

Appendix IV

PROJECT DOCUMENT
for New Work to revise *the Guidelines on Measurement Uncertainty* (CXG 54 - 2004)
(For approval by CAC)

The purpose and the scope of the standard

The purpose of the proposed new work is to revise the Guidelines on Measurement Uncertainty (CXG 54 – 2004) in order to improve and clarify the content.

The revised guide CXG 54 – 2004 covers general aspects on measurement uncertainty, without recommendation on lot assessment. It illustrates

- the use of measurement uncertainty in the interpretation of measurement results
- the relationship between the measurement uncertainty and (given) sampling plans

Relevance and timeliness

The revision of the Guidelines originates from the requests for more detailed explanations regarding the use of measurement uncertainty in the interpretation of measurement results and the relationship between the measurement uncertainty and sampling plans.

The MU deals with laboratory samples and not with the lot (the guide CXG 54 – 2004 does not concern uncertainty, which is derived by sampling). Measurement uncertainty only concerns the uncertainty of results for laboratory test samples. A large measurement uncertainty might have an effect on the number of samples of a sampling plan as well as on the number of test samples per composite sample of the lot. Since it is essential for the responsible authorities to understand the above mentioned relationship, the corresponding amendment of the guidelines is of great importance. A general illustrated introduction into that field is recommended, because the responsible authorities might not be as familiar with measurement uncertainty as the laboratories.

This should be supported by an information document including practical examples, referring to corresponding international standards. These recommended procedures are necessary for determining uncertainty of measurement results, including sub-sampling, sample processing and analysis. The information about the reported expanded measurement uncertainty should comply with the corresponding ISO standards.

Main aspects to be covered

- Introduction to the CXG 54 – 2004, which covers general aspects on measurement uncertainty, including the expanded measurement uncertainty as well as to emphasise its influence on sampling plans.
- A prioritised combination of general and technical improvements of an updated CXG 54 – 2004 that is comprehensive, simple to use and understood .

Assessment against the criteria for the establishment of work priorities**General:**

Consumer protection from the point of view of health, food safety, ensuring fair practices in the food trade and taking into account the identified needs of developing countries.

Specific:

Criteria applicable to general subjects

- Diversification of national legislations and apparent resultant or potential impediments to international trade: the criteria of product assessment are to be harmonized between the trade partners.

- Work is already undertaken by other international organizations in the field of measurement uncertainty. However, there is a noticeable lack of advice how these standards on measurement uncertainty are linked to sampling plans.
- Amenability of the subject can be achieved by the appropriate amendments of the existing guidelines CXG 54 – 2004.

Relevance to the Codex strategic objectives

This proposal for new work is within the scope of the Codex Strategic Vision Statement ‘To be the preeminent international food standards-setting body to protect the health of consumers and ensure fair practices in the food trade’. The proposed new work item goes in accordance with the Codex 2014–2019 Strategic Plan:

- Strategic goal 1: Establish international food standards that address current and emerging food issues
- Objective 1.1: Establish new and review existing Codex standards, based on priorities of the CAC.
- Activities 1.1.1: Consistently apply decision-making and priority setting criteria across Committees to ensure that the standards and work areas of highest priority are progressed in a timely manner.
- Activities 1.1.2: Strengthen the critical review process to improve standards monitoring.

Information on the relation between the proposal and other existing codex document

A list of issued Codex documents that relate to this proposal are:

- Guidelines on Estimation of Uncertainty of Results (CXG 59-2006). Overlapping of these Guidelines on estimation of uncertainty of results, which has been established by the Codex Committee on Pesticide Residues (CCPR) should be avoided.
- General Guidelines on Sampling (CXG 50 – 2004)
- General Guidelines on Principles for the Use of Sampling and Testing in International Food Trade (CXG 83 - 2013)

Identification of any requirements for and availability of expert scientific advice

Expert scientific advice might be needed in future

Identification of any need for technical input to the standard from external bodies so that this can be planned

Technical input from external bodies may also be needed. Up to date drafting and editing according to modern standards are essential to deliver a manageable document.

Overlapping of the Guidelines on estimation of uncertainty of results, which has been established by the Codex Committee on Pesticide Residues (CCPR) should be avoided. Also, there are other important and relevant factors that an updated CXG 54 needs to cover, including the relationship between CXG 54 and other international sources of guidance regarding the subject of measurement uncertainty.

Timeline

Work to start in 2018 after approval by CAC41, with adoption at Step 5 in 2020 and final adoption in 2021.