FINAL REPORT OF OIC-StatCom WG3

CERTIFICATION AND ACCREDITATION PROGRAM FOR OFFICIAL STATISTICS PROFESSIONALS (Draft)

1. INTRODUCTION

1.1. Background

The "Certification and Accreditation of Official Statistics Professionals" program (OStat) is based on the proposal submitted and presented by Central Informatics Organization (CIO) in Bahrain to initiate a program on the "Accreditation of Statistics Professionals" specific to member countries of the Organization of Islamic Cooperation (OIC) in the First Session of the OIC Statistical Commission held last 11-12 April 2011 in Ankara Turkey. It is envisaged that such a well-designed program will help Official Statistics Professionals of member countries in charting their professional development and establishing clear and effective career paths by endorsing the expertise and knowledge under an official context. When implemented appropriately, accreditation can strengthen the fundamental leadership and steering role of statistical authorities. It will eventually become a tool for international categorization and recognition of statistical organizations.

1.2. OIC-Stat Com WG3 and its activities

In the context of the determination of the tasks, requirements and processes of the OStat program, the delegates in the First Session of the OIC Statistical Commission held in Ankara decided to set up a Working Group for development a certification and accreditation program for statistical professionals under the OIC Statistical Commission in accordance with the decision number 6. The Working Group includes Egypt, Kazakhstan, Palestine, Qatar, United Arab Emirates, IDB and SESRIC. Bahrain undertook the responsibility to direct the activities of the Working Group as Lead Country.

The main task of WG3 was to develop conceptual and methodological background of the accreditation program, outline the processes involved in the establishment and operations of the program and identify requirements for application towards certification and accreditation.

In addition to the final report writing, WG3 also prepared the Terms of Reference specific to the accreditation/certification process which includes setting up accreditation criteria and way of measurement of these accreditation/certification criteria. Moreover, the Rules of Procedure for the accreditation the committees required for OStat were also prepared.

A pilot case study was planned to be implemented by the working group in order to test the applicability of this proposed accreditation process.

Way forward activities of WG3 were mostly communicated via email. The key activities and functions of WG3 focused on the conceptualization of the processes and outline the requirements of OStat through a consultative questionnaire format. This approached was initiated by Bahrain with SESRIC support.

A preliminary consultative questionnaire was designed by Bahrain and distributed to all WG3 members to seek the opinion, to comment or to confirm the proposed processes and requirements that may be applied for OStat. In addition to this, the consultative questionnaire also aimed to determine the willingness of WG3 members to participate in the Pilot Case Study of the proposed processes and requirements (Basic level) and report writing. The results of the consultative questionnaires were evaluated and reported by Bahrain.

The majority rule was applied by determining the percentage of votes from each responding WG3 members and the choices which took at least 50% of the votes were included in this report. The WG3 member country's vote for the suggested levels of certification and accreditation of the Program were consistently observed and reported in the calculations for determining majority.

Two reports were prepared based on the consultative questionnaire results and circulated among WG3 members for final approval. The first report summarized OStat processes and requirements of the accreditation and certification program for Official Statistics Professionals. The second report presented the willingness of the WG3 members' participation for conducting the pilot case study on the applicability of Basic Level OStat accreditation and certification processes and report writing.

1.3. Other Practices on Accreditation of Statistical Professionals

The current practice of accreditation of statistical professionals (specifically general statisticians) working in various sectors to be recognized as Professional Statisticians (PStat) are usually connected with country's statistical society or association. Accreditation programs in Australia, Canada, United States of America and the United Kingdom are voluntary, are portfolio-based rather than examination-based credentials and are usually renewable every five years.

The PStat accreditation in most countries usually established their accreditation programs based on Code of Conduct and Ethics or Ethical Guidelines for Statistical Practice which they aspire for the accredited individuals to uphold and put into practice. The accredited individuals are also encouraged to practice ethical and effective statistical work in morally conducive working environments. In the course of literature review, the search did not find any accreditation for Official Statistics statisticians only.

The accreditation procedures for voluntary accreditation of PStat starts with an application form along with documentation of experience, education, professional competence, communication skills and professional development. Applicants pay fees for processing.

The PStat accreditation has a validity of five years subject to renewal by the individual upon provision of updates of the Secretariat with any relevant updates to educational status, with information about professional development activities during that preceding five years, with evidence of continuing statistical practice, and with two letters of support indicating the applicant's continued fitness to be accredited. Renewal of accreditation also requires that applicants must agree to continue to abide by the Ethical Guidelines for Statistical Practice.

2. ACCREDITATION OF OFFICIAL STATISTICS PROFESSIONAL

2.1. Aim and objective of the Accreditation System

The main objective of the OStat program is to certify the expertise and knowledge under an official context for the professional conduct of statistical work of Official Statistics Professionals. The program further aims to recognize those who have achieved an acceptable level of professional competence in the understanding and application of statistical methods and are bound by code of ethics, principles and good practices of Official Statistics. The primary target audience of OStat includes currently employed statistical professionals in the national statistical offices and relevant government departments in the OIC Member States. Through the accreditation/certification process, the target audience will be able to demonstrate their qualifications, knowledge and skills in the areas of professional statistics and be recognized formally and internationally for it.

Based on the gathered number of employees of five WG3 member countries' national statistical organizations through the consultative questionnaire, the percentage distribution of Bachelor degree holders comprise an average of at least 53.4% which apparently was the minimum requirement for the accreditation of Official Statistics professionals.

2.2. Tasks and Requirements of the Programme

2.2.1. Accreditation Processes

The processes under OStat include (a) application and registration, (b) official curriculum and examination preparation, (c) examination testing, and (d) post examination and results.

The accreditation processes have been developed under the assumption of the establishment of two committees;

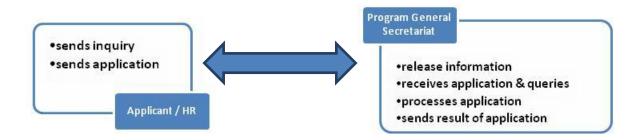
- Program General Secretariat (PGS)
- The Examination Committee. (EC)

a) Application and Registration Process

The general process for application and registration of prospective applicants for each identified level of certification and accreditation approved by WG3 members have the following tasks as follows:

- 1. Program General Secretariat prepares and disseminates information and application about each level of certification and accreditation.
- 2. Applicant sends inquiry or requests for application to Program General Secretariat.
- 3. Program General Secretariat responds to application inquiries and requests.
- 4. Program General Secretariat receives applications (application forms).
- 5. Program General Secretariat processes applications.
- 6. Program General Secretariat responds to processed complete applications with notice of examination.

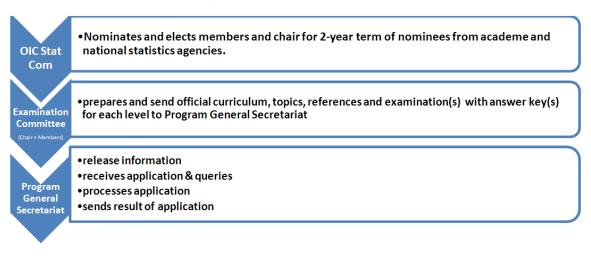
- 7. Program General Secretariat responds processed incomplete applications with further instructions and requirements.
- 8. Communications between candidate/applicants and Program General Secretariat can also be channeled through HR Section/Department



b) Official Curriculum and Examination Preparation Process

The tasks for the process of curriculum and examination preparation listed below have been approved by the WG3 members.

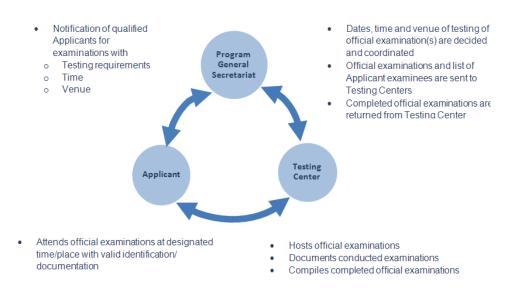
- 1. Members and chair of EC are nominated, appointed, substituted and mandated to perform functions.
- 2. EC members prepare official curriculum, topics, references and examination(s) for certification and accreditation.
- 3. EC sends official curriculum, topics, references and examination(s) to Program General Secretariat for implementation.



c) Examination Testing Processes

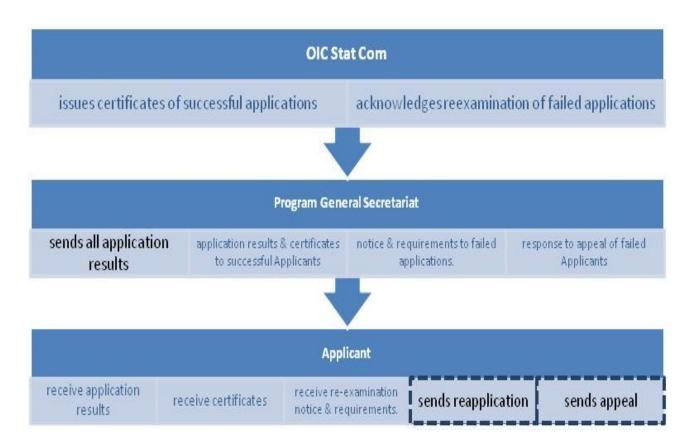
The process of the examination testing approved by the WG3 members has the following tasks:

- 1. Dates, time and venue of testing of official examination(s) are decided and relayed by Program General Secretariat.
- 2. Program General Secretariat has list of all officially registered Applicant examinees.
- 3. Program General Secretariat disseminates notice of examination to Applicant examinees.
- 4. Applicant examinees attend examination at testing venue at designated time/place.
- 5. Program General Secretariat collects completed examinations from Applicant Examinees.
- 6. Examinations are scored.
- 7. Program General Secretariat compiles all Examinations scores of Applicant Examinees into database applications.



d) Post-Examination Results Processes

The following tasks and responsibilities for post examination and dissemination of results process have been approved for the Program General Secretariat:



Program General Secretariat sends Application results to OIC-StatCom for both successful and failed applications.

- 1. OIC Stat Com issues certificates of successful applications and acknowledges reexamination of failed applications.
- 2. Program General Secretariat sends application results and OIC-StatCom issued certificates to successful Applicants
- 3. Program General Secretariat sends application results and re-examination notice and requirements to failed applications.
- 4. Successful Applicants receive their application results and certificates
- 5. Failed Applicants receive their application results and re-examination notice and requirements.
- 6. Failed Applicants send appeal to Program General Secretariat.
- 7. Program General Secretariat reviews appeal.
- 8. Program General Secretariat sends response on appeal to failed Applicants
- 9. Program Monitoring, Evaluation and Realignment

- 10. Follow-up on contact information, whereabouts and updates of successful applicants (certified and accredited individuals).
- 11. Creation and update of register of certified/accredited individuals across OIC member countries and organizations with latest contact information and credentials.

2.2.2. Accreditation Committee (Structure and Tasks of the committee)

The two committees identified in the accreditation process include the Examination Committee (technical) and the Program General Secretariat (administrative).

Examination Committee

The Examination Committee is created to develop official curricula and to prepare the official examinations for each level of certification and accreditation. The competency of the membership and leadership of this technical committee is important and are therefore nominated, appointed, substituted and mandated by OIC-StatCom either from the academe or OIC Member Country Statistical Organizations. Membership and leadership of Examination Committee is for two years.

The general tasks of the Examination committee are as follows:

- 1. Prepare and list official curriculum, topics and references
- 2. Prepare complete examination(s) with answer keys for certification and accreditation based on developed official curriculum.
- Sends official curriculum, topics, references and examination(s) to Program General Secretariat for implementation.

Program General Secretariat

The Program General Secretariat is created to serve as the administrative body and coordinator of the program. The Program General Secretariat provides the link and as the central point of communication of the program with OIC-StatCom, applicants, examinees and OStat certified Official Statistics Professionals. There is no decision yet as to how the formation of the Program General Secretariat will be established.

The following are the major responsibilities of the Program General Secretariat

- 1. Hosting and maintenance of Program website.
- Administrative and liaison role with OIC-StatCom, statistical organizations, Examination Preparation Committee, Applicants, funding agencies and other Official Statistics stakeholders.
- 3. Prepare and distribute materials or information about the program
- 4. Receive and process applications, enquiries and registration.
- 5. Coordinate with Examination Committee on official examinations for each level of certification and accreditation.
- 6. Prepare examination materials for testing based on the official examinations developed by Examination Committee.
- 7. Coordinate examination and scoring for each level of the program.
- 8. Coordinate with OIC Stat-Com on the application and examination testing results.
- 9. Release certificate to successful applicants.
- 10. Release notice for re-examination and requirements to failed applicants.
- 11. Maintain records (financial and administrative)
- 12. Annual Reporting
- 13. Coordination on Applicant appeal on results
- Process and handling cases of violation of Code of Conduct for Official Statistics Professionals

2.3. Cost Related to the Implementation of Accreditation Programme

There have been no discussion and decisions as to how the OStat program will be funded or financed for operations and maintenance. Sponsorship, fund generation or financial management may be sought by OIC-StatCom for OStat implementation. Future sources of funds may include official statistical materials publication, training, short courses and workshops opportunities.

Based on the consultative questionnaire results, a suggestion was raised that a nonrefundable fee between USD 50-100 can be charged for application (inclusive of testing) which includes a one-time reapplication testing. Applicant who availed for reapplication but failed will be treated as a new applicant. Requests for additional copies of certification will be charged nominal fees. The costs expected to be incurred in the implementation of OStat will include the operations of the two accreditation committees (Program General Secretariat and Examination Committee). Other costs includes those related to the examination venue/testing centers, remuneration of committee members or consultants, official examination printing, automated test scoring machines, printing and distributing certificates, marketing and publicity related costs and probable costs of outsourcing the examination preparation or test scoring.

CONCLUSIONS AND RECOMMENDATIONS

The OStat program approved by WG3 will be initially implemented only for three levels (Basic, Intermediate and Advanced) which will be started separately with a gap of a year starting with Basic level in the first year.

OIC-StatCom should decide on the way forward activities to ensure the implementation and participation of WG3 members in the stalled Pilot Case Study for the Applicability of Basic Level OStat Accreditation and Certification processes.

Parallel to the Pilot Case Study, it is important that OIC-StatCom determine the OICwide target clientele of OStat. Primary or secondary data on human resource statistics (by highest educational attainment) for all OIC-member countries' national statistical agencies will be essential.

Prior to offering the first Basic Level examination (initially once a year), the approved accreditation processes can only be implemented when OIC-StatCom have finalized decisions on the establishment and budget and funding of the two committees – Program General Secretariat (administrative) and Examination Committee (technical).

The implementation of the OStat processes and requirements for accreditation of qualified individuals assumes that the accreditation is only valid for a specific period of time as seen in other accreditation models for professional statisticians (PStat). The process and requirements for renewal of OStat accreditation may be further studied by OIC Stat Com to ensure that accredited individuals continuously contribute to the development of statistical community evidence of continuing statistical practice and continued fitness to be accredited. The importance of renewal also benefits the Program General Secretariat with the updated information of all accredited individuals.

Other relevant issues that OIC-StatCom can address include the disciplinary matters on accredited individuals as well as termination of accreditation either by the individual voluntarily or as a result of disciplinary action.

3. **REFERENCES**

- Accreditation of Statistical Professional to Improve Professional Competence in OIC Member Countries, Presentation made by Dr Nabeel Shams in the First Session of OIC Statistical Commission. (<u>http://www.sesric.org/imgs/news/image/524-Bahrain_Accredition-of-</u><u>Statistical%20Professionals.pdf</u>)
- 2. Professional Development in Official Statistics, University of Southampton, School of Social Sciences (<u>http://www.southampton.ac.uk/socsci/socstats/moffstat/index.html</u>)
- **3.** The United Nations Statistical Commission's 1994 *Fundamental Principles of Official Statistics* (<u>http://unstats.un.org/unsd/goodprac/bpabout.asp</u>)
- 4. Principles Governing International Statistical Activities <u>http://unstats.un.org/unsd/methods/statorg/Principles_stat_activities/principles_stat_activities.asp</u>
- 5. Code of Practice for Official Statistics: UK Statistical Authority http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html
- 6. Code of Ethical Statistical Practice: Statistical Society of Canada http://www.ssc.ca/en/webfm_send/3
- 7. National Statistics Code of Practice <u>www.ons.gov.uk/about-statistics/ns-</u> standard/cop/.../competence.pdf
- 8. Declaration of Professional Ethics: International Statistical Institute, The Netherlands. 1985 <u>http://isi-web.org/images/about/Declaration-EN2010.pdf</u>;
- 9. http://isi.cbs.nl/ethics.htm
- 10. National Statistician's Guidance http://www.education.gov.uk/rsgateway/ns-nsg-confidentiality.pdf
- 11. <u>http://www.amstat.org/accreditation/testimonials.cfm</u>
- 12. http://www.statsoc.org.au/what-is-professional-accreditation.htm
- 13. http://www.phuse.eu/download.aspx?type=cms&docID=2552
- 14. http://www.pmi.org/PMBOK-Guide-and-Standards/Standards-Overview.aspx
- 15. CAPM: <u>http://www.pmi.org/en/Certification/Certified-Associate-in-Project-Management-</u> <u>CAPM.aspx</u>
- 16. PMP: http://www.pmi.org/en/Certification/Project-Management-Professional-PMP.aspx
- 17. FAQ on PMP: http://www.pmi.org/en/Certification/Certification-FAQ.aspx

5. ANNEXES

List of participants

PARTICIPANT LIST OF WG3 - Development of a Certification and Accreditation Programme for Statistical

Lead Country: Bahrain

COUNTRY	PARTICIPANT NAME	INSTITUTION	TITLE
BAHRAIN	Mr. Nabel Mohammed Shams	Bahrain Central Informatics Organisation (CIO)	Director General
BAHRAIN	Mr. Tasleem Siddiqui	Bahrain Central Informatics Organisation (CIO)	Adviser
BAHRAIN	Mr. Ricky Gomez Anunciacion	Bahrain Central Informatics Organisation (CIO)	Adviser
EGYPT	Mrs. Ayat Mohamed Abdel Aty	Egypt Central agency for Public Mobilization and Statistics (CAPMAS)	
KAZAKHSTAN	Ms.Laura Sagyndykova	Agency of the Republic of Kazakhstan on Statistics	
PALESTINE	Mr. Sabeq Barghouti	Palestinian Central Bureau of Statistics (PCBS)	
QATAR	Mr. Sam La Spina	Qatar Statistics Authority (QSA) Shared Services Department	Human Resources Expert, Shared Services Department
UAE	Mr. Khalifa A. AL Rubaei	United Arab Emirates National Bureau of Statistics	Director of Government Communication
IDB	Mr. Thiekoro Doumbia	IDB	Researcher, Data Resources and Statistics Department
SESRIC	Ms. Münevver Nilgün Egemen	SESRIC	Senior Researcher
SESRIC	Mr. Syed Tahir Mahmud	SESRIC	Researcher