

# Peer-review of the decentralized critical official statistics: experience, lessons and best practices in Abu Dhabi

Qais Aljunaibi<sup>1</sup>, Dr. Yu Han<sup>1</sup>, and Nasser. M. Dayan<sup>1</sup>

<sup>1</sup> *Statistics Centre Abu Dhabi, United Arab Emirates*

## Abstract

The Emirate of Abu Dhabi has a decentralized statistical system. This means that certain statistics are mainly compiled by specialized Abu Dhabi Government Entities and Statistics Centre Abu Dhabi (SCAD) plays an important role in the coordination of the production of decentralized official statistics as well as the quality assurance. SCAD has launched a peer-review program to evaluate and enhance the quality of decentralized statistics since 2023. The peer-review procedure is a formal assessment of the compliance against the Code of Practice by Abu Dhabi Government Entities who produce decentralized official statistics.

The peer-review is designed as a self-evaluation questionnaire (55 questions expanding the principles of the Code of Practice), official meetings and dialogues with the production teams of decentralized entities with a simplified questionnaire to confirm the findings in the self-evaluation questionnaire, and assessment reporting. To assure the effectiveness, a workshop on the peer-review has been conducted with production teams of decentralized entities in Abu Dhabi before the launching of the peer-review project. The peer-review procedure has been conducted on prioritized entities that produced decentralized statistical outputs. Strength, areas of improvement, as well as recommended actions have been identified and communicated with the relevant entities.

This paper introduces the roles of SCAD in a decentralized statistical system, the design of its peer-review process, the experience of conducting its peer-review and lessons learnt as well as best practices identified.

**Keywords:** Peer Review, Code of Practice, Abu Dhabi Statistical System, Quality Assurance and Management

## 1. Introduction

SCAD has a statutory responsibility, and coordination role, for all of the Abu Dhabi Statistical System. SCAD has been updating its quality assurance framework, at organisational level, process level and product level and aligned more with international best practices. A number of initiatives have been developed in relate to quality management and assurance. First of all, a restructuring of official statistics production according to the portfolio of official statistics in Abu Dhabi has been carried out to better coordinate with all relevant governmental entities. Second, the Statistical Maturity Index (SMI) has been adopted to assess and classify the compliance and capacity of government entities providing data from which official statistics in

Abu Dhabi are produced. SCAD also provides entities with guidelines, manuals, handbooks, workshops, and additional support on official statistics, GSBPM and quality reporting. The quality assurance and management has also been rooted in the dissemination and revision policies of SCAD.

Since the Emirate of Abu Dhabi has a decentralized statistical system, SCAD plays a key role in the quality assurance of official statistics produced by other Abu Dhabi Governmental Entities (ADGEs). SCAD runs peer reviews as the quality monitoring process of the ADGEs' compliance with the guidelines for official statistics based on Code of Practice (CoP).

This article is structured as follows: in the next two sections, the readers can find SCAD's activities in developing its Code of Practice (CoP) as well as the conducted CoP peer review process and steps taken. In the third section, the SCAD peer review experience, lessons and best practices are discussed. In the last section of this article, readers can find the conclusion of the evaluation of the fit for use of the peer review as an effective quality assurance instrument, as well as the future steps to enrich the current CoP procedures.

## **2. SCAD's activities in developing its Code of Practice**

The development of the Abu Dhabi Code of Statistical Practice has been formulated in consultation with world-leading experts in assessment and monitoring of official statistics, drawing on the best practices from the European Statistical System, and the United Nations Fundamental Principles of Official Statistics. The uniqueness and robustness of the Code and its assessment process has been underpinned by taking regional and cultural aspects into consideration, in the context of Abu Dhabi.

## **3. SCAD peer review process**

In October 2023, a series of three initial assessments of compliance with the CoP were undertaken with the cooperation of selected Abu Dhabi Government Entities. The aim of these reviews was to test the practicality of conducting systematic assessments of this kind, particularly in cases where the production of official statistics was based on data collected by ADGEs.

A standard guideline setting out some 55 questions to be answered, grouped under the main principles of the CoP was prepared and the three ADGEs were invited to prepare written responses against each of the questions.

Following an initial review of the written information provided by the three ADGEs, members of the assessment team met with representatives of each ADGE to discuss the information provided and seek clarification where needed. The Assessment Reports were then finalised.

### **3.1 Main steps in the peer review**

1. The unit responsible for the statistical outputs to be reviewed will be informed of the forthcoming review and invited to ask any questions they may have.
2. Before issuing the Self-Assessment Questionnaire, the Assessment team will undertake a preliminary review of any information already collected for the Statistical Maturity Index and also, any Quality Reports or GSBPM documentation that already exists. They will then annotate the Self-Assessment Questionnaire as appropriate to indicate that certain questions do not require further response from the production team.
3. Following completion of the Self-Assessment Questionnaire by the production team, members of the Assessment Team (typically two members) will meet with representatives to review the Self-Assessment Questionnaire answers and explore the additional follow-up questions.
4. The report will then be produced in draft form and discussed with other members of the team and then approved by a senior manager.
5. The draft report will then be shown to the production unit who will be invited to make any written comments on factual points, although not on the judgements made by the Assessment Team.
6. The Assessment Team will make any amendments it thinks necessary in the light of the written comments.
7. At this stage, the completed report will be presented formally to SCAD senior managers and follow-up action on the recommendations will be decided and put in hand.
8. A copy of the completed Assessment Report will be given to the production unit and managers will be asked in writing to address the action points.
9. In due course, completion of action points should be acknowledged by a formal letter/document sent to the production unit which will be retained for future reference alongside the Assessment Report.

## **4. SCAD peer review experience, lessons and best practices**

Based on the work to prepare the three initial reports, the following experience, lessons and best practices have been accumulated.

**Establish reviews of compliance with the CoP on a systematic basis.** The three initial reports indicate that there is value in reviews of this kind and it is recommended that a rolling programme of reviews be implemented across the Abu Dhabi Statistical System. Reviews of this kind complement other quality management and assurance instruments taken by SCAD in recent years, notably the Statistical Maturity Index, Quality Reports, and GSBPM. Those instruments focus on documenting and assessing data quality - in the sense of making clear what the data are, how they were collected, how they were validated, the level of development of the data collection arrangements in ADGEs, and so on. The CoP peer review process, in contrast, focuses more on the 'other end' of the production process – how well the statistical outputs serve the user of statistics.

**Use compliance with the CoP as a way to define Official Statistics.** It is increasingly important to all National Statistical Institutes to distinguish Official Statistics outputs from the mass of other data that is available online. People can reasonably ask what distinguishes the statistics that SCAD or Abu Dhabi statistical System is responsible for from other data they find on the internet. The fact that official statistics are subject to formal assessment can be a powerful indication of their distinct quality. So, it is recommended that SCAD emphasises that one thing that makes official statistics 'better' than other statistical sources is that they are subject to assessment against the quality standards in the Code of Practice.

**Explain the current CoP and promote CoP compliance as being for the benefit of users of statistics.** It is recommended that the Code of Practice should be described by SCAD as the definitive statement of good practice standards for all those who work within the Abu Dhabi Statistical System and produce official statistics. In some respects, the current CoP is strong on principle but possibly not sufficiently clear and direct in its requirements to guide the work of producers of statistics. It would therefore be beneficial for it to be more fully explained in parallel to development of assessment against the CoP. It is further recommended that the CoP be made publicly available on the SCAD website as a strong statement of commitment to good practice.

All parts of the Code of Statistical Practice are relevant to the use and utility of official statistics. The user wants to be sure, among other things, that the statistics are independently produced, impartial, objective, accurate, relevant and equally available to all. If users do not have confidence in these things, they are less likely to use the statistics in beneficial ways, and that would diminish the practical value of the service provided. It is therefore recommended that SCAD should emphasise both to staff within the Abu Dhabi Statistical System and users of

statistics that compliance with the Code of Practice is not simply good international practice but has real benefit in enhancing the value of the service to users.

**Conduct peer review on all official statistics over time.** It is recommended that the Code of Practice peer review process should be developed and extended to cover all outputs of the Abu Dhabi Statistical System. This would take the form of a rolling programme of reviews, managed by a small team within SCAD and supported by external experts.

**Set clear goals for the peer review process and assess progress.** Assessment against the Code of Practice has a number of benefits but it is recommended that SCAD focuses on its value in terms of: giving SCAD greater professional influence over all of the statistical system; enabling SCAD to push up service quality where needed; helping to build a strong shared culture based on clear principles; and defending all parts of the statistical system, but particularly SCAD itself, against any future criticism of professional standards. Progress against these goals could be assessed periodically to establish the cost effectiveness of the CoP peer review process. Other Performance Indicators would include the number of CoP peer reviews conducted, the number of recommendations made, the number for which an action plan exists, and the number of action plans completed. But fundamentally, the value of the scheme will depend on whether SCAD, the ADGEs, and the users of statistics, perceive the reviews to be having a positive and cost-effective influence on the service provided. This can be monitored by seeking regular feedback.

**Use peer review of CoP compliance to target key improvements with a focus on adding values for the users.** Users of statistics need to be able to find the official statistics of most relevance to them and understand what those statistics are telling them. On the evidence of the three initial reviews, there is scope for a range of steps to be taken to better support the user in these respects. It seems likely that this finding applies more widely than just the three topics examined in the initial reviews. The aim should be to go beyond simply summarising the data and seek to help decision-makers, inside and outside government to understand the messages in the figures. The presentation of the statistics in tables and charts should be enhanced to draw attention to significant patterns and trends. It is therefore recommended that SCAD use the CoP peer review process to drive improvements of this kind.

Being able to demonstrate that user needs are systematically identified and met is of growing importance to statistical offices worldwide. With raw data increasingly available online directly from administrative and 'big data' systems, there is a need to demonstrate that the statistical office, and wider statistical system, are adding value to the raw material. In practice this means helping the user to find, navigate, understand and use the statistics. It is recommended that

the CoP peer review process be used by SCAD to drive forward improvements of this kind, both inside SCAD and across the ADGEs.

**Develop the Self-Assessment stage of the peer review in the light of experience.** The initial set of questions used in the three reviews was based on relevant elements of the Quality Assurance Framework of the European Statistical System (European Statistical System Committee, 2012) which is a detailed, and widely used, set of quality indicators. In the three initial reviews, the answers to the self-assessment questions produced useful information but also presented some problems. In the context of the work of ADGEs, some of the questions were either difficult to interpret or difficult to answer clearly. With that in mind, it is recommended that for future reviews the question set be changed and divided into two sets. The first set will be used for an initial Self-Assessment Questionnaire to be completed in writing as the first stage in a review, and the second set will be used, in addition to the Self-Assessment Questionnaire, in face-to-face meeting with the staff responsible for production of the statistics.

**Build and maintain support for the peer review process.** Reviews of compliance with the Code of Practice need to have the understanding and support of those affected by their conclusions. It is recommended that steps of the following kind be taken to promote support for the scheme:

1. The benefits of the Code of Practice and assessment against it, should be discussed and explained to managers and staff who might have to act on recommendations flowing from reviews. This is a task in which the Assessment Team could play an important role and should be covered in their training.
2. The staff conducting a CoP peer review should emphasise that they are aiming to help and not judge the production team. They should listen to the problems and challenges that the production team face and reflect those in the written reports. They should then make recommendations for improvement without implying negative judgements on the staff.
3. All written Assessment Reports should be reviewed by a senior manager before being finalised and shared with ADGE staff - to ensure that the views expressed by the Assessment Team are consistent with those in other Assessment Reports, and more generally, that Assessment Reports are consistent in style and content.

**Introduce training on the meaning of the Abu Dhabi Statistical System for staff in ADGEs.** The three initial reviews indicated that there appears to be a lack of awareness,

particularly in ADGEs, of the legislation and the guidance on good practice that already exists and what that guidance means for the work of staff producing official statistics. It is recommended that SCAD introduce formal training for staff in ADGEs whose work contributes to the production of official statistics. This would make an important contribution to building an integrated and professional statistical system. It could cover: the concept of official statistics and value of the Abu Dhabi Statistical System; the relevance of Law No 5 of 2021 to their work in ADGEs; the practical application of the 2020 Code of Practice; the Statistical Data Quality Framework; the Charter of Ethics in Statistical Practice; and concepts of quality more generally. Existing SLAs with ADGEs could be developed to require all relevant staff to have completed such training.

**Bring together all high-level statistical guidance.** The current work on Code of Practice peer reviews needs to be developed in the context of principles and requirements already formally established for the Abu Dhabi Statistical System. For example, the Statistical Data Quality Framework commits SCAD to “systematically and regularly identify strengths and weaknesses to continuously improve statistical process and product quality”. As well as the Code of Statistical Practice (v3, 2020) there are statements of good practice in a number of guidance documents including:

1. Law No (5) of 2021 Concerning the Reorganisation of Statistics Centre Abu Dhabi
2. Statistical Data Quality Framework for Abu Dhabi, Methodology and Quality Guides - Guide No. (6)
3. Charter of Ethics in Statistical Practice, V2.0, 2016 SCAD
4. The National Framework of Statistical Data Quality - FCSA 2017
5. Handbook on How to Write a Quality Report, SCAD, v1.0 2022

**Identify a Head of Statistics in each ADGE.** It is recommended that SCAD should identify one person in each ADGE who is recognised as the contact point for all liaison with SCAD and has responsibility for good practice in relation to all official statistics produced by the ADGE. This would provide a channel for SCAD to promote good practice and enhance awareness of the Abu Dhabi Statistical System and its standards. It would also help to bring together work relating to the Statistical Maturity Index and CoP peer reviews. Having the designation of departmental Head of Statistics could also add to the status of that role within the ADGE.

**Align Code of Practice reviews with the Statistical Maturity Index.** In the course of undertaking the three initial reviews it became clear that there was some overlap between the information being sought from the ADGEs for these reviews and the information already

provided to SCAD for construction of the SMI. The two approaches (SMI looking at fit to create databases and CoP looking at the quality of the service to users) can support one another. It is recommended that before issuing the Self-Assessment Questionnaire, the Assessment Team should review the relevant SMI documentation for the ADGE and (where it is found to be sufficient) annotate the Self-Assessment Questionnaire with the words 'SMI information available'. In practice this means that, in such cases, less information would need to be collected at the Self-Assessment stage. Similarly, before issuing the Self-Assessment Questionnaire, the Assessment Team will check whether there is a Quality Report or any GSBPM documentation completed for the statistical output under review and note this on the Self-Assessment Questionnaire before it is issued, again reducing the number of questions to be answered at that stage.

## **5. Conclusion and way forward**

Based on the conducted peer reviews on the three ADGEs, the CoP peer review procedure is fit for its quality assurance and management purpose. Next steps of the peer review should focus on three areas, namely, Coverage, Flexibility and Prioritisation.

**Coverage:** It is proposed that all outputs that are recognised as official statistics (that is within the Abu Dhabi Statistical System) should be included in the scope of the scheme and that each review should assess one set of statistical outputs against the Code of Practice. This will make it easier to complete the reviews efficiently and achieve consistent judgements. SCAD will need to maintain an up-to-date list of all the statistical outputs (both from SCAD and ADGEs) that it currently recognises as being products of the Abu Dhabi Statistical System, whilst keeping open the possibility of adding more.

**Flexibility:** Whilst it is proposed that each review should look at a single set of statistical outputs, there will be circumstances in which it makes sense to look at all the work of a unit, or team of staff in one review - for example where the unit produces several closely linked outputs/products. That is a decision that can be taken by the Assessment Team.

**Prioritisation:** It is suggested that priority should be given to reviewing statistical outputs that are either of high policy importance, or about which there is some uncertainty as to their quality. Once a list of all outputs to be covered has been prepared, SCAD senior management should be invited to identify a priority set.

## **References**

European Statistical System Committee. (2012). Quality Assurance Framework of the European Statistical System.



