TANZANIA BUREAU OF STANDARDS (TBS)

PREPARATION OF NATIONAL STANDARDS

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0. INTRODUCTION

Before standards are prepared by the National Standards Bodies, it is important first of all to establish a national standardization system, which is based on the world-wide known practice of the consensus principle, achieved through the use of committee structure. In many cases and at Tanzania Bureau of Standards (TBS), these are known as Divisional Committees.

Under the Divisional committees, Technical Committees or Sub-Committees are formed and these are usually the ones which formulate the initial proposals of national standards.

Members of the different committees are representatives from industry, users, public authorities, higher learning institutions, research institutes, consumer organizations and so on.

This paper will commence by providing a definition and content of a standard together with a brief on the types of standards.

The paper will then highlight on the formulation procedure of national standards prior to giving some highlights on the importance of standards.

1. WHAT IS A STANDARD

1.1 Definition of a standard

ISO/IEC Guide 2: 1996 defines a standard as a document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.

1.2 Content of a standard

Standards are varied in subject. They:

<u>Cover several disciplines</u>: dealing with all technical, economic and social aspects of human activity and covering all basic disciplines such as food, textiles, chemicals, engineering, environment etc:

Are coherent and consistent: standards are developed by technical committees which are coordinated by a specialized body, and ensure that barriers between different areas of activity and different trades are overcome;

Result from participation: standards reflect the results of joint work involving all competent parties concerned and are validated by consensus to represent all relevant interests: producers, users, laboratories, public authorities, academia etc;

Are a living process: standards are based on actual experience and lead to material results in practice; they establish a compromise between the state of the art and the economic constraints of the time:

<u>Are up to – date</u>: standards are reviewed periodically or as dictated by circumstance to ensure their currency, and therefore evolve together with technological and social progress;

<u>Have a reference status</u>: in commercial contracts and in court in the event of a dispute:

Have national or international recognition: standards are documents which are recognized as valid nationally, regionally or internationally, as appropriate;

Are available to everyone; standards may be consulted and purchased without restriction.

As a general rule, standards are not mandatory, but are for voluntary application. In certain cases, implementation may be obligatory (such as in fields connected with safety, electrical installations, health etc).

1.3 Types of standards

Four major types of standards can be cited:

- Fundamental standards which concern terminology, metrology, conventions, signs and symbols, etc;
- Test methods and analysis standards which measure characteristics;
- Specification standards which define characteristics of a product
- Management systems standards which deal with the description of the functions of the company such as quality management standards.

2. STANDARDIZATION WORK PROGRAMME

Planning is a pre-requisite for standardization as indeed is for any other activity. Hence, the long term standardization work plan must be worked out first before actual elaboration procedure for a national standard begins.

In preparing the standardization programme, it is recommended that the different items be listed according to priority after considering the production values i.e. the economic benefits of the eminent standards such as:

- Increasing export earnings
- Reducing production costs,
- Safety of the consumer
- Safety of the property
- Educational effects etc.

3 FORMULATION PROCEDURE

3.1 From an idea to a standard

Having come up with a standardization programme, the next logical step is to implement the programme by making all necessary arrangements to have the requisite standards formulated.

 The first stage is data collection through industrial visits to relevant companies that are producing products which need to be standardized. At the same time, reference is made to existing foreign or international standards. It is only after this process that the first draft proposal of a national standard can be formulated.

- The first proposal, once prepared, is then presented to the relevant Technical Committee for discussion. If approved, the proposal is presented to the Divisional Committee which may approve it for circulation to the public interested parties for comments.
- The public review stage period is three months. After this
 period, comments received are compiled by the Secretariat and
 relevant Technical Committee is again convened to deliberate
 on the comments and finalize the draft standard. The approval
 of the draft standard after this stage permits the draft standard
 to be forwarded to the Executive Council of the TBS for
 approval as a national standard.
- The final approval of a standard is done by the Minister for Industry and Trade by announcement in the official government gazette.
- 3.2 Generally the formulation procedure includes the following steps;
 - Emergence and receipt of proposals
 - Preliminary scrutiny of proposals
 - Approval of projects
 - Allotment of work to the Committees

- Preparation of draft standards
- Wide circulation of drafts
- Compilation of comments
- Finalization of drafts
- Approval of standards
- Publication and publicity

3. WHY STANDARDS

Global trade

Standards provide benchmarks for quality requirements. The ability to compete in global markets is directly linked to standards, which are the international language to access international markets.

• Interchangeability

The ability of the manufacturer to produce a large batch of parts (mass production) which are sufficiently identical in size, shape and performance to enable any one part to be substituted for another.

Standards as a means of communication

Nothing can be produced unless there is adequate means of communicating the needs, opinions and ideas. A primary function of a standard is to provide a means of communication between the manufacturer and the customer.

Safety

There are many product standards solely for the protection of human life and health;

Consumer interest

The protection of consumers interests is undoubtedly one of the most important aims of a standard. As a proof, several countries operate certification schemes in connection with their national standards.

From all the above, it can be summarized that, standards are needed to:

- Facilitate international trade through a common trading language
- Build trust and market opportunities
- Encourage high quality production
- Improve producers' profitability

4. CONCLUSION

Unless a national standard fulfils a generally recognized need and is in line with the needs of the economy, it would mean a waste of effort, for it may not receive the ready acceptance necessary for its nation wide implementation. It is important, therefore, that before a new project for standardization is approved, a thorough investigation is carried out to determine whether it is really justified in the context of the prevailing conditions and wanted by those concerned.