Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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International Standard ISO/IEC 18042 was prepared by Joint Technical Committee ISO/IEC JTC 1, Information technology, Subcommittee 24, Computer graphics, image processing and environmental data representation, in collaboration with The SEDRIS Organization.

ISO/IEC 18042 consists of the following parts, under the general title Information technology — Computer graphics and image processing —Spatial Reference Model (SRM) language bindings:

Part 4: C

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**Introduction**

The Spatial Reference Model (SRM) precisely and unambiguously specifies the context in which positions, directions, and distances are defined. It also provides the concepts needed to convert locations, directions and distances accurately among multiple spatial reference frames.

Access to the data types and concepts defined by this specification is through an application program interface (API). The abstract specification of this API is defined in ISO/IEC 18026. Each part of ISO/IEC 18042 defines the binding of that abstract specification to a particular programming language. This document specifies a standard binding for the C computer programming language.

1 Scope

The Spatial Reference Model (SRM), ISO/IEC 18026, specifies a language independent application program interface (API). For integration into a programming language, the SRM API is embedded in a language dependent layer obeying the particular conventions of that language. This part of ISO/IEC 18042 specifies such a language dependent layer for the C language.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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