BRITISH STANDARD

BS ISO/IEC 15414:2006

Information technology — Open distributed processing — Reference model — Enterprise language

ICS 35.080

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee IST/15, Software and systems engineering, which has the responsibility to:

— aid enquirers to understand the text;

— present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep UK interests informed;

— monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Summary of pages

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INTERNATIONAL STANDARD

ISO/IEC 15414

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Information technology — Open distributed processing — Reference model — Enterprise language

Technologies de l'information — Traitement réparti ouvert — Modèle de référence — Langage d'entreprise

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 15414 was prepared jointly by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and system engineering,* in collaboration with ITU-T. The identical text is published as ITU-T Rec. X.911.

This second edition cancels and replaces the first edition (ISO/IEC 15414:2002), which has been technically revised.

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Introduction

The rapid growth of distributed processing has led to the adoption of the Reference Model of Open Distributed Processing (RM-ODP). This Reference Model provides a coordinating framework for the standardization of open distributed processing (ODP). It creates an architecture within which support of distribution, interworking, and portability can be integrated. This architecture provides a framework for the specification of ODP systems.

The Reference Model of Open Distributed Processing is based on precise concepts derived from current distributed processing developments and, as far as possible, on the use of formal description techniques for specification of the architecture.

This Recommendation | International Standard refines and extends the definition of how ODP systems are specified from the enterprise viewpoint, and is intended for the development or use of enterprise specifications of ODP systems.

0.1 RM-ODP

The RM-ODP consists of:

- Part 1: ITU-T Rec. X.901 | ISO/IEC 10746-1: **Overview**: which contains a motivational overview of ODP, giving scoping, justification and explanation of key concepts, and an outline of the ODP architecture. It contains explanatory material on how the RM-ODP is to be interpreted and applied by its users, who may include standards writers and architects of ODP systems. It also contains a categorization of required areas of standardization expressed in terms of the reference points for conformance identified in ITU-T Rec. X.903 | ISO/IEC 10746-3. This part is informative.
- Part 2: ITU-T Rec. X.902 | ISO/IEC 10746-2: **Foundations**: which contains the definition of the concepts and analytical framework for normalized description of (arbitrary) distributed processing systems. It introduces the principles of conformance to ODP standards and the way in which they are applied. This is only to a level of detail sufficient to support ITU-T Rec. X.903 | ISO/IEC 10746-3 and to establish requirements for new specification techniques. This part is normative.
- Part 3: ITU-T Rec. X.903 | ISO/IEC 10746-3: **Architecture**: which contains the specification of the required characteristics that qualify distributed processing as open. These are the constraints to which ODP standards shall conform. It uses the descriptive techniques from ITU-T Rec. X.902 | ISO/IEC 10746-2. This part is normative.
- Part 4: ITU-T Rec. X.904 | ISO/IEC 10746-4: **Architectural semantics**: which contains a formalization of the ODP modelling concepts defined in ITU-T Rec. X.902 | ISO/IEC 10746-2 clauses 8 and 9. The formalization is achieved by interpreting each concept in terms of the constructs of one or more of the different standardized formal description techniques. This part is normative.
- ITU-T Rec. X.911 | ISO/IEC 15414: **Enterprise language**: this Recommendation | International Standard.

0.2 Overview and motivation

Part 3 of the Reference Model, ITU-T Rec. X.903 | ISO/IEC 10746-3, defines a framework for the specification of ODP systems comprising:

1) five viewpoints, called enterprise, information, computational, engineering and technology, which provide a basis for the specification of ODP systems;
2) a viewpoint language for each viewpoint, defining concepts and rules for specifying ODP systems from the corresponding viewpoint.

The purpose of this Recommendation | International Standard is to:

- Refine and extend the enterprise language defined in ITU-T Rec. X.903 |ISO/IEC 10746-3 to enable full enterprise viewpoint specification of an ODP system;
- Explain the correspondences of an enterprise viewpoint specification of an ODP system to other viewpoint specifications of that system; and
- Ensure that the enterprise language, when used together with the other viewpoint languages, is suitable for the specification of a concrete application architecture to fill a specific business need.

This Recommendation | International Standard uses concepts taken from ITU-T Recs X.902 | ISO/IEC 10746-2 and X.903 | ISO/IEC 10746-3 and structuring rules taken from clause 5 of ITU-T Rec. X.903 | ISO/IEC 10746-3; it introduces refinements of those concepts, additional viewpoint-specific concepts, and prescriptive structuring rules for enterprise viewpoint specifications. The additional viewpoint-specific concepts are defined using concepts from ITU-T Recs X.902 | ISO/IEC 10746-2 and X.903 | ISO/IEC 10746-3.

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This Recommendation | International Standard provides a common language (set of terms and structuring rules) to be used in the preparation of an enterprise specification capturing the purpose, scope and policies for an ODP system. An enterprise specification is a part of the specification of an ODP system using viewpoints defined by ITU-T Recommendation X.903 | ISO/IEC 10746-3. The specification of the ODP system can describe any or all of:

- an existing system within its environment;
- an anticipated future structure or behaviour of that existing system within the same or an anticipated future environment;
- a system to be created within some environment.

The primary audience for this Recommendation | International Standard is those who prepare and use such specifications. The audience includes ODP system owners and users, including subject manager experts, and developers and maintainers of ODP system, tools, and methodologies.

The motivation for the enterprise language is to support standardized techniques for specification. This improves communication and helps create consistent specifications.

The preparation of specifications often falls into the category referred to as analysis or requirement specification. There are many approaches used for understanding, agreeing and specifying systems in the context of the organizations of which they form a part. The approaches can provide useful insights into both the organization under consideration and the requirements for systems to support it, but they generally lack the rigour, consistency and completeness needed for thorough specification. The audiences of the specifications also vary. For agreement between the potential users of an ODP system and the provider of that system, it may be necessary to have different presentations of the same system – one in terms understood by clients, and one in terms directly related to system realization.

The use of enterprise specifications can be wider than the early phases of software engineering process. A current trend is to integrate existing systems into global networks, where the functionality of interest spans multiple organizations. The enterprise language provides a means to specify the joint agreement of common behaviour of the ODP systems within and between these organizations. The enterprise specification can also be used at other phases of the system life cycle. The specification can, for example, be used at system run-time to control agreements between the system and its users, and to establish new agreements according to the same contract structure. Enterprise viewpoint specifications may contain rules for inter-organizational behaviour.

This Recommendation | International Standard also provides a framework for development of software engineering methodologies and tools exploiting ODP viewpoint languages, and a set of concepts for development of enterprise viewpoint specification languages. For these purposes, this Recommendation | International Standard provides rules for the information content of specifications and the grouping of that information. Further requirements on the relationships between enterprise language concepts and concepts in other viewpoints are specific to the methodologies, tools or specification languages to be developed.

An enterprise specification defines the purpose, scope, and policies of an ODP system and it provides a statement of conformance for system implementations. The purpose of the system is defined by the specified behaviour of the system while policies capture further restriction of the behaviour between the system and its environment or within the system itself related to the business decisions of the system owners.

An enterprise specification also allows the specification of an ODP system that spans multiple domains and is not owned by a single party, and specification of the collective behaviour of a system that is divided into independently specified and independently working subsystems.

Annex A present parts of a model of the enterprise language, illustrating the concepts of the enterprise language and its relationships. Annex B explains concepts and structuring rules of the enterprise language and provides examples of how it may be used. These annexes are informative.

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INTERNATIONAL STANDARD
ITU-T RECOMMENDATION

Information technology – Open distributed processing – Reference model – Enterprise language

1 Scope

This Recommendation | International Standard provides:

a) a language (the enterprise language) comprising concepts, structures, and rules for developing, representing, and reasoning about a specification of an ODP system from the enterprise viewpoint (as defined in ITU-T Rec. X.903 | ISO/IEC 10746-3);

b) rules which establish correspondences between the enterprise language and the other viewpoint languages (defined in ITU-T Rec. X.903 | ISO/IEC 10746-3) to ensure the overall consistency of a specification.

The language is specified to a level of detail sufficient to enable the determination of the compliance of any modelling language to this Recommendation | International Standard and to establish requirements for new specification techniques.

This Recommendation | International Standard is a refinement and extension of ITU-T Rec. X.903 | ISO/IEC 10746-3, clauses 5 and 10, but does not replace them.

This Recommendation | International Standard is intended for use in preparing enterprise viewpoint specifications of ODP systems, and in developing notations and tools to support such specifications.

As specified in clause 5/X.903 | ISO/IEC 10746-3, an enterprise viewpoint specification defines the purpose, scope and policies of an ODP system. [see also 3-5.0]

2 Normative references

The following Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation | International Standard. At the time of publication, the editions indicated were valid. All Recommendations and Standards are subject to revision, and parties to agreements based on this Recommendation | International Standard are encouraged to investigate the possibility of applying the most recent edition of the Recommendations and Standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards. The Telecommunication Standardization Bureau of the ITU maintains a list of currently valid ITU-T Recommendations.

2.1 Identical ITU-T Recommendations | International Standards

– ITU-T Recommendation X.902 (1995) | ISO/IEC 10746-2:1996, *Information technology – Open Distributed Processing – Reference Model: Foundations*.

– ITU-T Recommendation X.903 (1995) | ISO/IEC 10746-3:1996, *Information technology – Open Distributed Processing – Reference Model: Architecture*.

– ITU-T Recommendation X.904 (1997) | ISO/IEC 10746-4:1998, *Information technology – Open Distributed Processing – Reference Model: Architectural semantics*.

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3 Terms and definitions

3.1 Definitions from ODP standards

3.1.1 Modelling concept definitions

This Recommendation | International Standard makes use of the following terms as defined in ITU-T Rec. X.902 | ISO/IEC 10746-2.

- action;
- activity;
- behaviour (of an object);
- component object [2-5.1];
- composite object;
- composition;
- configuration (of objects);
- conformance;
- conformance point;
- contract;
- <X> domain;
- entity;
- environment contract;
- environment (of an object);
- epoch;
- establishing behaviour;
- instantiation (of an <X> template);
- internal action;
- invariant;
- liaison;
- location in time;
- name;
- object;
- obligation;
- ODP standards;
- ODP system;
- permission;
- prohibition;
- proposition;
- reference point;
- refinement;
- role;
- state (of an object);
- subsystem [2-6.5];
- subtype;
- system;
- <X> template;
- terminating behaviour;
- type (of an <X>);
- viewpoint (on a system).

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3.1.2 Viewpoint language definitions

This Recommendation | International Standard makes use of the following terms as defined in ITU-T Rec. X.903 | ISO/IEC 10746-3.

- binder;
- capsule;
- channel;
- cluster;
- community;
- computational behaviour;
- computational binding object;
- computational object;
- computational interface;
- computational viewpoint;
- dynamic schema;
- engineering viewpoint;
- enterprise object;
- enterprise viewpoint;
- <X> federation;
- information object;
- information viewpoint;
- interceptor;
- invariant schema;
- node;
- nucleus;
- operation;
- protocol object;
- static schema;
- stream;
- stub;
- technology viewpoint;
- <viewpoint> language.

3.2 Definitions from ODP standards extended in this specification

This Recommendation | International Standard extends the definition of the following term originally defined in ITU-T Rec. X.902 | ISO/IEC 10746-2. [2-11.2.7]:

- policy.

The extended definition is in clause 6.

4 Abbreviations

For the purposes of this Recommendation | International Standard, the following abbreviations apply.

ODP	Open Distributed Processing
RM-ODP	Reference Model of Open Distributed Processing (ITU-T Recs X.901 to X.904 | ISO/IEC 10746 Parts 1-4)

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5 Conventions

This Recommendation | International Standard contains references to Parts 2 and 3 of the RM-ODP and to the normative text of this Recommendation | International Standard. Each reference is of one of these forms:

[2-n.n] – a reference to clause n.n of RM-ODP Part 2: Foundations, X.902 | ISO/IEC 10746-2;

[3-n.n] – a reference to clause n.n of RM-ODP Part 3: Architecture, X.903 | ISO/IEC 10746-3;

[n.n] – a reference to clause n.n of this Recommendation | International Standard.

For example, [2-9.4] is a reference to Part 2 of the reference model, (ITU-T Rec. X.902 | ISO/IEC 10746-2), subclause 9.4 and [6.5] is a reference to subclause 6.5 of this Recommendation | International Standard. These references are for the convenience of the reader.

This Recommendation | International Standard also contains some text which is a modification of text from Part 3 of the reference model, ITU-T Rec. X.903 | ISO/IEC 10746-3. Such text is marked by a reference like this: [see also 3-5.n]. The modifications are authoritative with respect to the enterprise language.

6 Concepts

The concepts of the enterprise language defined in this Recommendation | International Standard comprise:

- the concepts identified in 3.1.1 and 3.1.2 as they are defined in ITU-T Rec. X.902 | ISO/IEC 10746-2 and in ITU-T X.903 | ISO/IEC 10746-3;
- the concepts defined in this clause.

This clause defines new concepts and refines the definition of policy from ITU-T Rec. X.902 | ISO/IEC 10746-2. [2-11.2.7] The grouping into subclauses and the headings of the subclauses of this clause are informative.

6.1 System concepts

6.1.1 scope (of a system): The behaviour that a system is expected to exhibit.

6.1.2 field of application (of a specification): The properties the environment of the ODP system shall have for the specification of that system to be used.

6.2 Community concepts

6.2.1 objective (of an <X>): Practical advantage or intended effect, expressed as preferences about future states.

NOTE 1 – Some objectives are ongoing, some are achieved once met.

NOTE 2 – In the text of ITU-T Rec. X.903 | ISO/IEC 10746-3 [3-5] the terms, purpose and objective, are synonymous. The enterprise language emphasizes the term, objective, and emphasizes the need of expressing an objective in measurable terms.

6.2.2 community object: A composite enterprise object that represents a community. Components of a community object are objects of the community represented.

6.3 Behaviour concepts

6.3.1 actor (with respect to an action): A role (with respect to that action) in which the enterprise object fulfilling the role participates in the action. That object may be called an actor.

NOTE – It may be of interest to specify which actor initiates that action.

6.3.2 artefact (with respect to an action): A role in (with respect to that action) which the enterprise object fulfilling the role is referenced in the action. That object may be called an artefact.

NOTE – An enterprise object that is an artefact in one action can be an actor in another action.

6.3.3 resource (with respect to an action): A role (with respect to that action) in which the enterprise object fulfilling the role is essential to the action, requires allocation, or may become unavailable. That object may be called a resource.

NOTE 1 – Allocation of a resource object may constrain other behaviours for which that resource is essential.

NOTE 2 – A consumable resource object may become unavailable after some amount of use. Any resource object may become unavailable after some amount of time (for example, in case a duration or expiry has been specified for the resource).

6.3.4 interface role: A role in a community, identifying behaviour which takes place with the participation of objects that are not members of that community.

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6.3.5 **process**: A collection of steps taking place in a prescribed manner and leading to an objective.

NOTE 1 – A process may have multiple starting points and multiple end points.

NOTE 2 – The prescribed manner may be a partially ordered sequence.

NOTE 3 – A process specification can be a workflow specification.

NOTE 4 – The activity structure concepts provided in subclause 13.1 of ITU-T Rec. X.902 | ISO/IEC 10746-2 may be used, after substitution of 'step' for 'action' and 'process' for 'activity', to specify the structure of a process.

NOTE 5 – An enterprise specification may define types of processes and may define process templates.

6.3.6 **step**: An abstraction of an action, used in a process, that may leave unspecified objects that participate in that action.

6.4 Policy concepts

6.4.1 **policy**: A set of rules related to a particular purpose. A rule can be expressed as an obligation, an authorization, a permission or a prohibition. [see also 2-11.2.7]

NOTE 1 – Not every policy is a constraint. Some policies represent an empowerment.

NOTE 2 – This definition refines subclause 11.2.7/X.902 | ISO/IEC 10746-2, by adding authorization.

6.4.2 **authorization**: A prescription that a particular behaviour shall not be prevented.

NOTE – Unlike a permission, an authorization is an empowerment.

6.4.3 **violation**: A behaviour contrary to that required by a rule.

NOTE – A rule or policy may provide behaviour to occur upon violation of that or some other rule or policy.

6.5 Accountability concepts

6.5.1 **party**: An enterprise object modelling a natural person or any other entity considered to have some of the rights, powers and duties of a natural person.

NOTE 1 – Examples of parties include enterprise objects representing natural persons, legal entities, governments and their parts, and other associations or groups of natural persons.

NOTE 2 – Parties are responsible for their actions and the actions of their agents.

The following concepts are used to identify actions which involve the accountability of a party.

6.5.2 **commitment**: An action resulting in an obligation by one or more of the participants in the act to comply with a rule or perform a contract.

NOTE – The enterprise object(s) participating in an action of commitment may be parties or agents acting on behalf of a party or parties. In the case of an action of commitment by an agent, the principal becomes obligated.

6.5.3 **declaration**: An action that establishes a state of affairs in the environment of the object making the declaration.

NOTE – The essence of a declaration is that, by virtue of the act of declaration itself and the authority of the object or its principal, it causes a state of affairs to come into existence outside the object making the declaration.

6.5.4 **delegation**: The action that assigns authority, responsibility or a function to another object.

NOTE – A delegation, once made, may later be withdrawn.

6.5.5 **evaluation**: An action that assesses the value of something.

NOTE 1 – For example, the action by which an ODP system assigns a relative status to some thing, according to estimation by the system.

NOTE 2 – Value can be considered in terms of usefulness, importance, preference, acceptability, etc.; the evaluated target may be, for example, a credit rating, a system state, a potential behaviour, etc.

6.5.6 **prescription**: An action that establishes a rule.

6.5.7 **agent**: An enterprise object that has been delegated (authority, responsibility, a function, etc.) by and acts for a party (in exercising the authority, carrying out the responsibility, performing the function, etc.).

NOTE 1 – An agent may be a party or may be the ODP system or one of its components. Another system in the environment of the ODP system may also be an agent of some party.

NOTE 2 – The delegation may have been direct, by a party, or indirect, by an agent of the party having authorization from the party to so delegate.

6.5.8 **principal**: A party that has delegated (authority, a function, etc.) to another.

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7 Structuring rules

This clause refines and extends the structuring rules defined in subclause 5.2 of ITU-T Rec. X.903 | ISO/IEC 10746-3, as they apply to the concepts of community, enterprise object, objective, behaviour and policy. It defines structuring rules for the accountability concepts defined in 6.5. It uses the concepts defined in ITU-T Rec. X.902 | ISO/IEC 10746-2, in subclause 5.1 of ITU-T Rec. X.903 | ISO/IEC 10746-3 and in clause 6.

7.1 Overall structure of an enterprise specification

An enterprise specification of an ODP system is a description of that system and relevant parts of its environment. The enterprise specification focuses on the scope and purpose of that system and the policies that apply to it in the context of its environment.

NOTE 1 – The environment of an ODP system and the ODP system itself may span multiple organizations. More than one party may own the ODP system.

NOTE 2 – An enterprise specification may specify the collective behaviour of separately specified and interworking subsystems of the ODP system.

A fundamental structuring concept for enterprise specifications is that of community. A community is a configuration of enterprise objects that describes a collection of entities (e.g., human beings, information processing systems, resources of various kinds and collections of these) that is formed to meet an objective. These entities are subject to an agreement governing their collective behaviour. The assignment of actions to the enterprise objects that comprise a community is defined in terms of roles. (See 7.8.1 and 7.8.2.)

The enterprise specification includes, within the areas of interest of the specification users, the objective and scope of the ODP system, the policies for the ODP system (including those of any environment contracts), the community in which ODP system is specified and the roles fulfilled by the ODP system and other enterprise objects in that community, and the processes in which the ODP system and enterprise objects in its environment participate.

An enterprise specification of an ODP system includes at least the community in which that system may be represented as a single enterprise object interacting with its environment. Whether the specification actually includes that level of abstraction is left for the specifier to decide.

NOTE 3 – This minimal enterprise specification describes the objective and scope of the ODP system; this description is necessary for completeness of the enterprise specification.

Where necessary for clarity or completeness of description of the behaviour of the ODP system, the enterprise specification can include any other communities of which the ODP system or its components are members, and other communities of which enterprise objects in the environment of the ODP system are members.

NOTE 4 – The set of communities in an enterprise specification may include, for example, communities at both more abstract and more detailed levels than the minimal enterprise specification, as well as communities relating to functional decomposition of the ODP system and to ownership of the ODP system and its parts.

The enterprise specification can also be structured in terms of a number of communities interacting with each other.

NOTE 5 – This may be, for example, a federation.

The scope of the system is defined in terms of its intended behaviour; in the enterprise language this is expressed in terms of roles or processes or both, policies, and the relationships of these.

NOTE 6 – It may be meaningful to discuss the intended, delivered or expected scope of a system in various phases of planning, development or deployment. In such cases, the term "scope" should be appropriately qualified.

A complete ODP system specification indicates rules for internal consistency in terms of relationships between various viewpoint specifications and a complete enterprise specification contains conformance rules that define the required behaviour of the described ODP system.

This clause defines how the concepts identified in clause 3 or defined in clause 6 are used in an enterprise specification.

7.2 Contents of an enterprise specification

An enterprise specification is structured in terms of the elements explained in 7.1 and the other concepts identified in clause 6, as well as the relationships between them.

For each of these elements, depending on the specifier's choice and desired level of detail, the enterprise specification provides:

- the characteristics of the element; or
- the type or types of the element; or
- a template for the element.

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An enterprise specification provides a pattern for realization of an ODP system in its environment. As such it may be realized once, never, or many times, depending upon the objective of the specifier. This means that the behaviour defined may also be observable any number of times, depending on when and where the specification is realized. It is therefore necessary to take care of the context when interpreting statements about the occurrence of the concepts in an enterprise specification.

In particular, when distinguishing type and occurrence in a specification, the objective is normally to distinguish between multiple occurrences of a single type within the specification, and not to imply a constraint on how often the specification can be realized in the world. The definitions in this Recommendation | International standard should be interpreted in the context of specification, without constraining when and where the specification should be realized.

The enterprise language makes no prescription about the specification process nor about the level of abstraction to be used in an enterprise specification.

NOTE 1 – No recommendations are made about the relative merits of modelling from top-down or bottom-up. Nor is there a recommended sequencing of the development of viewpoint specifications.

NOTE 2 – It is a design choice whether a specification deals with a specific implementation by, for example, identifying individual enterprise objects, or deals with a more flexible architecture by identifying types and rules for assigning enterprise objects to roles.

NOTE 3 – A specification may be partitioned because of readability, reuse of specification fragments in other specifications or interoperability of enterprise objects.

NOTE 4 – Roles and communities, as well as types and templates, can be private to a specification and development environment, or they can be stored in a repository that can be shared by a wider audience of several development environments and groups.

7.3 Community rules

7.3.1 Community

An enterprise specification states the objective of a community, how it is structured, what it does, and what objects comprise it. The objective of the community is expressed in a contract that specifies how the objective can be met. This contract:

- states the objective for which the community exists;
- governs the structure, the behaviour and the policies of the community;
- constrains the behaviour of the members of the community;
- states the rules for the assignment of enterprise objects to roles.

The contract of the community specifies constraints that govern the existence or behaviour of the collection of entities described by the community. When a collection of entities is represented as a community, there may already be some implicit or explicit agreement about those entities. Terms of that agreement may appear in the contract of the community. An enterprise specification may include all or part of that agreement by reference. Such references relate the elements of the specification to terms of that agreement. In particular, commitments of enterprise objects may be subject to that agreement.

The behaviour of the community is such that it meets its objective. The enterprise objects of a community are constrained by the rules of the contract of the community.

The contract can be put in place by a defined behaviour carried out by enterprise objects or the contract may be prescribed to exist by the enterprise specification.

The collective behaviour of the community is specified in terms of one or more of the following elements:

- the roles of the community (including those roles which define how a community interacts with its environment);
- the processes that take place in the community;
- the assignment of roles to steps in processes;
- policies that apply to the roles and processes; and
- identification of those actions for which parties are accountable.

This collective behaviour is constrained by the policies associated with roles and processes and by the contract of the community.

The behaviours of objects in a community are subject to the contract of that community and to the constraints specified in relationships between those objects.

Documents
Document Sharing Hub
Full document details: BS ISO/IEC 15414:2006