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In the course of the London authorized sub-group meeting of SGFS December 1992, a number of interrelated changes were proposed to clause 7 of TR 10000-1, concerning the nature, purpose and method of use of the Taxonomy. This note proposes replacement text for that clause.

7. Framework of The Taxonomy of Profiles

7.1 Nature and Purpose of the Taxonomy

The Taxonomy is a structured classification system for identifying required Profiles. From the taxonomy, unique identifiers for Profiles are derived which indicate (in a codified form) the functional relationship of one profile to another.

The first-level elements of the structure are based on the main subdivisions of Information Technology standards into major topics, where possible corresponding to the contents of defined or assumed reference models. The structure is thereby matched to the types of use to which the resulting profiles are put by both suppliers and users, and also to the areas of expertise of the technical committees and subcommittees which have responsibility for the standards and profiles on that topic.

Further levels of structure are then added which relate to the inherent, real-world divisions of functionality which are supported by the base standards concerned. These sub-classes correspond to functional elements which are meaningful to both users and suppliers; they correspond to points where choices are made, such as whether or not to use/offer a particular conforming subset of an application service, or which communications sub-network environment is to be accessed, or what types of portability need to be provided by a system.

Such a taxonomy structure is dynamic by nature, evolving with both the availability of base standards, and the identification of user requirements.

7.2 Elements of the taxonomy

The taxonomy consists of a hierarchical structure, and the identities of the profiles which it supports.

7.2.1 Structural Elements

The identification system used in this Technical Report enables related sets of profiles to be given titles and identifiers which indicate their commonality, and therefore intermediate nodes of the taxonomy can be named and referenced, even though they are not themselves profiles.

7.2.2 Profile Elements

The following considerations shall be taken into account in defining the profile elements of the taxonomy,

- **Analysis of user requirements.** Grouping together elements of functionality into a Profile should correspond to identifiable, real-world, units of application or system design.
- **Significant differences between adjacent profiles.** Too many nearly-similar Profiles within a sub-class of the Taxonomy will increase the likelihood that users will be unable to agree on a single Profile choice to interwork successfully, or port applications or users easily; too few Profiles may lead to the provision of so many options to a Profile that it accomplishes little in the way of selection and simplification.
- **Development over time.** The availability of successive editions of referenced base standards can be a reason for creating new profiles in the taxonomy if they provide a significant functional increase in capability. Otherwise, they give rise only to new editions of the ISP which defines the profile.

7.3 The Taxonomy of Profiles

Profiles are divided into a number of classes, each class identified by a different initial letter. This letter is the basis of a structured set of Profile identifiers, which forms the representation of the Taxonomy. The main characteristics of the Taxonomy are stated here, including all defined uses of the initial letter. Subsequent parts of ISO/IEC/TR 10000 provide the detail of this system.

7.3.1 Open System Environment Profiles

[Ed Note: This subclause is subject to detailed review in the light of the discussions and proposals regarding the terminology of "OSE Profiles", "AEPs" and "Functional Profiles", as recorded in Issues 15, 30, 31]

The Taxonomy of OSE Profiles is defined in ISO/IEC/TR 10000-3.

A single class of OSE Profiles is identified as follows:

P - OSE Profiles

In the context of the scope of OSE as outlined in clause 1, this classification covers the domain of "Generic OSE Profiles".

No classification is assigned to the domain of "Industry Specific OSE Profiles", which are identified in this Technical Report only in concept, and which are not therefore subject to classification or control under the common processes of ISO/IEC.

The domain of "Functional Profiles" comprises a number of classes. The set of classes which corresponds to the concept of OSI Profiles is identified in clause 7.3.2, and the relevant taxonomy is defined in Part 2 of this Technical Report.

The definition of additional classes of Functional Profile is for further study.

7.3.2 OSI Profiles

The Taxonomy of OSI and OSI-related Profiles is defined in ISO/IEC/TR 10000-2.

In order to decouple representation of information or objects from communications protocol support, and application-related protocol from subnetwork types, OSI and OSI-related Profiles are currently divided into the following classes:

- A - Application Profiles using Connection-mode Transport Service (i.e. using T-Profiles).
- B - Application Profiles using Connectionless-mode Transport Service (i.e. using U-Profiles).
- F - Interchange Format and Representation Profiles.
- R - Relay functions between T-Profiles or between U-Profiles.
- T - Connection-mode Transport Profiles, related to subnetwork type.

U - Connectionless-mode Transport Profiles, related to subnetwork type.

Other classes or sub-classes of OSI profiles may be required.