# Proposal for a New Work Item for Guidelines for the Preparation of Language Independent Service Specifications

### Purpose and justification.

With the growth of interest and activity in the area of open systems, services used from within programming languages are increasingly being conceived and developed for use with a variety of languages. These may be developed initially with one language as the target with bindings to other languages following later, but this can create problems because assumptions that are correct for one language may not hold true for all. On the other hand, language independent specifications can be done in a variety of ways each presenting their own binding problems.

Following early experience in producing language bindings, TR 10182 Guidelines for Language Bindings (at the time of writing to be published by ITTF)) was produced to give guidance to those designing the language bindings, but there is no general source of similar guidance for those writing language independent service or interface specifications, so that they may do so in a way which facilitates the development of language bindings. The proposed technical report will fill that gap. As well as addressing specifications written from scratch in language independent form, it will provide guidance for those converting specifications produced in language-specific form to a language independent form.

The guidelines will take into account, as relevant, the outcome of the work of the SC22 Cross Language Issues Ad Hoc Group (established by SC22 Plenary resolutions of 1992), existing language independent specifications produced within JTC1 Subcommittees (SC21, SC22, SC24 and others), and organisations outside JTC1.

If, during the development of the Technical Report, it becomes apparent that additions, updates, modifications or clarifications are needed to the Guidelines for Language Bindings, TR 10182, these will be recorded separately, as required, for use in any further revision of TR 10182. The Technical Report will not encroach on the scope of TR 10182 by including guidelines for language bindings, though it will, where appropriate, relate its guidelines to the relevant parts of TR 10182.

#### Relevant documents to be considered

TR 10182 - Guidelines for Language Bindings ISO/IEC JTC1/SC22 N1251 Programming Language Independent Specification Methods (IEEE TCOS-LIS/D4).

# **Co-operation and liaison**

Other SC22 WGs, especially WG15 POSIX, and, as appropriate, other standards groups or organizations concerned with language-independent specifications.

# **Preparatory work offered with target date(s)**

Material from document ISO/IEC JTC1/SC22/N1251 (IEEE TCOS-LIS/Draft 4, Programming Language Independent Specification Methods) will form the basis for the proposed TR.