

The OIC Ten-Year Programme of Action



Ranking of University from the OIC region

**Report
on adopted
Criteria, Procedures and Mechanisms
for
Ranking of Universities**

Tehran, Islamic Republic of Iran,
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CONTENTS

| | |
|-----------------------------------------------------------------|----|
| COVER | i |
| CONTENTS | 1 |
| Introduction | 2 |
| Background | 4 |
| Technical Experts Meeting | 6 |
| Seminar of OIC member states on university ranking | 8 |
| Ranking Methodology | 9 |
| Key Performance Indicators | 9 |
| Analysis and Calculation of final scores..... | 10 |
| 1. Preliminaries | 10 |
| 2. The Research criterion | 11 |
| 3. The Education criterion | 15 |
| 4. The International Outlooks criterion | 19 |
| 5. The Facilities criterion | 21 |
| 6. The Socio-economic Impact criterion | 22 |
| Procedures and Mechanisms | 24 |
| Application of the proposed criteria | 24 |
| Post Seminar | 25 |
| Recommendations | 26 |
| Conclusions | 27 |

Introduction

The quest for knowledge is a pillar of the Islamic Faith, and knowledge and its pursuit have today assumed augmented importance in promoting knowledge-intensive world.

While, the Muslim Leaders are aware of the critical role and impact of higher education in the socioeconomic development and in equipping the future generation with new skills, knowledge and ideas, the higher education in the OIC countries, however, is yet faced with great challenges such as lack of financing, staff development, skill-based training, quality of teaching and scarcity of research fund. In the meantime, the higher education is opened up to new technological innovation and opportunities that are improving the ways in which knowledge is produced, managed, disseminated, accessed and controlled.

This is the time that we as Muslim Ummah should accord more attention to the promotion of quality higher education in our societies. However, there has always been concern at the lack of comprehensive and objective methodologies to evaluate the performance of universities in the OIC region in terms of quality of education and research outputs. In appreciating the issue and in responding to the growing demand of the market-forces of Knowledge-economy (K-economy), a fresh look is needed to re-examine the higher education system in the OIC region in terms of its quality and relevance.

The Vision 1441 on Science and Technology adopted by the 10th Session of the Islamic Summit held in Putrajaya, Malaysia in 2003 declared that the OIC member states are committed to become a community that values knowledge and is competent in advancing Science and Technology and in utilizing it to enhance their socioeconomic well-being.

The Third Extraordinary Islamic Summit held in Makkah-al-Mukaramah in December 2005 noted with concern the fact that very few universities from the OIC region are ranked among the Top 500 World Universities. The Summit adopted an OIC Ten-year Programme of Action that calls for effective improvement and reformation of the educational institutions and curricula at all levels in the OIC member states. A mechanism to meet and achieve the decision is to select at least 20 Universities within the OIC Region to be strengthened and elevated to the rank of Top 500 World Universities.

As a result, an informal open-ended meeting of the Ministers of Higher Education was convened in Kuwait City, the State of Kuwait on 20 November 2006 and discussed procedures and mechanisms of ranking of universities. The meeting decided to review currently available university ranking systems and to propose improvements for application in the OIC region.

A Technical Experts Meeting was convened in Tehran, the Islamic Republic of Iran on 19 – 21 February 2007 to draft a document containing proposed criteria, procedures and mechanisms for ranking of universities in the OIC region.

The draft document was distributed to all OIC member states, for reference, in the Seminar of OIC member states held in Tehran, the Islamic Republic of Iran on 29 – 30 April 2007.

Representatives of the OIC member states reviewed the document with the aim of seeking consensus on the proposed criteria, procedures and mechanisms for ranking of universities. The document was finally amended and adopted by the Seminar.

Background:

The OIC held its Third Extraordinary Summit in Makkah Al Mukarramah on 7-8 December 2005 (5-6 D. Qadah 1426H). The outcome of the Summit was contained in three basic documents namely: (i) The Final Communiqué, (ii) The Makkah Declaration, and (iii) The Ten-Year Program of Action. The documents have underscored the necessity to re-invigorate the OIC and serve as a champion of change. The documents also accord key roles to the individual OIC member states, the OIC General Secretariat and the OIC institutions in the implementation of the resolutions resulting therefrom.

One of the programmes of actions under the domain of Higher Education, Science and Technology is:

“Effectively improve and reform educational institutions and curricula in all levels, link postgraduate studies to the comprehensive development plans of the Islamic World. At the same time, priority should be given to science and technology and facilitating academic interaction and exchange of knowledge among the academic institutions of Member States, and urge the Member States to strive for quality education that promotes creativity, innovation, and research and development.”

On 5 March 2006, the Secretary General of the OIC convened a Coordination Meeting with all the OIC subsidiary organs, specialized and affiliated institutions. The Coordination Meeting identified several actions for the above programme of action. One of the actions identified was:

“to strengthen selected universities in the field of science/engineering, with the objective of elevating at least 20 Universities within the OIC Region to the rank of Top 500 World Universities.”

At the sideline of the Third Session of the Islamic Conference of Ministers on Higher Education and Scientific Research held in Kuwait City, State of Kuwait on 19 – 21 November 2006, a meeting between the OIC institutions relevant to the area of higher education namely the Standing Committee on Science and Technology Cooperation (COMSTECH), the Islamic Educational, Scientific, and Cultural Organization (ISESCO), the Islamic Development Bank (IDB), the Statistical, Economic and Social Research and Training Centre for Islamic Countries (SERSTCIC), the Islamic University of Technology, Dhaka, Bangladesh (IUT), the Islamic University in Niger (IUN), the Islamic University in Uganda (IUIU), the International Islamic Universities of Malaysia (IIUM) and the OIC General Secretariat was held on 18 November 2006. The meeting agreed that the OIC General Secretariat and the SESRTCIC present background documents on university ranking as basis for discussion and deliberation by an informal open-ended meeting of the Ministers of Higher Education.

An informal open-ended meeting of the Ministers of Higher Education of the OIC member states was convened on 20 November 2006 at the sideline of the Third Islamic Conference of Ministers of Higher Education and Scientific Research, Kuwait City, the State of Kuwait. The meeting was chaired by the Minister of Higher Education from Malaysia. The meeting agreed:

- To establish a “core group” with the assignment to oversee the preparation of a draft document on the criteria, procedures and mechanisms for the selection of universities to be presented to the OIC member states.

- The “core group” consists of the Islamic Republic of Iran; Malaysia; the COMSTECH; the IDB; the ISESCO; the SESRTCIC; and the OIC General Secretariat.

The “core group” met on 21 November 2006 in Kuwait City and agreed on the following activities:

- A Technical Experts Meeting will be organized to prepare a document on the criteria, procedures and mechanisms for the selection of universities ;
- The Islamic Republic of Iran will host the Technical Experts Meeting;
- The technical experts in relevant fields from the OIC region will be recruited to assist the “core group” in drafting a background document on criteria, procedures and mechanisms for the selection of the 20 universities;
- A Seminar, to be attended by all the interested OIC member states to discuss the selection criteria approved by the Technical Experts Meeting, will be hosted by the Islamic Republic of Iran in April 2007;
- The report of the Seminar on the selection criteria will be presented to the 34th ICFM for endorsement;
- The programme for elevation of the 20 universities shall be presented to the Islamic Development Bank for its consideration to be included as part of its Scholarship programme; and
- The OIC General Secretariat shall be the focal point and the over all coordinator of the process.

Technical Experts Meeting

The OIC General Secretariat with the cooperation of the Regional Library of Science and Technology (RLST) of the Islamic Republic Iran and with the support of the ISESCO convened a Technical Experts Meeting in Tehran, the Islamic Republic of Iran on 19 – 21 February 2007. The objectives of the Meeting were to:

- review currently available criteria for ranking of universities,
- propose reasonable improvements to the current criteria and to propose particular procedures and mechanisms for the selection of the universities from the OIC region; and
- produce a document containing proposed criteria for ranking of universities, and proposals of particular procedures and mechanisms to select 20 universities from the OIC region to be elevated to the rank of the Top 500 World Universities.

Several consultants from the OIC region and the Islamic Republic of Iran with relevant expertise were invited to assist the core group. The consultants were in the fields of:

- assessment of Science and Technology;
- higher education and quality manager;
- Scientometrics;
- Bibliometrics;
- Sociology of scientific research.

The consultants presented their views on currently available ranking systems and proposed improvements to their criteria for application to ranking universities in the OIC region. The consultants also presented proposed procedures and mechanisms to select universities. In making their proposals, the consultants were mindful of the different levels of innovation capabilities of the OIC member states.

The Technical Experts Meeting deliberated on the proposed improvements of criteria of currently applicable ranking systems and proposed particular procedures and mechanisms to apply the criteria for selection of the universities as given in **Table 1: Criteria of Top Universities**

On basis the information in Table 1 and the criteria used by the Shanghai Jiao Tong Ranking System and the Time Higher Education Supplement and other ranking systems, the Meeting identified five major criteria that could be applicable for ranking of universities in the OIC region. The five major criteria are as in **Table 1: Major criteria for ranking universities in the OIC region**.

Table 1: Major Criteria for ranking universities from the OIC region

| Criteria | Weightage |
|-------------------------------|------------------|
| Research quality and output | 50 % |
| Quality of Education Teaching | 35 % |
| International outlook | 7 % |
| Facilities | 3 % |
| Socio-economic impact | 5 % |

A document containing proposed criteria for ranking of universities from the OIC region and proposal on particular procedures and mechanisms were adopted by the Meeting for consideration by the OIC member states.

Seminar of OIC member states on university ranking

The OIC General Secretariat with the cooperation of the Ministry of Science, Research and Technology of the Islamic Republic of Iran and with the support of the Islamic Development Bank and the ISESCO convened a Seminar of OIC member states on university ranking in Tehran, the Islamic Republic of Iran on 29 – 30 April 2007. The theme of the Seminar was ***Global RePositioning of OIC Universities*** aimed at seeking consensus on the criteria and the proposed procedures and mechanisms for ranking of universities.

The objectives of the Seminar were:

- The Seminar shall appraise the currently available criteria for ranking of universities and shall review the proposed criteria, procedures and mechanism for ranking of universities;
- The OIC member states representatives are expected to comment on the proposed criteria and the proposed particular procedures and mechanisms for ranking of universities in the OIC region;
- The Seminar shall endorse the final document containing the proposed criteria, procedures and mechanisms.

The Seminar was organized under the patronage of Minister of Science, Research and Technology of the Islamic Republic of Iran.

Representatives of twenty seven (27) OIC member states; representatives of OIC countries which have launched national university ranking – the Islamic Republic of Iran, Malaysia, Pakistan and Turkey; representatives of the OIC institutions related to the domain of higher education including the Islamic University of Technology, Dhaka, Bangladesh; the International Islamic University of Malaysia; the Islamic Academy of Sciences; representatives of the universities from the OIC region already included in the international ranking systems such as the Shanghai Jiao Tao University ranking system and the Time Higher Education Supplement such as the Universiti Kebangsaan Malaysia; the University Malaya, Malaysia; and the Putra Universiti Malaysia; representatives of the UNESCO, the Time Higher Education Supplement and the Bologna European System participated in the Seminar.

After two days of deliberations, the Seminar finally amended and then adopted by consensus, the document containing the proposed criteria; procedures and mechanisms for ranking of universities and agreed to present the decision of the Seminar to the 34th Session of the Islamic Conference of the Foreign Ministers scheduled to be held in Islamabad, Pakistan on 15 – 17 May 2007.

The Seminar gave the commitment to cooperate effectively in the implementation of the OIC university ranking system, to identify the gaps in the ranked universities and to implement the relevant recommendations made by the Seminar.

Ranking Methodology

Key Performance Indicators.

Key Performance Indicators (KPI) were identified for each of the five major criteria as provided in Table 1. The KPI were selected using the SMART concept, keeping in view in particular the simple and measurable indicators. The KPI for all the five major criteria along with their weight are given in Table 2.

Table 2: Key Performance Indicators

| Criterion | Indicator | | Weight | |
|---------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------|---|
| Research (Total Weight: 50) | A1 | Research quality | 17 | |
| | A2 | Research performance | 16 | |
| | A3 | Research volume | 5 | |
| | A4 | Rate of growth for research quality | 5 | |
| | A5 | Rate of growth for research performance | 5 | |
| | A6 | Patents | 2 | |
| Education (Total Weight: 35) | B1 | Faculty members with awards | 6 | |
| | B2 | Faculty Highly Cited researchers | ISI (international) standards | 3 |
| | | | OIC standards | 5 |
| | B3 | Ratio of faculty members with PhD to total number of faculty | 4 | |
| | B4 | Alumni that did win awards | 3 | |
| | B5 | Alumni that become Highly Cited researchers | ISI (international) standards | 1 |
| | | | OIC standards | 2 |
| | B6 | Ratio of faculty to students | 3 | |
| | B7 | Ratio of post graduate students to total number of students | 2 | |
| B8 | Rate of growth of post graduate students | 3 | | |
| B9 | Students wining international Olympiads | 3 | | |
| International out-look (Total Weight 7) | C1 | Ratio of International faculty to Total faculty | 2 | |
| | C2 | Ratio of International students to Total students | 1 | |
| | C3 | Ratio of faculty members with Foreign Ph.D. degrees to Total number of faculty members with PhD degrees. | 1½ | |
| | C4 | International conferences organized | 1½ | |
| | C5 | International Exchange Programs | Number of operating programs | ½ |
| Number of beneficiaries | | | ½ | |
| Facilities (Total Weight: 3) | D1 | Number of book titles per student | 1 | |
| | D2 | Number of journals/periodicals accessible (hard and soft copies) | 1 | |
| | D3 | Number of university's research Institutes/Centres | 1 | |
| Socio-economic impact (Total Weight: 5) | E1 | Contracts and consultancies incomes | 2½ | |
| | E2 | Life learning courses | 1 | |
| | E3 | Entrepreneurship programs and industrial linkages | 1 | |
| | E4 | Number of incubated projects and spin-off companies | ½ | |

Analysis and Calculation of final scores:

These technical notes aim to explain how to calculate the final scores as well as the values and then the scores for each of the above indicators.

The final score for each university is the weighted sum of the obtained scores for each separate indicator.

$$\text{Final score} = \sum_{\text{indicators}} (\text{weight of the indicator}) \times (\text{score of the indicator}) \quad \text{formula (1)}$$

For each of the indicators, except for the indicators A4, A5 and B8, the score is always a positive number and is calculated by the formula:

$$\text{Score of the indicator} = 100 \times \frac{\text{Value of the indicator}}{\text{Highest value of the indicator}} \quad \text{formula (2)}$$

For the indicators A4, A5 and B8, the scores may be either positive or negative numbers, as these indicators aim to measure rates of growth.

We also use formula (2) if the highest value of the indicators is a positive number, i.e.: at least one university is making progress. Otherwise, i.e.: if all the universities of the panel are “falling down”, we shall use the alternate formula (2*) below, which produces negative values for the scores:

$$\text{Score of the indicator} = -100 \times \frac{\text{Value of the indicator}}{\text{Lowest value of the indicator}} \quad \text{formula (2*)}$$

Preliminaries:

I- According to the international standards, only the journals classified by the Institute for Scientific Information (ISI) and covered by the Science Citation Index (SCI) and the Social Sciences Citation Index (SSCI), should be used both for counting publications and citations.

For every published article, the institution receives:

- for the publications counter: a credit equal to its share of the article.
- for the citations counter: a credit equals to its share of the article for each citation that refers to the given article.

The institution’s share for a multiple author’s article equals the ratio of the number of authors affiliated to the institution to the total number of authors.

Example: if an article is published by 3 authors, 2 of them are affiliated to the institution under consideration, and if this article is cited 7 times, then the institution will receive, for this article, a credit of $2/3$ for the publications and a credit of $7 \times 2/3 = 14/3$ for the citations.

II- Faculty members mean persons that perform either a teaching or a research activity in the given institution, either as permanent affiliated persons or on a full time, contractual basis for no less than one semester. In this latter case, each semester gives a credit of ½.

III- In all of the following, RkY stands for the ranking year.

The Research criterion

The indicators relevant to this criterion measure the university achievements with regard to the “creation of knowledge”; the first of the two major missions of the university.

As the research production fluctuates from one year to another, we shall smoothen these fluctuations, for calculating the values of the indicators A1 to A6, by considering periods of three (3) years

Measuring the values of the indicator A1: Research quality

This indicator aims to measure the quality of the performed research, compared with the mean quality of all of the World research.

It is internationally admitted that the quality of a given published article can be measured by the number of citations it receives.

To quantify this, it is usual to consider one of the three following indicators: the 3-years citations indicator, the 5-years citations indicators and the 10-years citations indicator.

We shall consider here the 5-years citations indicator. Thus for every ranking year RkY (e.g. 2007), we shall measure the average quality of research performed in the 3 years period RkY-5 to RkY-3 (e.g. 2002 to 2004).

Because of formula (2), there is no need to divide the right hand term in the following equality by the same expression for the entire World. But this “scale correction” will become necessary when we will have to deal with the rate of growth for research quality (indicator A4)

$$\text{Value of the indicator A1} = \frac{\left(\frac{\text{Number of citations received in the period RkY-5 to RkY-1}}{\text{by articles published in the period RkY-5 to RkY-3}} \right)}{\text{Number of articles published in the period RkY-5 to RkY-3}} \quad \text{formula (3)}$$

Example: for the ranking year 2007, formula (3) becomes:

$$\text{Value of the indicator A1 for the year 2007} = \frac{\left(\frac{\text{Number of citations received in the period 2002 to 2006}}{\text{by articles published in the period 2002 to 2004}} \right)}{\text{Number of articles published in the period 2002 to 2004}} \quad \text{formula (3E)}$$

Measuring the values of the indicator A2: Research performance

This indicator aims to measure the research performances of the faculty members for a given period.

$$\text{Value of the indicator A2} = \frac{\left(\begin{array}{c} \text{Number of published articles} \\ \text{in the period RkY-3 to RkY-1} \end{array} \right)}{\left(\begin{array}{c} \text{Average number of faculty members for the} \\ \text{academic years RkY-4/RkY-3 to RkY-2/RkY-1} \end{array} \right)} \quad \text{formula (4)}$$

Example: for the ranking year 2007, formula (4) becomes:

$$\begin{array}{l} \text{Value of the indicator A2} \\ \text{for the year 2007} \end{array} = \frac{\left(\begin{array}{c} \text{Number of published articles} \\ \text{in the period 2004 to 2006} \end{array} \right)}{\left(\begin{array}{c} \text{Average number of faculty members for the} \\ \text{academic years 2003/2004 to 2005/2006} \end{array} \right)} \quad \text{formula (4E)}$$

Measuring the values of the indicator A3: Research volume

This indicator aims to measure the volume of the research production of the faculty members. As for the indicator A2, we shall consider periods of three (3) years.

This indicator is not size dimensioned and, “theoretically”, advantages big universities.

$$\text{Value of the indicator A3} = \left(\begin{array}{c} \text{Number of published articles} \\ \text{in the period RkY-3 to RkY-1} \end{array} \right) \quad \text{formula (5)}$$

Measuring the values of the indicator A4: Rate of growth for research quality

This indicator aims to measure the progress done in the recent years for what concerns the quality of the performed research.

This indicator is by far the most difficult one to compute and it may be calculated in more than one way.

The following order of priority will be used, depending on technical difficulties encountered: first formula (6a) shall be used, otherwise formula (6b) and finally formula (6c).

The above order of priority was selected in order to capture as accurately as possible the evolution tendency of the mean quality of the research produced by the institution’s faculty.

As the mean quality of the World research (resp. in the OIC region) evolves, we shall introduce the “scaling factor” that was omitted in formula (3). Here too, we shall preferably use, depending on technical difficulties encountered, first the worldwide scaling factor and second the OIC region scaling factor.

Value of the indicator A4 (1st choice) =

$$\frac{\left(\frac{\text{Expected number of citations for the articles published by the institution's faculty in the period RkY-3 to RkY-1}}{\text{Expected number of citations for the articles published worldwide (resp. in the OIC region) in the period RkY-3 to RkY-1}} \right)}{\left(\frac{\text{Expected number of citations for the articles published by the institution's faculty in the period RkY-6 to RkY-4}}{\text{Expected number of citations for the articles published worldwide (resp. in the OIC region) in the period RkY-6 to RkY-4}} \right)} - 1 \quad \text{formula (6a)}$$

For each publication, the expected number of citations to be credited to the institution under consideration is obtained by multiplying the institution's share of the publication by the impact factor of the journal where the publication was made:

$$\text{Expected citations} = (\text{institution's share of the publication}) \times (\text{journal's impact factor})$$

If technical difficulties are encountered in performing the calculations according to formula (6a), as it seems that a special software needs to be devised to deal with it, we shall use the following alternate formula (6b):

Value of the indicator A4 (2nd choice) =

$$\frac{\left(\frac{\left(\frac{\text{Number of citations received in the period RkY-5 to RkY-1 by articles published by the institution's faculty in the period RkY-5 to RkY-3}}{\text{Number of articles published by the institution's faculty in the period RkY-5 to RkY-3}} \right)}{\left(\frac{\text{Number of citations received in the period RkY-5 to RkY-1 by articles published worldwide (resp. in the OIC region) in the period RkY-5 to RkY-3}}{\text{Number of articles published worldwide (resp. in the OIC region) in the period RkY-5 to RkY-3}} \right)} \right)}{\left(\frac{\left(\frac{\text{Number of citations received in the period RkY-10 to RkY-6 by articles published by the institution's faculty in the period RkY-10 to RkY-8}}{\text{Number of articles published by the institution's faculty in the period RkY-10 to RkY-8}} \right)}{\left(\frac{\text{Number of citations received in the period RkY-10 to RkY-6 by articles published worldwide (resp. in the OIC region) in the period RkY-10 to RkY-8}}{\text{Number of articles published worldwide (resp. in the OIC region) in the period RkY-10 to RkY-8}} \right)} \right)} - 1 \quad \text{formula (6b)}$$

If technical difficulties are still encountered in performing the calculations according to formula (6b), because of the needed data for the 10 years prior to the ranking year, we shall use the following alternate formula (6c):

Value of the indicator A4 (3rd choice) =

$$\begin{aligned}
 & \left(\frac{\text{Number of citations received in the period RkY-3 to RkY-1 by articles published by the institution's faculty in the period RkY-3 to RkY-2}}{\text{Number of articles published by the institution's faculty in the period RkY-3 to RkY-2}} \right) \\
 & \left(\frac{\text{Number of citations received in the period RkY-3 to RkY-1 by articles published worldwide (resp. in the OIC region) in the period RkY-3 to RkY-2}}{\text{Number of articles published worldwide (resp. in the OIC region) in the period RkY-3 to RkY-2}} \right) \\
 & \text{---} \\
 & \left(\frac{\text{Number of citations received in the period RkY-6 to RkY-4 by articles published by the institution's faculty in the period RkY-6 to RkY-5}}{\text{Number of articles published by the institution's faculty in the period RkY-6 to RkY-5}} \right) \\
 & \left(\frac{\text{Number of citations received in the period RkY-6 to RkY-4 by articles published worldwide (resp. in the OIC region) in the period RkY-6 to RkY-5}}{\text{Number of articles published worldwide (resp. in the OIC region) in the period RkY-6 to RkY-5}} \right) \\
 & \text{---} \\
 & - 1 \qquad \text{formula (6c)}
 \end{aligned}$$

Measuring the values of the indicator A5: Rate of growth for research performance

This indicator aims to measure the progress done in a 3 years period for what concerns the research performances of the faculty members.

$$\text{Value of the indicator A5} = \frac{\text{Value of the indicator A2 for the year RkY}}{\text{Value of the indicator A2 for the year RkY-3}} - 1 \qquad \text{formula (7)}$$

$$= \frac{\left(\frac{\text{Number of published articles in the period RkY-3 to RkY-1}}{\text{Average number of faculty members in the academic years RkY-4/RkY-3 to RkY-2/RkY-1}} \right)}{\left(\frac{\text{Number of published articles in the period RkY-6 to RkY-4}}{\text{Average number of faculty members in the academic years RkY-7/RkY-6 to RkY-5/RkY-4}} \right)} - 1$$

Measuring the values of the indicator A6: Patents

Here too, we use the fractional credit counting, i.e.: if an institution shares a patent with others, it will be credited only with the fraction corresponding to its share.

$$\text{Value of the indicator A6} = \left(\frac{\text{Number of approved patents in the period RkY-3 to RkY-1}}{\text{---}} \right) \qquad \text{formula (8)}$$

The Education criterion

The indicators relevant to this criterion measure the university achievements with regard to the “maintenance and dissemination of knowledge”; the second of the two major missions of the university.

Measuring the values of the indicator B1: Faculty members with awards

This indicator reflects the recent presence of “out standing” faculty members in the institution. For a present/previous faculty member to give credit to the institution with regard to this criterion, he/she has to have won the award either while he/she is affiliated or before he/she becomes affiliated to the institution.

$$\text{Value of the indicator B1} = \left(\begin{array}{l} \text{Sum of the credits given by present/} \\ \text{previous faculty members with awards} \end{array} \right) \quad \text{formula (9)}$$

The credits given to the institution by present/previous faculty member depend upon the time that has elapsed after he/she has left the institution, and are given in the following table:

| | |
|-------------------------------------------------------------|------------|
| Affiliated to the institution in the period RkY-5 to RkY | 1.0 |
| Affiliated to the institution in the period RkY-10 to RkY-6 | 0.7 |

| | |
|--------------------------------------------------------------|------------|
| Affiliated to the institution in the period RkY-15 to RkY-11 | 0.4 |
| Affiliated to the institution in the period RkY-20 to RkY-16 | 0.2 |

The awards that are considered for this indicator include international and OIC ones: `Nobel prize, Fields medals, FAISAL, IDB, IAS, KHARAZMI, RAZI, ISESCO, TWAS, etc.

An OIC committee will decide about the eligibility of other claimed awards.

The awards shall not include post-doctorial and other research fellowships.

Measuring the values of the indicator B2: Faculty Highly Cited researchers

This indicator also reflects the presence of “out standing” faculty members in the institution. For a present/previous faculty member to give credit to the institution with regard to this criterion, he/she has to be Highly Cited researcher either while he/she is affiliated or before he/she becomes affiliated to the institution.

As Highly cited researchers conforming to ISI (international) standards are too few in the OIC countries (only 4 researchers of now), it was decided, in order to allow a larger participation, to come out with an OIC standards for HiCi researchers¹. The indicator B2 is therefore spilt into two indicators:

- indicator B2a that refers to HiCi researcher, according to ISI standards with weight 3 of 8,
- indicator B2b that refers to HiCi researcher, according to OIC standards with weight 5 of 8.

¹ First 50 cited researchers from the OIC in each of the 21 broad disciplines according to ISI classification. Researchers are ranked according to the number of citations received in the period RkY-10 to RkY-1 by articles they have published in the period RkY-10 to RkY-1. As for the ISI standards for HiCi, citations are counted on full credit basis. Individuals who are HiCi with the ISI standards would also be counted in the OIC standards

The scores for each of the indicators B2a and B2b are calculated separately according to formula (2).

$$\text{Value of the indicator B2a} = \left(\begin{array}{c} \text{Number of HiCi researcher,} \\ \text{according to ISI standards,} \\ \text{either present or previous faculty} \end{array} \right) \quad \text{formula (10a)}$$

$$\text{Value of the indicator B2b} = \left(\begin{array}{c} \text{Number of HiCi researcher,} \\ \text{according to OIC standards,} \\ \text{either present or previous faculty} \end{array} \right) \quad \text{formula (10b)}$$

There is no weighting and no limitation on the period of time that would have eventually elapsed after the Highly Cited researcher has left the institution, i.e.: it suffices for an institution to have hosted a Highly Cited researchers, according to the conditions on faculty members given in the preliminaries of these technical notes, to receive full credit.

Measuring the values of the indicator B3: Faculty members with PhD degrees

This indicator measures the academic qualification of faculty members.

Value of the indicator B3 =

$$\frac{\left(\begin{array}{c} \text{Average number of faculty members with PhD degrees in} \\ \text{the academic years RkY-4/RkY-3 to RkY-2/RkY-1} \end{array} \right)}{\left(\begin{array}{c} \text{Average number of faculty members in the} \\ \text{academic years RkY-4/RkY-3 to RkY-2/RkY-1} \end{array} \right)} \quad \text{formula (11)}$$

Measuring the values of the indicator B4: Alumni that did win awards

This indicator measures the quality of education given to previous students.

$$\text{Value of the indicator B4} = \left(\begin{array}{c} \text{Sum of the credits given by previous} \\ \text{graduates that did win an award} \end{array} \right) \quad \text{formula (12)}$$

The awards to be considered for this indicator are the same as those to be considered for the indicator B1.

All the institutions where an award winner has obtained a degree (Bachelor, Master or PhD) receive credit. An institution will receive credits for each separate degree that the award winner did obtain from it.

The credits given by the alumni depend upon the period where the degree has been obtained, and are given in the following table:

| | |
|-----------------------------------------------|------------|
| Degree obtained in the Period RkY-5 to RkY | 1.0 |
| Degree obtained in the Period RkY-10 to RkY-6 | 0.7 |

| | |
|------------------------------------------------|------------|
| Degree obtained in the period RkY-15 to RkY-11 | 0.4 |
| Degree obtained in the period RkY-20 to RkY-16 | 0.2 |

Example: for the ranking year 2007, an award winner alumni that did obtain his/her Master and his/her PhD from the same institution in the years 1994 and 1998 gives the institution a credit of $0.4 + 0.7 = 1.1$.

Measuring the values of the indicator B5: Alumni that become Highly Cited researcher

This indicator also measures the quality of education given to previous students.

Here too, as for indicator B2, we shall consider HiCi researchers conforming to OIC standards in addition to HiCi researchers conforming ISI standards. The indicator B5 is therefore spilt into two indicators:

- indicator B5a that refers to the ISI standards with weight 1 of 3,
- and indicator B5b that refers to the OIC standards with weight 2 of 3.

The scores for each of the indicators B5a and B5b are calculated separately according to formula (2).

$$\text{Value of the indicator B5a} = \left(\begin{array}{c} \text{Number of degrees delivered to} \\ \text{'future' HiCi researcher,} \\ \text{according to ISI Standards} \end{array} \right) \quad \text{formula (13a)}$$

$$\text{Value of the indicator B5b} = \left(\begin{array}{c} \text{Number of degrees delivered to} \\ \text{'future' HiCi researcher,} \\ \text{according to OIC Standards} \end{array} \right) \quad \text{formula (13b)}$$

All the institutions where a Highly Cited researcher has obtained a degree (Bachelor, Master or PhD) receive credit. An institution will receive credits for each separate degree that the Highly Cited researcher did obtain from it. As for the indicator B2, there is no weighting and no limitation on the period of time since the Highly Cited researcher has obtained his/her degree.

**Measuring the values of the indicator B6:
Ratio faculty to students**

This is a standard indicator for measuring the quality of education.

$$\text{Value of the indicator B6} = \frac{\left(\begin{array}{c} \text{Average number of faculty} \\ \text{members in the academic years} \\ \text{RkY-4/RkY-3 to RkY-2/RkY-1} \end{array} \right)}{\left(\begin{array}{c} \text{Average number of Total} \\ \text{students at the academic years} \\ \text{RkY-4/RkY-3 to RkY-2/RkY-1} \end{array} \right)} \quad \text{formula (14)}$$

**Measuring the values of the indicator B7:
Ratio of post graduate students to total number of students**

This indicator aims to measure the efforts made by the institution to promote the post graduate studies.

$$\text{Value of the indicator B7} = \frac{\left(\begin{array}{c} \text{Average number of post graduate} \\ \text{students at the academic years} \\ \text{RkY-4/RkY-3 to RkY-2/RkY-1} \end{array} \right)}{\left(\begin{array}{c} \text{Average number of Total} \\ \text{students at the academic years} \\ \text{RkY-4/RkY-3 to RkY-2/RkY-1} \end{array} \right)} \quad \text{formula (15)}$$

**Measuring the values of the indicator B8:
Rate of growth of post graduate students**

This indicator also aims to measure the efforts made in recent years for promoting post-graduate studies. This indicator gives more weight to PhD students than to Master students.

Value of the indicator B8 =

$$= \frac{\left(\begin{array}{c} 3 \times (\text{average number of Master Students for the} \\ \text{academic years RkY-4/RkY-3 to RkY-2/RkY-1}) \\ + 5 \times (\text{average number of PhD Students for the} \\ \text{academic years RkY-4/RkY-3 to RkY-2/RkY-1}) \end{array} \right)}{\left(\begin{array}{c} 3 \times (\text{average number of Master Students for the} \\ \text{academic years RkY-7/RkY-6 to RkY-5/RkY-4}) \\ + 5 \times (\text{average number of PhD Students for the} \\ \text{academic years RkY-7/RkY-6 to RkY-5/RkY-4}) \end{array} \right)} - 1 \quad \text{formula (16)}$$

Measuring the values of the indicator B9: Students wining international Olympiads

This indicator aims to measure the quality of education through the performances of its students in international Olympiads.

For a given Olympiad to be considered, it has to be international, or at least a very large regional participation.

Only Olympiads organized prior to the ranking year RkY are considered.

$$\text{Value of the indicator B9} = \left(\begin{array}{l} \text{Sum of the credits given by students} \\ \text{“well ranked” in international Olympiads} \end{array} \right) \quad \text{formula (17)}$$

Each student will give credit to the institution according both to its rank in the Olympiad and to the time that has elapsed since the Olympiad. The weights are given in the next table.

| Rank in the Olympiad | Weight | | Year of the Olympiad | Weight |
|----------------------|--------|--|----------------------|--------|
| 1 | 100% | | RkY-1 | 100% |
| 2 | 80% | | RkY-2 | 80% |
| 3 | 60% | | RkY-3 | 60% |
| 4 | 40% | | RkY-4 | 40% |
| 5 | 20% | | RkY-5 | 20% |

Example: for the ranking year 2007, a student ranked 3rd in an Olympiad that was held in the year 2005, gives the institution a credit of $0.48 = 0.6 \text{ (rank)} \times 0.8 \text{ (year)}$.

The International Outlook criterion

Other ranking schemes have not attached uniform importance to this parameter. It is, however, felt here that internationalization of a university has a positive impact on its teaching quality, research output, socio-cultural understanding and, ultimately, reputation. It was, therefore, agreed to give credit to institutions that have international faculty and students, staff with PhDs from outside the country where the university is located, and participation in international exchange programs.

Measuring the values of the indicator C1: International faculty

$$\text{Value of the indicator C1} = \frac{\left(\begin{array}{l} \text{Average number of International faculty for the} \\ \text{academic years RkY-4/RkY-3 to RkY-2/RkY-1} \end{array} \right)}{\left(\begin{array}{l} \text{Average number of Total faculty for the} \\ \text{academic years RkY-4/RkY-3 to RkY-2/RkY-1} \end{array} \right)} \quad \text{formula (18)}$$

By International faculty, it is meant here a person that was affiliated to the university (see Preliminaries III) and who belongs to one of the following two categories:

- persons holding foreign nationalities who were full time in the university for at least one semester;

- nationals who were full time in the university for at least one semester, but are normally affiliated to universities abroad.

**Measuring the values of the indicator C2:
International students**

$$\text{Value of the indicator C2} = \frac{\left(\frac{\text{Average number of International students for the academic years RkY-4/RkY-3 to RkY-2/RkY-1}}{\text{Average number of Total students for the academic years RkY-4/RkY-3 to RkY-2/RkY-1}} \right)}{\left(\frac{\text{Average number of Total students for the academic years RkY-4/RkY-3 to RkY-2/RkY-1}}{\text{Average number of Total students for the academic years RkY-4/RkY-3 to RkY-2/RkY-1}} \right)} \quad \text{formula (19)}$$

**Measuring the values of the indicator C3:
National faculty with Foreign PhDs**

$$\text{Value of the indicator C3} = \frac{\left(\frac{\text{Average number for the academic years RkY-4/RkY-3 to RkY-2/RkY-1 of National faculty members with Foreign PhD degrees}}{\text{Average number for the academic years RkY-4/RkY-3 to RkY-2/RkY-1 of Total National faculty members with PhD degrees}} \right)}{\left(\frac{\text{Average number for the academic years RkY-4/RkY-3 to RkY-2/RkY-1 of Total National faculty members with PhD degrees}}{\text{Average number for the academic years RkY-4/RkY-3 to RkY-2/RkY-1 of Total National faculty members with PhD degrees}} \right)} \quad \text{formula (20)}$$

By National faculty members, it is meant here faculty members that are not considered International according to the definition given in indicator C1.

**Measuring the values of the indicator C4:
International Conferences/Workshops**

$$\text{Value of the indicator C4} = \left(\frac{\text{Total number for the period RkY-3 to RkY-1 of International conferences and workshops}}{\text{Total number for the period RkY-3 to RkY-1 of International conferences and workshops}} \right) \quad \text{formula (21)}$$

By International conference/workshop, it is meant here a conference/workshop organised by the university with a minimum of five participants normally affiliated to universities abroad (International participants).

**Measuring the values of the indicator C5:
International Exchanges**

By international exchange program it is meant an **institutional** agreement between the university under consideration and a foreign entity that is **operating**, in the sense that at least one person, either faculty or student, has used it in the previous three years (period RkY-3 to RkY-1).

This indicator aims to measure the intensity of international exchange programs, both in quantity and in quality. It is therefore split into two sub-indicators C5a and C5b.

The scores for each of the indicators C5a and C5b are calculated separately according to formula (2).

$$\text{Value of the indicator C5a} = \left(\frac{\text{Total number of **operating, institutional** international exchange program}}{\quad} \right) \quad \text{formula (22a)}$$

$$\text{Value of the indicator C5b} = \left(\frac{\text{Total number of persons who benefited from **operating, institutional** international exchange program in the period RkY-3 to RkY-1}}{\quad} \right) \quad \text{formula (22b)}$$

The Facilities Criterion:

Facilities are crucial in determining the strength of a university. However, they are diverse and range from library to laboratory and an array of student support facilities. Many of these, especially equipment, are difficult to quantify and verify. For these reasons, only quantifiable indicators were chosen for consideration and comparison.

Measuring the values of the indicator D1: Books per student

$$\text{Value of the indicator D1} = \frac{\left(\frac{\text{Total number of books available in the academic year RkY-2/RkY-1}}{\quad} \right)}{\left(\frac{\text{Total number of students in the academic year RkY-2/RkY-1}}{\quad} \right)} \quad \text{formula (23)}$$

Here, if a title is available in several exemplars, all of the exemplars have to be counted.

Measuring the values of the indicator D2: Available/accessible research journals/periodicals

$$\text{Value of the indicator D2} = \left(\frac{\text{Total number of titles of journal/periodical eligible for this indicator}}{\quad} \right) \quad \text{formula (24)}$$

For a journal/periodical to be eligible for this indicator, it has to be on the ISI recognized list² of “world class” journals and the full sets of the journals for the last 3 years should be available, either in hard or soft copy.

² See

<http://scientific.thomson.com/mjl/>

http://scientific.thomson.com/media/pdfs/sourcepub-journals/wos_ahci_a5020_final.pdf

http://scientific.thomson.com/media/pdfs/sourcepub-journals/wos_scie_a5021_final.pdf

http://scientific.thomson.com/media/pdfs/sourcepub-journals/wos_ssci_a5022_final.pdf

Measuring the values of the indicator D3: University’s Research Institutes/Centres

For this indicator, research institute/centre means entity dedicated to research.

Value of the indicator D3 = Total number of research institutes/centres **formula (25)**

The Socio-economic Impact Criterion:

In classical sense, the basic functions of a university include the maintenance, dissemination and creation of knowledge. The rapidly changing global economic scenario and social dynamism require that education must have relevance to society. Many argue, quite genuinely, that the foremost responsibility of scientists and scholars is to promote the welfare of the society. Although all universities are essentially involved in human resource development through their degree programs, there are other areas that merit encouragement. Indeed these ensure sustainability of the university system, its reputation, and its “universality”.

Measuring the values of the indicator E1: Contracts and consultancies incomes

Value of the indicator E1 =
$$\frac{\left(\begin{array}{c} \text{Average Total earning from} \\ \text{Contracts and Consultancies in the} \\ \text{period RkY-3 to RkY-1} \end{array} \right)}{\text{Average Total university budget in the period RkY-3 to RkY-1}}$$
 formula (26)

Measuring the values of the indicator E2: Life learning

Value of the indicator E2 =
$$\left(\begin{array}{c} \text{Total number of life learning courses offered} \\ \text{during the academic year RkY-2/RkY-1} \end{array} \right)$$
 formula (27)

By life learning course, it is meant here either a distance learning course (e-learning) or a class-room contact course (community courses) with duration of no less than two (2) weeks.

Measuring the values of the indicator E3: Entrepreneurship programs and industrial linkages

This indicator focuses on the “entrepreneurship courses”; that are courses that aim to teach students how to start a company, how to manage a company, etc.

The term ‘entrepreneurship’ supports the innovative ideas put forward by university students and endeavours to transform the creative ideas into products through introducing these ideas to the

industrial sector, factories, companies, etc., of the society, which will also bear about job opportunities for the university students.

Value of the indicator E3 =

$$\frac{\left(\begin{array}{l} \text{Total number of students who benefited from entrepreneurship} \\ \text{courses during the academic years RkY-4/RkY-3 to RkY-2/RkY-1} \end{array} \right)}{\left(\begin{array}{l} \text{Average number of total students} \\ \text{for the academic years RkY-4/RkY-3 to RkY-2/RkY-1} \end{array} \right)} \quad \text{formula (28)}$$

Measuring the values of the indicator E4: Number of incubated projects and spin-off companies

This indicator is considered as incubation and creation of spin-offs play an important role in commercializing the research outputs of the university faculties and/or graduates.

Value of the indicator E4 =

$$\left(\begin{array}{l} \text{Total number of incubated projects} \\ \text{in the period RkY-6 to RkY-1} \end{array} \right) + \left(\begin{array}{l} \text{Total number of Spin-off companies} \\ \text{created in the period RkY-6 to RkY-1} \end{array} \right) \quad \text{formula (29)}$$

Procedures and Mechanisms

OIC member states were requested to appoint a focal person. The focal person is expected to liaise between the universities in his or her country with the members of the core group through the OIC General Secretariat; to certify that the information provided by the universities are credible and accurate; and to monitor activities implemented in his or her country related to reform and improvement of the selected universities.

A set of questionnaires were prepared with the aim to gather information of universities in the OIC member states. The questionnaires to be completed by the individual universities are as in the **Attachment 1** and the questionnaires to be completed by the focal person are as in the **Attachment 2**. The questionnaires are posted on the homepage of SESRTCIC for the convenient of the OIC member states to access and provide information on line.

Each member states were assigned username and identification password. The Focal person for each country is given the authority to allow the use of the password by all the respective universities in their respective country.

The information gathered will be analyzed jointly by the SESRTCIC, IRPHE and RLST. They will present their recommendation on the selected 20 potential universities to the core group.

Application of the proposed criteria

The criteria adopted by the Seminar of OIC member states on university shall be used to rank universities from the OIC region.

All the OIC member states shall be contacted and requested to appoint a focal person and to provide information according to a set of questionnaire. The data and information received will be analyzed and initial potential universities will be selected. The tasks and activities performed by the assigned OIC institutions and related bodies in the Islamic Republic of Iran leading to the ranking are given in the following **Table 3: Action Plan to rank universities from the OIC region**.

Table 3 : Action Plan to rank universities from the OIC region

| Tasks | Activities | Responsible Body | Deadline |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------|
| 1. Transmission of document containing criteria, procedures and mechanisms on university ranking | The document distributed to all participants of the Seminar of OIC member states on university ranking held in Tehran, the Islamic Republic Iran on 29 – 30 April 2007, all the OIC member states and all OIC institutions | The OIC General Secretariat | By end of May 2007 |
| 2. Focal Person | The OIC General Secretariat to remind all member states to appoint focal person | The OIC General Secretariat | On-going |

| | | | |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------|------------------|
| 3. Questionnaires | The OIC General Secretariat is to remind all member states to complete questionnaires on line | The OIC General Secretariat | On-going |
| 4. Data processing and analysis | IRPHE/RLST/SESRTCIC to cooperate to gather and analyze data information provided by member states | IRPHE/RLST/SESRTCIC | On-going |
| 5. Ranking of universities | SESRTCIC to process the data and information and rank the universities | SESRTCIC | On-going |
| 6. Reporting | Core group report to 34 th ICFM | OIC GS | 15 – 17 May 2007 |
| | Core group report the results to 11 th Summit | | 7 – 8 March 2008 |
| | Core group report the results of ranking to Conference of Ministers of Higher Education and Scientific Research | | 2008 |

Post Seminar

Following the adoption of the criteria, procedures and mechanisms by the OIC member states, the core group shall apply the criteria to identify the potential 20 universities from the OIC region to be elevated to the rank of the Top 500 World Universities. The list of the universities as results of the ranking process shall be presented to the Islamic Conference of Ministers on Higher Education and Research and to the 11th Islamic Summit scheduled to be held in Dakar, Senegal in 2008.

The Seminar also made several recommendations. The tasks and activities to implement those recommendations and conclusions is in **Table 4 : Implementations of recommendations of the Seminar of OIC member states on university ranking held in Tehran, the Islamic Republic of Iran on 29 – 30 April 2007.**

Table 4 : Implementations of recommendations of the Seminar of OIC member states on university ranking held in Tehran, the Islamic Republic of Iran on 29 – 30 April 2007

| Recommendations | Activities | Responsible Body | Deadline |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------|
| 1. Quality Assurance and Accreditation | The Ministry of Science, Research and Technology of the Islamic Republic of Iran proposed Islamic Countries Network for Quality Assurance in Higher Education (ICNQAHE) | Core Group | On-going |
| 2. Sponsorship | Contact Nature and Al-Jazirah Media | Core Group | On-going |

| | | | |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------|
| 3. Strategic Alliance and network with other international rankers | Participation in QS Asia Pacific Professional Leaders in Education (APPLE) Conference & Exhibition - Hong Kong, July 11 to 13, 2007 | Core Group and member states | 11 – 13 July 2007 |
| 4. Establishment of ranking bureau | The Government of the Islamic Republic of Iran offered to establish and host a bureau for ranking of OIC universities | Core Group | As soon as possible |
| 5. Reporting | Report to the 34 th that the document containing criteria, procedures and mechanisms was adopted by the Seminar of the OIC member states held in Tehran, the Islamic Republic of Iran on 29 – 30 April 2007 | The OIC General Secretariat | 15 – 17 May 2007 |
| | Report to 11 th Summit | The OIC General Secretariat | 7 – 8 March 2008 |
| | Report to Conference of Ministers on Higher Education and Scientific Research | The OIC General Secretariat | 2008 |

Recommendations

The important and crucial role played by the core group to implement one of the identified activities and to meet target of one of the programmes of actions in the OIC Ten-year Programme of Action is acknowledged. The core group is commended to continue their good work to implement the recently developed OIC ranking system with the aim of selecting 20 universities from the OIC region to be elevated to the rank of the Top 500 World Universities and to monitor the actions taken by the selected 20 universities to improve and maintain position in the rank of the Top 500 World Universities.

A successful application of the criteria for ranking of universities from the OIC region would demand full commitments, support and cooperation from all the OIC member states. All the OIC member states through their respective assigned focal persons are committed to cooperate fully and in timely manner to provide the information and data to SESRTCIC for analysis.

The Regional Library of Science and Technology (RLST) and the Institute for Research and Planning in Higher Education (IRPHE) of the Islamic Republic of Iran were commended for the development of special software for data compilation and analysis, at no cost, for the use by the members of “core group”. The “core group” shall continue to avail to the generous support and services of the RLST and IRPHE to further apply the ranking criteria and to monitor the improvements made by the selected universities.

SESRTCIC and RLST with the cooperation of the COMSTECH and the ISESCO shall continue to gather data and information on all universities from the OIC region.

The results of the gap analysis that identify the strength, weaknesses, opportunities and challenges for the respective selected 20 universities will be presented to the IDB and other relevant organizations for their favourable consideration to provide financial support for the implementation of the identified activities.

There is need to continuously monitor the improvement of quality of higher education in the OIC member states. The establishment of a regional body to facilitate the quality enhancement and to ensure continuous improvement would benefit the OIC member states. It is recommended that all member states in the OIC region consider establishing National Quality Assurance Center and to network it with similar other established regional and international Agencies.

All universities from the OIC region are advised to establish a section to register and monitor its alumni and to establish a quality assurance unit. The progress and achievements of alumni is one of the important criteria for the ranking of universities. The quality assurance section will ensure the continuous improvement of the university.

The possibility of the involvement of private sectors and mass media companies from the OIC region to sponsor and promote the university ranking of the OIC shall be explored.

The OIC member states are invited to use and avail themselves to the facilities already available at the citation centre at the RLST. The RLST was assigned as a citation centre for the OIC by the ISESCO following the approval the OIC Ministers of Higher Education Conference.

The core group with the cooperation of the OIC member states and the other relevant OIC institutions shall apply the proposed criteria, procedures and mechanisms to select the 20 universities from the OIC region once it is adopted by the 34th ICFM.

The offer made by the Islamic Republic of Iran to establish and host a bureau for ranking of OIC universities is welcomed.

Conclusions

The proposed criteria, procedures and mechanisms for ranking of university would contribute to the process to select 20 universities from the OIC region to be elevated to the rank of the Top 500 World Universities is presented for approval by the OIC member states.

The core group is mandated to continue to gather information and data on all the universities in the OIC region, monitor the improvement of the selected universities and ensure that they maintain their position in the Top 500 World Universities. The core group shall periodically report to the OIC member states.

Attachment 1

**QUESTIONNAIRE ON UNIVERSITY RANKING IN THE OIC MEMEBER COUNTRIES
(TO BE COMPLETED BY INDIVIDUAL UNIVERSITIES)**

Guidelines for Respondents

Respondents are invited to note the following:

- This form is available for downloading at the web address <http://www.sesrtcic.org/urankings/> provided you get a user name and password from your national focal point. Having filled it in, please e-mail the questionnaire to your national focal point.
- You are kindly requested to forward the Questionnaire responses to your national focal point by **20 March 2007** at the latest.
- Please fill in the questionnaire as completely as possible.
- In responding to the questions, please do not feel limited by the response space provided. You can create additional spaces by widening the boxes.
- The SESRTCIC researchers are available to assist respondents in answering the questionnaire. Respondents are encouraged to contact the SESRTCIC for any clarifications or guidance that would make responding easier and more accurate. Please contact:

Nabil Dabour
Tel: 90-312-468 61 72
Fax: 90-312- 467 34 58
E-mail: ndabour@sesrtcic.org

Please provide your contact information (the person who answers the questions below):

Contact Name :
Title :
Institution :
Address :
Tel. :
Fax :
E-mail :

Please provide information about your university

Name of University

Address

| |
|----------|
| CITY: |
| COUNTRY: |

7. Please give the total number of regular students who pursue a master degree for the academic years 2000/01-2005/06 (each academic year separately).

| | | | | | |
|---------|---------|---------|---------|---------|---------|
| 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 |
| | | | | | |

8. Please give the total number of regular students who pursue PhD degree for the academic years 2000/01-2005/06 (each academic year separately).

| | | | | | |
|---------|---------|---------|---------|---------|---------|
| 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 |
| | | | | | |

9. Please give, for the academic year 2005/06, the total number of international students.

10. Please give the information requested below regarding faculty members who are Award winners and that were affiliated to your university in the period 1987-2006.

| Name of the faculty member | Years where the faculty member was affiliated to the university | The Body that did Give the Award | Year of winning the Award | Proof of Award |
|----------------------------|-----------------------------------------------------------------|----------------------------------|---------------------------|----------------|
| | | | | |

11. Please give the information requested below regarding both previous and present faculty members and who are/were highly cited researchers.

| Name of Highly Cited Researcher | Discipline (of 21 Categories*) | Years where the person was affiliated to the university | Year of Citation |
|---------------------------------|--------------------------------|---------------------------------------------------------|------------------|
| | | | |

* For the list of categories see the web site <http://hcr3.isiknowledge.com/formBrowse.cgi>

12. Please give the information requested below regarding the Alumni (former students who did graduate from your university) in the period 1987-2006 and who won –later– an Award.

| Name of Alumni | List all degrees the alumni has obtained from your University (BA, MA, PhD) | Year of Obtained Degree | Name of Award(s) | The Body that did Give the Award and Year of Award | Proof of Award * |
|----------------|-----------------------------------------------------------------------------|-------------------------|------------------|----------------------------------------------------|------------------|
| | | | | | |

* Please provide the SESRTCIC (electronically) with the copies of proofs of awards

13. Please give the information requested below regarding the Alumni (former students who did graduate from your university) who become –later– Highly Cited Researchers.

| Name of Alumni | List all degrees the alumni has obtained from your University (BA, MA, PhD) | Year of Obtained Degree | Discipline (of 21 Categories*) | Year of Citation |
|----------------|-----------------------------------------------------------------------------|-------------------------|--------------------------------|------------------|
| | | | | |

* For the list of categories see the web site <http://hcr3.isiknowledge.com/formBrowse.cgi>

14. Please give the information requested below regarding the students of the university who were ranked in the first five places in the international Olympiads organized in the period 2001-2006.

| Student's Name | Olympiad Organizer | Obtained Rank | Year of the Olympiad | Proof of Award* |
|----------------|--------------------|---------------|----------------------|-----------------|
| | | | | |

Please provide the SESRTCIC (electronically) with the copies of proofs of awards

15. .Please give the full list of approved patents (where the name of university or one of its affiliated institutions do appear) for the years 2004, 2005, 2006.

| Name of Patents | Year of Patent Obtained | Proof of Patent (Certificate etc.)* |
|-----------------|-------------------------|-------------------------------------|
| | | |

* Please provide the SESRTCIC (electronically) with the copies of the approval patents.

16. Please give the full list of publications appeared in the ISI journals for the period 1997-2006.

| Year of publication | Author (s) | The institution's Share of the Publication * | Title of articles | Name of Journal and Number of Issue |
|---------------------|------------|----------------------------------------------|-------------------|-------------------------------------|
| | | | | |
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| | | | | |

* The institution's share for a multiple authors article equals the ratio of the number of authors affiliated to the institution to the total number of authors. **Example:** if an article is published by 3 authors, 2 of them are affiliated to the institution, then the institution' share for this article equals 2/3.

17. Please give the list of international Conferences or Workshops organized by the university with a minimum of 5 foreign participants for the period 2004, 2005, 2006.

| Year of Conference/ Workshop | Period of Conference/ Workshop | Name of Conference/ Workshop | Number of National Participants | Number of Foreign Participants |
|------------------------------|--------------------------------|------------------------------|---------------------------------|--------------------------------|
| | | | | |

18. Please give the information requested below for the total number of operating international exchange programs for the period 2004, 2005, 2006.

| Year | Name of Exchange Program | Number of Students Benefited | Number of Academic Staff Benefited | Name of the Partner |
|------|--------------------------|------------------------------|------------------------------------|---------------------|
| 2004 | | | | |
| 2005 | | | | |
| 2006 | | | | |

19. Please give the number of book titles and periodicals accessible in your university.

| Number of Book Titles in the Library | Number of Hard Copy Journals in the Library | Number of Accessible Soft Copy Journals |
|--------------------------------------|---------------------------------------------|-----------------------------------------|
| | | |

20. Please give the requested information below regarding the total number of research institutes established in the university campus.

| Name of Research Institute | Year of Establishment | Area of Specialization | Number of Researchers |
|----------------------------|-----------------------|------------------------|-----------------------|
| | | | |

21. Please give the ratio of earning from contracts and consultancies to the recurrent budget (2006).

22. Please give the information requested below regarding the total number of formally short courses that lasts more than two weeks, e-learning (distance learning), and community courses (life long learning opportunities) for the year 2006.

| Name of the Course | Length of the Course | Number of Participating Course |
|--------------------|----------------------|--------------------------------|
| | | |

23. Please give the information requested below regarding the total number of entrepreneurship programs and industrial linkages

| Name of Program/linkages | Length of the Program/linkages | Number of Beneficiaries |
|--------------------------|--------------------------------|-------------------------|
| | | |

24. Please give the information requested below regarding the total number of companies or start-ups (projects) involved in incubators, and spin-off companies.

| Name of Company/Start-up | Year of Establishment |
|--------------------------|-----------------------|
| | |

Attachment 2

QUESTIONNAIRE ON THE NATIONAL PROFILE OF HIGHER EDUCATION (TO BE COMPLETED BY NATIONAL FOCAL POINT)

Guidelines for Respondents

National Focal Point Respondent is invited to note the following:

- This form is available for downloading at the web address <http://www.sesrtcic.org/urankings/> provided you get a user name and password from the OIC. Having filled it up, please e-mail to oicankara@sesrtcic.org. Please also forward responses that you are to receive from individual universities in your country to the aforementioned address.
- You are kindly requested to forward the two questionnaire responses (focal point and individual university) to the SESRTCIC by **20 March 2007** at the latest.
- Please fill in the focal point questionnaire as completely as possible.
- In responding to the questions, please do not feel limited by the response space provided. You can create additional spaces by widening the boxes.
- The SESRTCIC researchers are available to assist respondents in answering the questionnaire. Respondents are encouraged to contact the SESRTCIC for any clarifications or guidance that would make responding easier and more accurate. Please contact:

Nabil Dabour
Tel: 90-312-468 61 72
Fax: 90-312- 467 34 58
E-mail: ndabour@sesrtcic.org

Please provide your contact information.

CONTACT NAME :
TITLE :
INSTITUTION :
ADDRESS :
TELEPHONE :
FAX :
EMAIL :

**Please provide your relevant websites
related to Higher Education.**

1. Please provide information about universities in your country

| Names of Universities | Public Universities (e-mail/URL) | Private Universities (e-mail/URL) |
|-----------------------|----------------------------------|-----------------------------------|
| | | |

| | | |
|--|--|--|
| | | |
|--|--|--|

TOTAL:

TOTAL:

TOTAL:

2. Please provide information about research institutions in your country

| Name of Research Institutions | Public Research Institutions | Private Research Institutions |
|-------------------------------|------------------------------|-------------------------------|
| | | |

| | | |
|--|--|--|
| | | |
|--|--|--|

TOTAL:

TOTAL:

TOTAL:

3. Please provide the number of faculty members nationwide

| Academic Title | Number |
|---------------------|--------|
| Professor | |
| Associate Professor | |
| Assistant Professor | |
| Research Assistant* | |
| Lecturer | |

*Staff who are recruited by universities to work for Master and PhD degrees.

4. Does your country have a ranking system of universities?

No

Yes

If yes, please answer the following questions.

5. Please specify the name of the ranking institution/body

- a. Name
- b. Address
- c. E-Mail
- d. Tel.
- e. Fax

6. Is there a link between consequences of **ranking** and **budget allocation**?

No

Yes

If yes, please give additional information:

7. If possible, please provide the results of your national ranking assessment to SESRTCIC through:

E-mail: oicankara@sesrtcic.org

Fax: +90 312 467 34 58

Post: Attar Sokak No. 4, G.O.P. 06700, Ankara, Turkey

8. If possible, please indicate the budget allocated to higher education as a percentage of GDP for the last five years

| 2002 | 2003 | 2004 | 2005 | 2006 |
|------|------|------|------|------|
| | | | | |

9. Please provide information about the scientific journals published by universities/research centers, learned societies

| Name of Journal | Language | Frequency of Publication (quarterly, monthly, etc.) | Index |
|-----------------|----------|--------------------------------------------------------|-------|
| | | | |

10. Please list the scientific and professional associations and societies in your country

| Name | Address | E-mail | Fax | Tel |
|------|---------|--------|-----|-----|
| | | | | |