

Title:       **The Way Ahead**  
Source:      **ISO/IEC JTC1/SGFS**  
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## **1       PROGRESSION OF SGFS WORK**

The ISO/IEC JTC1 Special Group on Functional Standardization has been chartered with the development of the concepts involved with functional standardization, with the development of a methodology and procedures for achieving functional standardization, and with the execution of parts of those procedures.

In executing the tasks assigned to it by its charter, the SGFS has given priority to the elements relevant for functional standardization in the area of Open Systems Interconnection (OSI).

This work has resulted in a number of publications addressing the following topics:

    Framework and taxonomy for functional standardization: TR10000-1 and TR10000-2  
    Procedures for taxonomy update, ISP approval and maintenance: N201  
    Directory of ISP and profiles contained therein: N100.

In its June 1991 meeting the SGFS considered the various extensions that have been proposed to the work already performed. The SGFS concluded that these proposals cover a broad spectrum, influencing the existing documentation in different ways and with different timescales. Moreover, the SGFS recognized the need to identify possible ways in which further enhancements can be achieved.

Following these objectives the SGFS produced this document which addresses the following items:

In clause 2 it gives an overview of the scope of the work done today and of areas that have been recognized for potential future work.

In clause 3 it addresses the implications of extensions for the structure and contents of TR10000.

In clause 4 it addresses the implications of extensions for the working procedures.

In clause 5 it addresses the timeframes in which the incorporation of these identified extensions are seen to take place.

## 2 SCOPE OF SGFS WORK

The current scope of the responsibility of the SGFS, originally specified in ISO/TC97 N1865 resolution 15 and restated in JTC1/SGFS N293 is the:

1. creation of a
  - conceptual basis for profiles and ISPs (framework/taxonomy) (TR10000)
  - directory of approved and proposed ISPs (N100)
  - process by which they are documented in, and approved as ISPs (N201)
2. administration of the process defined above.

In TR10000, the subject of Functional Standardization is developed in terms of the concept of "Profiles", which are the specifications of the use of one or more standards to accomplish defined functions. TR10000-1 defines the "Framework" for constructing the definitions of Profiles for relating them to the referenced standards and for publishing them as a new form of document (International Standardized Profiles).

TR10000-2 takes this concept and creates a "Taxonomy" of profiles, which is a structured classification. The purpose of such a taxonomy is to provide a labelling scheme to identify profiles uniquely, and to indicate, by their place in the structure, their functional relationship to each other.

As currently published, TR10000 addresses the domain of OSI functionality and related interchange and representation formats. This work, based on established and emerging standards from JTC1 SC6, SC18 and SC21, has successfully proved the concept of functional standardization and the associated process for creating ISPs.

The SGFS is now addressing a range of extensions, including amongst others:

1. The functionality required to support a full Open System Environment (OSE). The OSE is defined as
  - "The comprehensive set of interfaces, services, and supporting formats, plus user aspects, for interoperability or for portability of applications, data, or people, as specified by information technology standards and profiles".

(ref: ISO/IEC JTC1/TSG1 Final Report, April 1991)

In doing so, the SGFS will generalize the conceptual basis for profiling defined in TR10000 to address all OSE interfaces, services, and formats.

2. The testing and conformance aspects of profiles including
  - concepts for profile test methods and tools
  - relationship between base standards testing and conformance and profile testing and conformance
  - the implications of conformance to a profile.
3. The creation of procedures which would allow the SGFS to respond to requests for support of profiling activities within the ISO TCs outside JTC1.

### **3 ENHANCEMENT OF TR10000**

#### **3.1 Background**

The extension of the work of the SGFS in the areas described above will lead to the need to enhance TR10000. Such extensions may require new parts of TR10000 to be created which describe the taxonomy for specific areas. In considering such an enhancement the following criteria will be taken into account:

1. Base standards groups outside of JTC1 may require separate documents for development/maintenance or balloting purposes.
2. New areas of work may be outside the scope of the taxonomy/framework contained in the existing version of TR10000.
3. Possible new taxonomies may be too large for inclusion in an existing part.
4. There should be minimum disruption to existing documentation
5. Joint ballots between different TCs should be avoided.

#### **3.2 Proposal**

It is proposed that TR10000 is restructured to allow new parts to be added. This should be achieved by:

1. Merging the material in Part 1 which is 'OSI and related format profile specific' into Part 2.
2. Enhancing Part 1 so that it provides an overview to TR10000, defines general principles (eg on framework and taxonomy), ties the various parts of TR10000 together, and explains relationships.

New parts to TR10000 should only be developed if the criteria outlined above make enhancement of an existing part inappropriate.

### 3.3 Examples

Possible new parts to TR10000 could include a framework/taxonomy for OSE, and a framework/taxonomy to cover the work of another TC.

An example of a new area of work which may not need a new part is the incorporation of two new profiles currently being developed for libraries. ISO/TC46 has indicated that the profiles fit into the existing 'OSI' taxonomy as A-profiles, and TC46 is willing for JTC1 to ballot the resulting change to TR10000.

## 4 PROCEDURAL ISSUES

By the development of Profiles for OSI and during the review and approval stage of ISPs for OSI, the SGFS works under the rules as described in SGFS/N401. It is foreseen that the development of ISPs for OSE will be based on the same procedures, and the SGFS expects harmonized input from the S-Liaisons in the field of OSE.

The current rules, as described in N401, deal with the development of ISPs within JTC1. The extension of these procedures to cover ISPs developed by other ISO/IEC TCs was discussed at a meeting of ISP-SWG in Geneva (June 1991). It is understood that these extensions will apply equally to the OSE profile development process.

In order not to de-stabilize the current structure of TR10000 it can be expected that when the SGFS receives a request to incorporate a Taxonomy into TR10000, the SGFS first will investigate the problems and consequences of such an incorporation and will produce a report with recommendations on the subject.

## 5 PLANNING

The SGFS foresees its activities proceeding as follows:

### 5.1 Activities during 1991

#### 5.1.1 Update to TR10000

Documents TR10000-1 and TR10000-2 are in the process of amendment.

TR10000-1 is being updated to accommodate experience with the first group of pDISP submissions and to take account of new profiles which have been identified and which fall within the scope of TR10000-2. A working draft will be submitted to the SGFS for postal comment, and once these comments have been incorporated will be submitted to national ballot as a draft revision of TR10000-1. This is likely to occur towards the end of 1991.

TR10000-2 was updated during the meeting in June 1991 to include several requested amendments and extensions to the taxonomy. The draft revision was approved by the meeting and will be submitted to national ballot in the second half of 1991.

### 5.1.2 Meeting on OSE Profiling.

The meeting in June 1991 considered documents from member bodies and from EWOS and SC22/WG15 relating to the extension of the TR10000 framework and taxonomy to encompass the Open Systems Environment (OSE). It was resolved to convene an Authorised Subgroup meeting to discuss the development of the concepts needed to incorporate profiles for OSE in the area of functional standardization. This meeting is planned for the week ending 1st November 1991, to be located in Europe. Specific SGFS documents to be considered are: N337 (from EWOS), N355 (from SC22/WG15), N364 (from IBN), N369 (from BSI).

The minutes and results of this meeting will be distributed to the members of the SGFS.

## 5.2 Activities during 1992

### 5.2.1 Updates to TR10000-1 and TR10000-2

There will potentially be a requirement to update TR10000-1, TR10000-2 and the procedures document N100 in line with the agreements of the ISP-SWG meeting in Geneva (June 1991).

In line with the structure outlined in section 3 above, it is intended to update both parts of TR10000, moving OSI specific information to TR10000-2 and enabling TR10000-1 to encompass other areas.

The phasing of this work is yet to be agreed.

### 5.2.2 Consideration of output from the meeting on OSE Profiling.

The recommendations of this meeting will be a significant input to the SGFS

meeting in June 1992, and it is expected that as a result further decisions will be made about the work relating to TR10000 extensions.

### 5.3 Activities after 1992

Activities in this timescale will depend on decisions taken in the meantime. They will include the maintenance of TR10000-1 and TR10000-2. Development of new parts will depend on the availability of a harmonised framework and taxonomy.