9 of the Investment Promotion Code (as amended by Decree No. 95-23 of 9 January 1995) contain a number of measures providing incentives for enterprises to develop new technological procedures and acquire appropriate scientific equipment to facilitate such development.

454. There has also been a considerable increase in the number of research establishments and in their financial and human resources, together with incentives for supporting their own efforts.

455. The number of research establishments increased from 22 in 1989 to 29 in 1995. Their distribution by sector shows that:

(a) There are eight research establishments for the social sciences, seven for engineering, three for medical and pharmaceutical sciences, and eight for agriculture. This constitutes a fairly well-balanced set of research establishments in terms of sectoral distribution;

(b) The budgets of the research establishments have increased by an average of 10 per cent a year since 1991. However, the numbers of permanent researchers have not increased to the same extent but by only 1 per cent a year.

456. Nevertheless, there has been a sizeable increase in the number of contractual research personnel, or back-up personnel, as a result of the credits available under the national mobilization programmes and the resources allocated to the budgets of the research establishments or resulting from the implementation of contracts between research establishments and economic enterprises.

457. In order to encourage research establishments to improve their management and further develop their research capacity, much greater flexibility was introduced in the relevant controls, in particular the prior vetting of public expenditure, by Decree No. 94-431 of 14 February 1994 amending and supplementing Decree No. 89-1999 of 31 December 1989 on control of public expenditure. Thus, "for expenditures connected with scientific research provisional commitments (without prior vetting) may be made up to a limit of one half of the amounts allocated" in the budget. The first provisional commitment proposal is passed without any need to provide documentary support. However, it has been noted that the officials responsible for authorizing expenditures are still reluctant to have recourse to such provisional commitments, no doubt wishing to avoid any subsequent criticism.

458. Pursuant to Decree No. 94-546 on the modalities of utilization of resources made available in connection with the opening of institutions of higher education and scientific environmental research, funds resulting from contracts with enterprises may be used up to a limit of "30 per cent for the improvement of working conditions in the institution" instead of being returned to the State budget pursuant to the Public Accounting Code. Moreover, an additional 30 per cent is earmarked for research or support personnel, who may be added to the official manning table.

459. Lastly, in order to improve the management of higher education and research establishments, Decree No. 93-466 of 18 February 1993, establishing the allowances and benefits accorded to the holders of certain managerial posts in higher education and scientific research establishments, introduced considerable changes in the allowances paid to such persons, thus providing improved incentives for the scientific staff of the establishments.

460. The measures described above show that the Tunisian Government has made great efforts to facilitate the maintenance, development and dissemination of science in order for everyone to enjoy the applications of scientific progress.

3. Freedom of scientific research

461. The States Parties to this Covenant undertake to respect the freedom indispensable for scientific research and creative activity.

462. Since the freedom of creative activity is regarded as a fundamental condition for the development of human rights in science and technology, the national research system, inspired by the Declaration of 7 November 1987, has endeavoured to encourage the exercise of this freedom by means of an array of legal, administrative, jurisdictional and trade-union measures.

463. Legal measures designed to guarantee the scientific independence of researchers were adopted in the legislation on the status of teaching and research personnel adopted pursuant to Act No. 83-112 of 12 December 1983 on the general status of employees of the State, local public bodies and public administrative establishments.

464. As a public employee, a researcher now enjoys double protection of his scientific freedom:

(a) Firstly, "protection against threats, insults or defamation which may be directed against him" (art. 9, Act No. 83-112). Accordingly, a researcher cannot be attacked by reason of his work or the scientific results to which it may lead. "The Administration shall be required to protect public employees against threats and attacks of any kind which may be directed against them in connection with the performance of their duties";

(b) Secondly, protection against the Administration itself, which is prohibited by article 10 of Act No. 83-112 from including in a public employee's file any documents "referring to (his) political, philosophical or religious opinions".

465. The same legislation provides public employees with administrative guarantees against any prosecution not based on legally established breaches of discipline.

466. The legislation on the status of higher education and research personnel, including in particular Decree No. 93-825 of 6 December 1993 establishing the specific status of university teacher-researchers, which also includes research personnel working in research establishments (Decree No. 87-1113 of 22 August 1987 on the specific status of agricultural researchers), guarantees:

(a) Recruitment on the basis of scientific qualifications;

(b) Promotion based on evaluation by scientific peers without any administrative interference;

(c) Career development based on the scientific work done by the researcher and judged by juries composed of scientists which the researcher concerned may challenge;

(d) Freedom of choice of the subjects of research, subject only to the scientific assessment of the laboratory or research department.

467. Reconciliation of the freedom accorded to researchers with the needs of society and the national economy with respect to the choice of research topics is not effected on the basis of directives or budgetary restrictions. In the budget for higher education and research establishments the State continues to earmark substantial amounts to enable scientific departments and laboratories to carry out the research work which they decide upon in the light of their own concerns.

468. Research related to the needs of society and the economy are financed by means of budgetary allocations, in particular in the budget of the Secretariat of State for Scientific Research and Technology,

which determines through its "scientific advisers" (Decree No. 92-362 of 17 February 1992) and scientific commissions the research topics which are to be covered by the national mobilization programmes. An invitation to tender is then addressed to laboratories, and the projects are selected after consultation of the scientific commissions.

469. In addition, the State encourages the participation of researchers in international scientific congresses and conferences and in training courses in overseas laboratories in various forms:

(a) When engaged in a scientific activity abroad a researcher is subject to the "official mission" schedule, which accords him a privileged status and allowances which are dependent on his grade but, in any event, sufficient to cover the costs of his stay abroad and, if necessary, of registration fees and travel. The only practical limitations on this schedule are those inherent in the budgetary constraints connected with the structure of the country's economy;

(b) Researchers may also enjoy the benefits of the research grants system, which allows partial reimbursement of the costs of foreign travel or of scientific equipment from the general State budget (art. 71);

(c) In addition, the "training course" system ("stages") allows researchers the possibility of retaining their salary in Tunisia and receiving training allowances linked to their grade if they are required to spend a fairly long period abroad for scientific purposes;

(d) Researchers also enjoy subsidies for the publication of the results of their scientific work; such subsidies are granted either through publishing establishments (Study, Research and Publication Centre, Centre for Economic and Social Research, National University Centre for Scientific and Technical Documentation) or directly by the Secretariat of State for Scientific Research and Technology.

470. This situation, which enhances the scientific freedom of researchers and enables them to conduct their research without interference, is consolidated by the trade-union rights accorded them by law. Article 4 of Act No. 83-112 of 12 December 1983, referred to above, provides that "public employees shall have trade-union rights. Their occupational trade unions, governed by the Labour Code, may appear and argue before any court". In Tunisia the trade unions of higher education and research personnel have played an important catalytic and partnership role in ensuring the normal development of relations between teaching-research personnel and the Administration, thus investing the freedom of research and creative activity with a real content and tangible impact. The freedom of creative activity is also strengthened by the existence of another trade union, the Union of Writers of Tunisia, which performs outstanding work in support of literary and artistic creation thanks to the policy of President Zine El Abidine Ben Ali of encouraging the arts and literature.

471. Many administrative measures have been taken to safeguard and protect the freedom indispensable for scientific research and creative activity:

(a) Pursuant to the legislation on the status of higher education and scientific research personnel, the Administration submits many decisions to juries and scientific commissions elected by the personnel concerned;

(b) Pursuant to this same legislation and the Decree on organization of universities and higher education and research

establishments, the appointment by the Administration of the officials responsible for the administrative and scientific management of such establishments is based exclusively on free election by the teaching or research personnel or on the outcome of consultation of the personnel concerned.

472. From the legal standpoint, the freedom of scientific production is doubly protected with respect both to the Administration and to third parties.

473. Where the Administration is concerned, any researcher who feels injured by an administrative decision may submit an application for legal review on the ground of abuse of power to the Administrative Tribunal created by Act No. 72-40 of 1 June 1972 with a view to having the decision annulled. The case law of the Administrative Tribunal demonstrates, not that there is any need to do so, the high degree of protection accorded to public employees in general and to research personnel in particular.

474. If an administrative act causes an injury, the person concerned may bring proceedings before the competent legal body pursuant to the Decree of 7 November 1888 with a view to obtaining reparation.

475. Lastly, the Press Code allows the author of any scientific work to defend his opinions and, if necessary, to bring proceedings before a competent court in respect of any public insult or defamation to which he may be subjected on the occasion or by reason of the publication of his opinions or the results of his research work.

(d) Measures taken to prevent the use of scientific and technical progress for purposes adverse to the enjoyment of all human rights

476. Tunisia has a long history of enacting legislative measures to prevent the use of scientific and technological progress for purposes adverse to the enjoyment of all human rights, in particular the rights to life, health, individual freedom and privacy.

477. With regard to health, many measures have been enacted concerning the human food supply, pharmaceutical products (National Centre for Pharmacological Supervision, National Drugs Monitoring Laboratory) and organ transplants. The introduction of new products which may affect a person's health or his faculties is subject to prior authorization by the competent authority: Ministry of Public Health for drugs, Ministry of Industry for industrial products, and Ministry of Agriculture for factory-produced foodstuffs.

478. Effective monitoring arrangements have been put in place to verify conformity with the standards, including the ones relating to hygiene:

Central Analysis and Testing Laboratory;

National Institute of Nutrition and Food Technology;

Higher Drugs Council;

Higher Bioethics Commission.

479. Organ transplants are also subject to regulation. In addition to the Central Analysis and Testing Laboratory, the Government has established the National Institute for Research into Physical and Chemical Analysis, in order to equip the country with suitable means of providing accurate information about the composition of a substance and ensuring efficient and effective control of the content of products brought into use, thus preventing the circulation of products having invisible effects on human or animal health or harmful effects on the

environment, and with a view to the issue of international certificates of conformity.

480. In addition, the National Radio-Protection Centre has at its disposal appropriate legislation for monitoring ionising radiation and the use of radioactive products and materials in the country, thus preventing radioactive sources from being used for purposes other than those for which they are intended and providing protection against the dangers of ionising radiation.

481. It must also be pointed out in this connection that the various administrative regulations which facilitate the organisation of science and scientific establishments play ipso facto a certain preventive role in combating any attempt to use scientific progress or experiments connected with scientific developments for purposes prejudicial to human rights. In addition, Tunisia's penal system is sufficiently well developed from the standpoint of criminal legislation and juridical institutions to ensure the punishment of any use of scientific progress for purposes prejudicial to human life or individual freedom or privacy. However, it is still the case that the means placed in man's hands by science and technology, which now enable him to affect, even indirectly, the physical integrity, freedom or privacy of the individual, constitute a serious threat to human rights in any country, especially since scientific and technological progress has achieved such a degree of sophistication that individuals hardly have any truly "private" life any more and are no longer safe from genetic manipulation.

482. The Tunisian authorities are aware of the problems which this situation can pose. They are making considerable efforts, despite the difficulties, to protect people against the harmful effects which scientific progress may have on the privacy and integrity of the human person. The array of legal measures described above testifies to the scale and extent of the efforts made. It is to be hoped that the scientifically advanced nations will effectively control the use of scientific progress by their nationals or public authorities and prevent any use detrimental to the natural wealth and the human, genetic and biological resources of the less developed nations or to the individual freedom and privacy of their citizens, especially with respect to trade in and management of waste materials.

(e) Dissemination of scientific progress

483. Aware that all scientific progress must be placed in the service of mankind and society, the Tunisia of the new era has introduced comprehensive arrangements to ensure the widespread dissemination of scientific culture and an exchange of information between scientists both in Tunisia and abroad. The policy for the dissemination of scientific culture is described below.

484. The prodigious developments in the field of science and technology enhance Tunisia's function as a bridge of scientific culture. The efforts to inform and enhance the awareness of the general public enable science and technology to become integral parts of their daily life. Various actions have been carried out in this area.

(i) Actions aimed at the general public

485. Approaches have been made to the media with a view to increasing the number of press articles popularising and providing information about science and to encouraging scientific broadcasts on television (scientific documentaries and films); this has led to the production of many specialized scientific programmes and broadcasts describing the results of research. The daily newspapers give considerable space to the latest scientific developments in Tunisia and elsewhere. It is in this

framework that the Secretariat of State for Scientific Research and Technology participates as a member of the National Committee for the Decade of Culture in the project on Tunisia as "regional cultural capital" by providing a presentation on bioethics.

(ii) Actions aimed at young people

486. It is a priority for the State to enhance the awareness of the young public, provide it with additional scientific information and knowledge, and acquaint it with the pleasure of discovery and learning. Several actions have been taken for this purpose under the programme "Douroub Biladi" (footpaths of my country). The participants in this programme have been on organized visits to a number of laboratories and research centres operating under the Secretariat of State. The interest shown by the young people justifies stepping up this type of activity and organizing other visits.

487. In addition, the Secretariat of State has concluded and renewed a framework agreement with the Youth Science Association of Tunis (AJST) designed to encourage scientific activity within the Association and the conduct of activities in the regions and the remotest districts of the country.

488. Lastly, the Secretariat of State took part in the meeting on youth and innovation held to mark the seventh anniversary of the Change by running a stand on innovation in science and technology in conjunction with the various institutes (Arid Regions Institute, Regional Institute for Information, Science and Telecommunications, National Scientific and Technological Institute for Oceanography and Fisheries, Sfax Biotechnology Centre, and National Scientific and Technological Research Institute).

(iii) Development of the products of technological research and innovation

489. The Secretariat of State helps to facilitate the opportunities for contact between research and industry and meetings between researchers and industrialists, in particular by supporting specialized fairs and exhibitions of the research conducted and products produced in the various institutes, laboratories, engineering schools and universities. It is by this means that the Secretariat of State participates in the work of the Technological Innovation Centre. This Centre, set up under the auspices of the "Crossroads of Business and Technology", a biennial event which has become a tradition, provides an excellent framework for the development of the products of research and technological innovation and for meetings between researchers and industrialists, both nationally and internationally. The Secretariat of State makes a contribution to the convening and content of the meetings and discussions which take place on the fringes of this event.

490. In addition, at the national level the State encourages technological innovation by furnishing financial support for persons who perfect an invention or confer an added value on an existing technology.

(iv) Audiovisual products

491. One of the purposes of the State's action is to make use of audiovisual aids in the dissemination of scientific culture. For example, a scientific documentary ("OASIS - WAHAAT") has been produced in collaboration with ORSTOM, the French cooperation research institute. This film deals with the oasis ecosystem in Tunisia and with man's traditions and culture and his means of communication with his environment. This production is a result of the policy of developing audiovisual aids for scientific and technological purposes.

(v) Prospects

492. The dissemination of scientific culture will continue to be encouraged on the following terms and for the following purposes:

(a) Continuation of the support offered to scientific associations both to enable them to promote their own activities and for the purposes of extension work and dissemination of scientific information among the general public;

(b) Production of folders describing the country's existing research institutions and the principal research activities;

(c) Organization of "meeting-discussion days" with scientific associations and clubs in order to step up the activities of such associations, especially those concerned with scientific culture;

(d) Preparation for 1996, as part of the project on Tunis as regional cultural capital, of an international meeting on bioethics;

(e) Organization for 1996 of the scientific film festival originally planned for 1995;

(f) Participation in international scientific events and exhibitions.

493. Much has been done to ensure the dissemination of scientific information. This action includes measures on scientific documentation and national and international research networks.

494. In the case of scientific documentation, scientific establishments, libraries and private establishments are free to import any scientific papers that they may wish.

495. Public establishments receive large credits every year for the purchase of printed works or subscriptions to scientific reviews. The system for the production and exchange of scientific and technical documents and information includes the National University Centre for Scientific and Technical Documents, which is responsible for carrying out, for the benefit of researchers and research establishments, all kinds of documentary research by consulting national and international data banks and furnishing information about the national scientific heritage.

496. In addition, the Secretariat of State has established a national research and technology network, which is managed by the Regional Institute for Computer Science and Telecommunications, which is itself connected to the international electronic scientific information networks. The national network enables researchers to consult national and international data banks, exchange information, correspond by electronic mail, and engage in a dialogue with researchers throughout the world. The development of this network to include a tele-medicine network has reached an advanced stage, thus giving patients access to a better medical service in the forefront of progress. The establishment of this national research network, which became operational in 1994, was welcomed by Tunisia's research community. Despite the fairly high cost of commissioning the network, it is being continually extended and is in constant use.

497. However, the high cost of acquiring information from foreign data banks limits the opportunities which such a network can offer. It is to be hoped that the international community will find means of facilitating even further the exchange of scientific information as an essential tool for reinforcing human rights in this area.

498. Scientific progress and technological innovation demand, amongst other things, encouragement of the establishment of learned societies as vehicles for providing training and organizing activities, especially for the benefit of young researchers.

(vi) Associations

499. The activities of associations, after having been relatively neglected earlier, have benefited from the powerful support given by President Zine El Abidine Ben Ali by means of the revision (by Act No. 92-25 of 2 April 1992) of the Associations Act of 7 November 1959. The revision of this legislation has introduced an essential flexibility in the conditions governing the establishment of associations by replacing the rather strict requirement of prior authorization by a much more flexible and basically more favourable requirement of a simple declaration to the authorities, by virtue of which the association is deemed constituted unless the authorities object within the period of 46 days specified by the Act of 2 April 1992. Such objections must be described in detail in an administrative document and are subject to appeal, if necessary, on the ground of abuse of power pursuant to Act No.72-40 of 1 June 1972, mentioned above. Furthermore, the same legislation specifies the rights and obligations of associations and the privileges which may be granted to certain members of their staff under the Convention on the Privileges and Immunities of the Specialized Agencies of 21 November 1947. In accordance with these provisions, many NGOs and various other associations have been able to establish themselves in Tunisia, a country which regards itself as open to its outside environment in all respects and especially in scientific and technological matters.

500. In addition to the relaxation of the regulations governing the establishment of associations, which has worked greatly to the benefit of learned societies - present in vast numbers in the early 1990s - the State has also encouraged learned societies both by contributing to their annual budgets and by supporting the scientific events which they organize. Such encouragement may be provided by any ministry, but mainly the Departments responsible for higher education, health and scientific research and technology.

501. Thus, a very large number of national and international scientific events have been held in recent years, making Tunisia a leading international venue for meetings on scientific research.

502. This policy of encouraging the creation of learned societies was consolidated by Act No. 93-80 of 26 July 1993 on the establishment of NGOs in Tunisia: their establishment may be authorized by decree. Such decrees also specify the privileges to which they may be entitled, in particular any tax exemptions which they may claim.

(f) International cooperation

503. The States Parties to this Covenant recognize the benefits to be derived from the encouragement and development of international contacts and cooperation in the scientific and cultural fields.

504. Tunisia is convinced that such cooperation is an essential element of the establishment of peace and brotherhood among men and an important means of promoting exercise of the right to knowledge and scientific progress, and it therefore encourages international exchanges in this area by all means. Scientific cooperation is also an important factor in safeguarding the international aspects of Tunisian research and investing the national efforts with an international extension which can help Tunisia's development.

505. It is on this basis that Tunisia has played a leading role in the Arab Maghreb Union with respect both to the adoption of scientific cooperation agreements and to the convening of scientific meetings in the Maghreb countries or the launching of joint research programmes under the auspices of the Maghreb Academy of Science.