

Annex C (informative)

Hierarchical diagrams for SRM concepts

C.1 Introduction

This annex presents diagrams that illustrate SRM concepts and their relationships. [Figure C.1](#) illustrates the relationships among many of the key SRM concepts as a UML class diagram. Hierarchical diagrams [Figure C.2](#), [Figure C.3](#), and [Figure C.4](#) illustrate the relationships between RDs, RD categories, ORMs and ORM templates. These concepts are applicable to spatial objects of two and three dimensions. For simplicity of presentation, this informative annex only presents the 3D case. [Figure C.2](#) illustrates the relationship between reference datum categories and (a subset of) the standardized RDs. [Figure C.3](#) shows the relationship between ORM templates and RD components. Three examples of ORMs based on an ORM template are shown in [Figure C.4](#).

C.2 Hierarchical diagrams

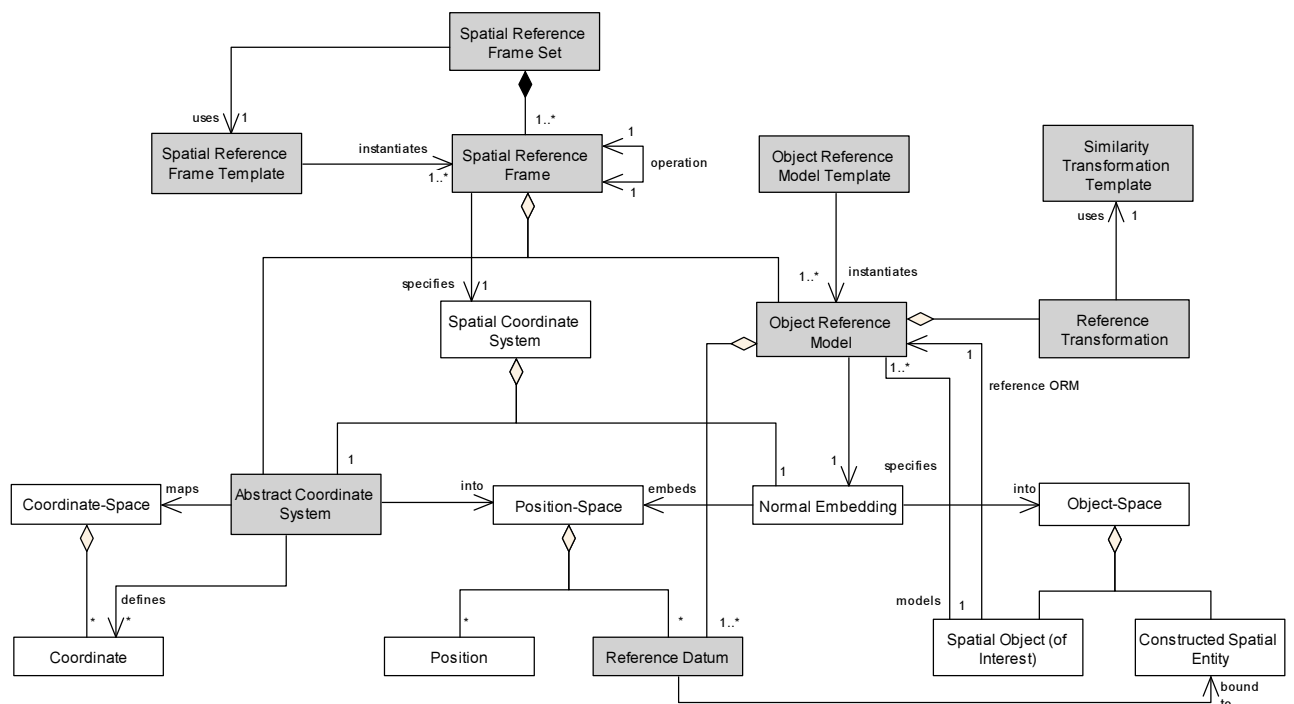


Figure C.1 — SRM concepts and their relationships

In [Figure C.1](#) shaded concepts are those that appear in the SRM API ([Clause 11](#)), and that can be registered ([Clause 13](#)). The aggregation relationships involving Coordinate-Space, Position-Space, and Object-Space are intended only to show that the component objects (Coordinate, Position, etc.) are defined within the respective spaces. A multiplicity of “*” is intended to indicate that there are potentially an infinite number of such objects within the space.

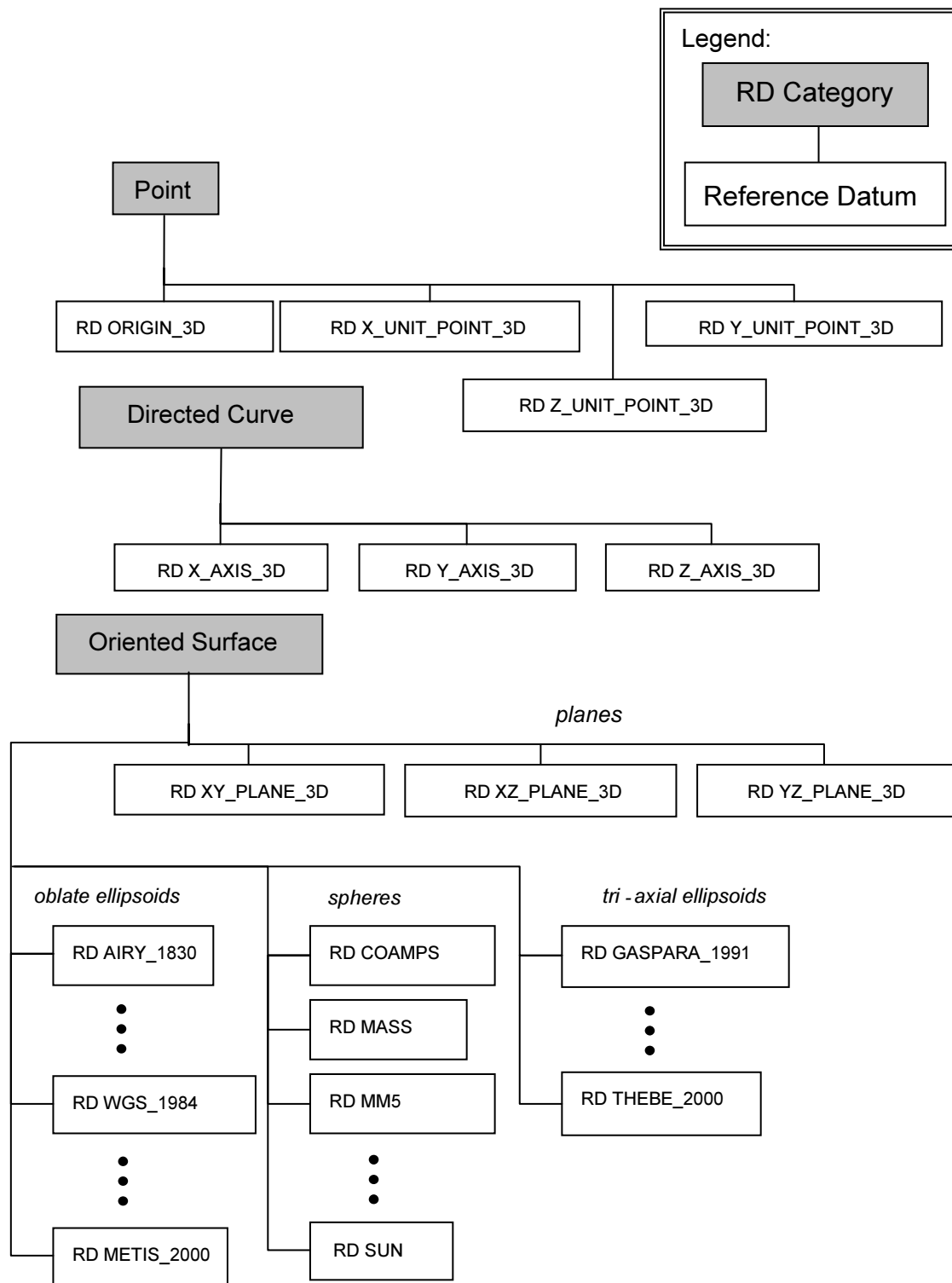


Figure C.2 — 3D RDs

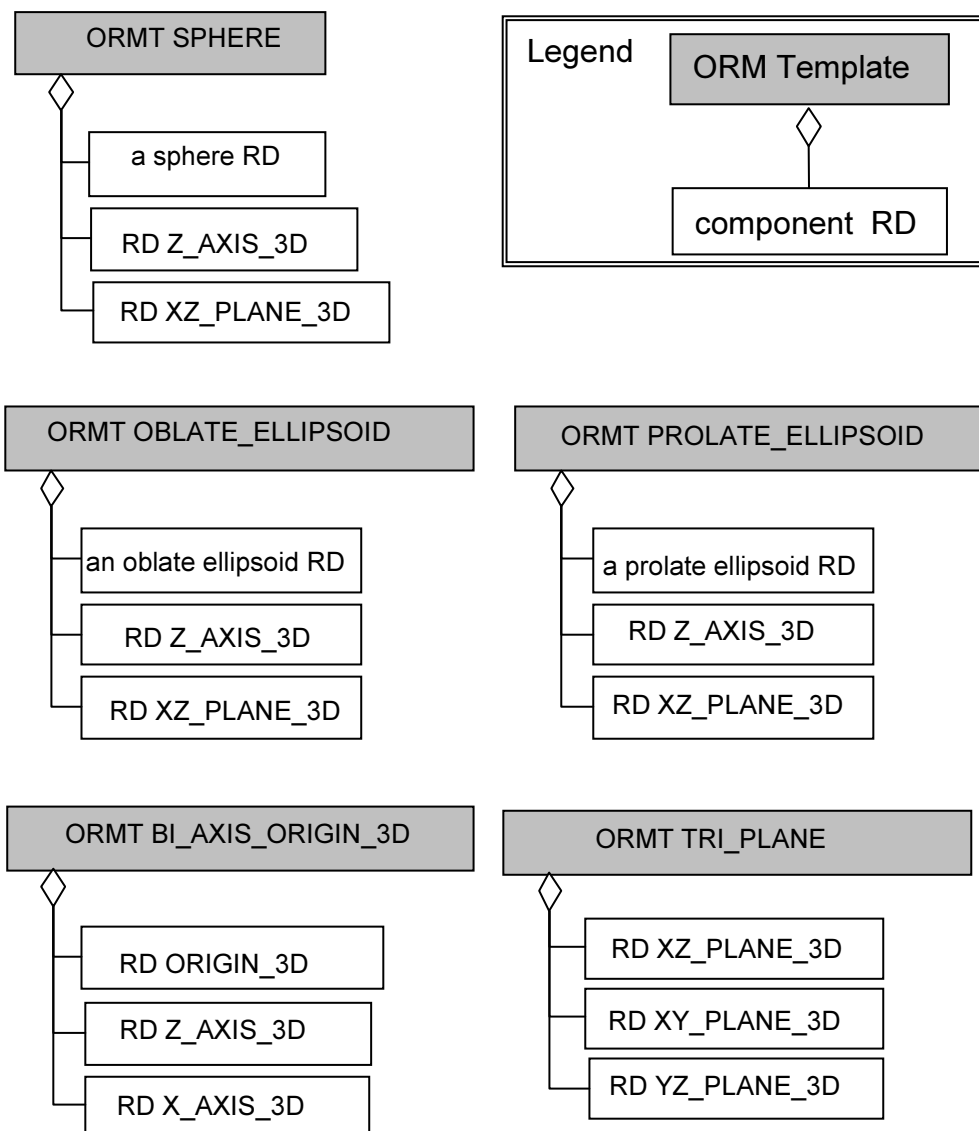
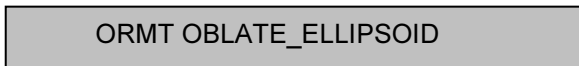
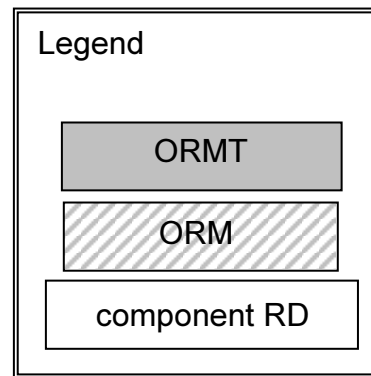
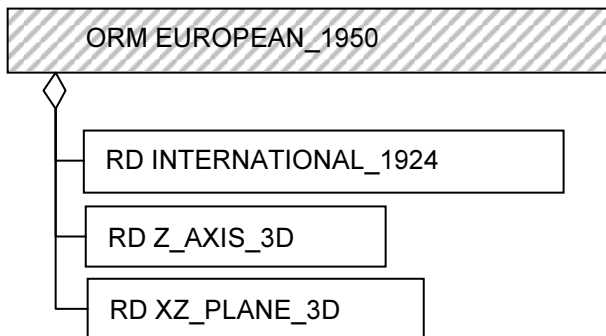


Figure C.3 — 3D ORMT components

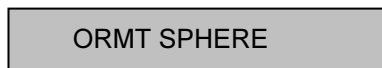
ORM template:



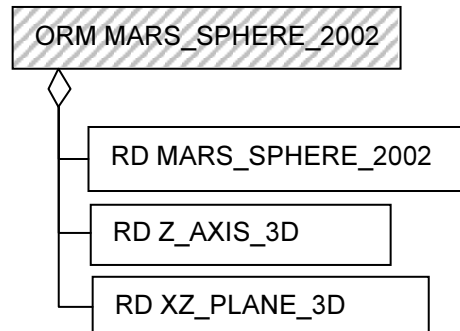
ORM template realization example



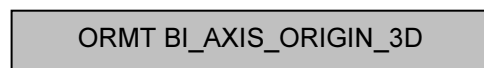
ORM template:



ORM template realization example



ORM template:



ORM template realization example

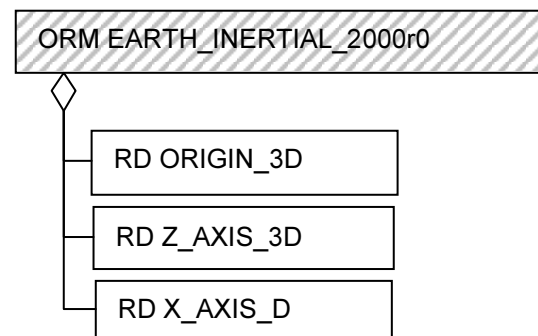


Figure C.4 — 3D ORM examples