Appendix C: Terms and Definitions

The terms and their definition has been done in cooperation with Alla Morozova during her work on the master thesis project.

The following contains terms and definitions for the REA Model (REA), Enterprise Business Model (EBM), Microsoft Enterprise Model (MEM) and Jamaica Business Model (JBM).

The structure of a definition of a term has the following form:

Term_Definition	::=	<Term_Designation> <Term_Description> <Term_Statement>$^*_1$ <Term_Used>$^*_0$ | 'see ' <Term_Designatio>
Term_Designation	::=	**string**
Term_Description	::=	' is ' **string** '. '
Term_Statement	::=	<Term_Designation> **string** '. '

The purpose of the semi-formal form of definitions is to give a base for modeling the definitions in UML or other formal languages.

Business Terms

Account is *business information*. An account is a part of a *ledger*. An account has a number of account items, each describing a *cash receipt* or a *cash disbursement*. An account has a balance. Account is specialized into *cash account*, *bank account*, *capital account*, wages account, *sales account*, *purchase account* and other more special purpose accounts.

Accountant is an *actor* participating in an *activity* of *accounting*.

Accounting is a *support activity* of keeping *business information* about all payments to and from an *enterprise*. Accounting is performed by an *accountant*.

Action see *Business Action*.

Action Flow is an ordering relation between two *actions*. The second action can only be started, when the first action has been ended.

Activity is something that an *enterprise* might do. Activity may be specialized into *economic activity*. Activity may be developed or improved by *technical development*.

Actor is a person doing a *business action* or a *business process*. The actor may play a specific *role* designating the function in the action. An actor is normally located in the *enterprise*. An actor can sometimes be located in the *enterprise environment*. An actor may be specialized into *accountant*, *agent*.

Address is a postal address connected to a *party*.

Agent represents a person or an *enterprise* - a *party* - participating in an *econonic activity*. Agent is a specialization of an *actor*.

Architecture is a conceptual abstraction of a *system* reflecting it components, relationships between the components and between the system and its *system environment*. Architecture includes also rules for govering system life cycle. An architecture has an *architectural description*.

Architectural Description is a description of an *architecture*. Architectural description has a *rationale*. Architectural description identifies one or more *stakeholders*. Architectural description is an aggregation of *views* and related *models*. Architecture description is related to *viewpoint* and *concern*.

Assets are all the *resources* owned by an *enterprise*. Assets has a value.

Bank Account is an *account* registering *cash transactions* via bank.

Business Action is the unit of work to be done in an *enterprise*. Actions are building blocks in *processes* and they are ordered by *action flows*. An action is performed by one or more *actors*.

Business Agent is a part of the *REA Model*. A business agent may be: Customer, Vendor, Enterprise, Employee, Stockholder.

Business Enterprise see *enterprise*.

Business Information is an *intangible resource* for an *enterprise*. Business information is specialized into *account* and *ledger*.

Business Method is the way to perform a *business process*. Business methods are used to accomplish the *enterprise strategy*.

Business Partner is a *party* cooperating with the *enterprise*. Business partners are part of the *enterprise environment*. Business partners are part of the *human resources* for an enterprise. Business partner is specialized into *supplier* and *vendor*.

Business Process is one or more *actions* and sub-processes performed by one or more *actors* in an *enterprise*. A business process is described by a *business method*.

Business Resource is part of the *REA Model*. A business resource may be: Cash, Inventory, Equipment.

Business User is an *agent*. A business user has an attribute, *Role*. User is associated to one User Portal Assoc. Users are aggregated to *System*.

Buy is an *event*, where a *party* being the *buyer* gets *goods* from another party in exchange for *money*.

Buyer is a *role* of a *party* buying *goods* from another party.

Capital Transaction is a *cash transaction* between a *stockholder* and the *enterprise* as a result of *financial activity*.

Cash is money in form of bills or coins. Cash belonging or available to an *enterprise* is a *tangible resource*. Cash is involved in an *economic activity*. Cash is increased by *cash receipt*. Cash is decreased by *cash disbursement*.

Cash Disbursement is a *cash transaction* from the *enterprise* to a *vendor* or *employee* as a payment for *goods* or to a *stockholder* as a result of a *economical activity*.

Cash Receipt is a *cash transaction* from a *customer* to the *enterprise* for *goods* included in a *sale*. Cash receipt is also a cash transaction from a *stockholder* to the enterprise as a result of a *economical activity*.

Cash Transaction is a *economical activity* involving an *enterprise*. Cash transaction is generalizations of *cash disbursement*, *cash receipt* and *capital transaction*.

Capital Transaction is a *cash transaction* defining an exchange of *cash* between a *stockholder* and an *enterprise*.

Claim is *legal affairs* where a *party* can expect something from another party. Claims may be part of a *contract*.

Commitment is *legal affairs*, where a *party* make a promise to another party. A commitment from A to B implies a *claim* from B to A. *Commitments* may be part of a *contract*.

Competitor for an *enterprise* is a *party* offering the same *goods*. Competitors are part of the *environment* of the enterprise.

Concern is important for a *stakeholder* regarding a *system*. One or more concerns identies an *architectural description*

Consultant is a *role*of a *party* selling *services* to other parties.

Contract is a *legal affair* between a *party* (the primary party) and one or more other parties (the counter party). The contract includes a content like *trade* and a specification of the involved parties with their roles and responsibilities - *claims* and *commitments*.

Control is a *management activity*, where a *schedule* is compared with the present state.

Copyright is an *intangible resource* as an exclusive right to a literary, dramatic, musical, or artistic work or to the use of a commercial print or label, as granted by law.

Core Business Processes is the set of *business processes* giving the biggest contributaion to the value creation.

Customer[1] is a *party* buying *goods* from an *enterprise*. Customer issues an *order* requesting the goods. Customers are part of the *enterprise environment*.

Customer[2] is a *party* buying *products* from a *retail shop*.

Customer Service (EBM) is *primary activities* of an *enterprise* assisting actual and potential *customers*

Distributor (EBM) is a *business partner* delivering the *goods* produced by an *enterprise* to its *customers*.

Economic Activity is an *activity* involving *cash*. An economic activity may be performed by an *agent*.

Employee is a person hired and paid by an *enterprise*. An employee is doing personel *services*.

Enterprise is a social organization performing *services*, *production* and *trade* of *goods*. A *retail shop* is a specialization of an enterprise doing trade. An enterprise is based on private ownership of wealth. An enterprise has an *enterprise environment*. An enterprise has some *stakeholders*. An enterprise may be described by a *value chain framework* model. An enterprise may buy *equipment* from a *vendor*.

Enterprise Environment is the part of the world having interaction with or of interest for the *enterprise*. *Vendors*, *customers* and *business partners* are part of *enterprise environment*.

Enterprise Operation Level relates day-to-day work of an *enterprise*.

Enterprise Resource is the means for an *enterprise* to create value. Resources may be divided into *tangible resources*, *intangible resources* and *human resources*.

Enterprise Solution is a kind of *software system* solving a problem for a single user type. An enterprise solution may be described by one or more *models*.

Enterprise Strategy is a set of enterprise *goals*.

Enterprise Strategic Level concerns with enterprise *goals* and enterprise functioning.

Enterprise Tactic is a set of *business methods* to accomplish the *enterprise strategy*.

Enterprise Tactical Level deals with practical concrete directions and related *activities* to realize *enterprise strategy*.

Entity is a countable existing thing.

Equipment is means for creating *goods*. Equipment owned by an *enterprise* is part of its *tanguible resources*.

Equipment Acquisition is an *event* where an *enterprise* buys *equipment* from a *vendor*.

Event[1] (REA) represents an *economic activity*.
Event[2] is something of interest occurring. Event may have time/date and

location.

Finance is a *support activity* within *firm infrastructure* for an *enterprise* providing funds and capital for investment in *resources*.

Financial activity is an *economic activity*.
A financial activity results in a *cash transaction* between an *enterprise* and a *stockholder*.

Firm Infrastructure is *support activities* being required for *primary activities* and other support activities. Firm infrastructure includes *management*, *planning*, *finance*, *accounting*, *legal affairs* and *government affairs*.

Goal is a desired situation. Goal is an element in an *enterprise strategy*.

Good is somehing sold by an *enterprise* to a *customer*. A good is either a *product* or a *service*. *Cash disbursement* is payment for goods by the *enterprise*. *Cash receipt* is the payment for goods by the *customer*. *Competitor* may be offering goods of the same kind as the *enterprise*. *Equipment* and *machinery* may be used creating goods. *Goods* may be delivered by a *distributor*. An *order* may request some goods. Goods is *purchased* from a *vendor*. Goods is sold to a *customer*. Goods is sold by a *seller*. Goods may be developed or improved by *technical development*.

Goodwill is an *intangible resource* established when an *enterprise* does something having a value. Goodwill may include the enterprise's reputation, brand recognition, and relationships with *enterprise environment* and *customers*.

Government Affairs are activities for an *enterprise* concerning government authoritiies or political units. Govern affair are *support activities* in *firm infrastructure*.

Human Resource is a *party* needed by *enterprise* like *employees*, *consultants* and *business partners*.

Human Resource Management is *support activities* for supplying an *enterprise* with *employees* having *know-how* to perform activities in the enterprise.

Inbound Logistics (EBM) is *primary activities* for supplying an *enterprise* with *raw material*.

Intangible Resource is a *resource* being abstract (non-physical) owned by an *enterprise*. Intangible resources include *goodwill*, *intellectual property* and *copyrighs*.

Intellectual Property is an *intangible resource* as trade secrets, patent, *know-how*, *information* about *enterprises* and *enterprise environment*.

Inventory is a description of a *stock* of *tangible resources* and their amounts.

Know-how is the technical knowledge and skills required to do something.

Ledger is a collection the complete record of the *accounts*.

Legal Affairs are activities for an *enterprise* concerning legal authorities and other *parties*. Legal affairs are *support activities* in *firm infrastructure*. Legal affairs includes *contracts*, *commitments* and *claims*.

Machinary is mechanical or electrical tools necessary for creating *goods*. Machinery owned by an *enterprise* is part of its *tangible resources*.

Main Business Activity is *activities* responsible for creating monetary value.

Management is *support activities* concerned with running an *enterprise*. Management includes *decision making*, *planning*, *scheduling* and *control*. Management is a support activity in *firm infrastructure*.

Management Choice is a *decission making* selecting one from a number of alternative *actions*.

Management Decission is the result of a *management decission*. Management decission includes factors like values, *resources*, *business processes*, *organizational structure* and *enterprise environment*.

Management solution is a combination of *management decissions* on organizing and running an *enterprise*.

Modeling engineering is a process describing something (the subject) by a formal notation. The notation may be UML, and the subject may be an *enterprise solution*.

Marketing is *primary activities* finding potential *customers*.

Method see *Business Method*.

Mission[1] is a set of possibilities for future development of an *enterprise*. These possibilities may be ouside of present *resources*.
Mission[2] is a main goal a *system*.

Model is a description of something like a *system*. A model is part of *architectural description*. A model participates in one or more *views* conforming to some *viewpoints*. A model may describe an *enterprise solution*. A *consultant* is constructing *models*.

Money is a *resource* used as a medium for exchange.

Objective is a *goal* which is considered attainable.

Order is a *document* made by a buyer playing the role *customer* requests *goods* from a *party*. Order is part of a *sale*

Organization is a part of an *enterprise* which includes *organizational structure*, *organizational policy* and *organizational culture*.

Organizational Culture is a part of *organization*. Organizational culture is a collection of beliefs, experiences and behavioral norms shared by people within the organization.

Organizational Policy is a part of *organization*. Organizational policy defines how an *enterprise* deals with *stakeholders*, *enterprise environment* and the range of *goods* and the scope of *activities*.

Organizational Structure is a part of *organization*. Organizational structure defines how *human resources* are distributed in accordance with their *roles* in *business processes*.

Outbound Logistics is *primary activities* delivering *products* to *customers*.

Party is a group of individuals, non-business organizations and *enterprises*. Elements in the group may be persons, *enterprises*, *competitors*, *customers*, *sellers*, *stakeholders* and *vendors*. A party may have an *address*.

Personnel Service is an *event* where an *employee* provides *services* to an *enterprise*.

Plan is the result *planning*. A plan has some *steps* and ordering relations between the steps.

Planning is a *management activity* resulting in a *plan*.

Primary Activity (EBM) is a sequence of *activities* in the *value chain framework*. Primary activity elements are *inbound logistics*, *production operations*, *outbound logistics*, *marketing and sale* and *customer service*.

Procurement is a *support activity* for supplying an *enterprise* with material and technical devices for its functioning.

Product is a *good* being a physical thing. A product is sold to *customers* by an *enterprise* A product is an outcome of *production operations*. Products belonging to an *enterprise* are part of its *tangible resources*.

Production Operation (EBM) are *primary activities* making *products*.

Profit for an *enterprise* is the difference between the value received and the value spent.

Purchase is an *event* where an *enterprise* buyes *goods* from a *vendor*. A purchase may increase the *stock*.

Rationale is an explanation of the motive for an *architectual description*. The rationale guides the selection of *viewpoints* with regard to *stakeholders*[2] and their *concerns*.

Raw Material is used and consumed in *production operations*. Raw materials being owned by an *enterprise* is a *tangible resource*.

REA Model is a business model. The REA Model has *Business Resource*, *Business Event*, and *Business Agent*. A REA Model may be specialized into an REA Accounting Model.

Resource (REA) is an economic thing, that is controlled by an *enterprise*.

The resouces is specialized into *tangible resources*, *intangible resources* and *human resources*. The collection of All the resources for an enterprise is the *assets*.

Retail Shop is an enterprise doing *trade* by selling *products* to *customer* for their own use.

Role is something played by an *party*. Role may be specialized into *actor*.

Sale[1] (REA) is an *event* where the *enterprise* sells *goods* to a *customer*. A sale may decrease the *stock*.
Sale[2] (EBM) is *primary activities* for an *enterprise* selling *goods* to *customers*. A sale may include an *order*.

Schedule is a *plan* extended with time points for the start of the *steps*.

Seller is a *role* of a *party* selling *goods* to another party.

Semi-product is a *product* being part of another product. Semi-products belonging to an *enterprise* is part of its *tangible resources*.

Service is a non-tangible *good* being either some information or work.

Software Enginering ......

Stakeholder[1] is a *party* having interest in the *enterprise*. Stakeholders may be *employees*, *stockholders business partners*, *customers*, *supplier*, *vendors* and *distributors*.
Stakeholder[2] in IEEE Std. 1471 is a *party* being interested in a *system*. A stakeholder has some *concerns*.

Step is an element in a *plan*. A step may be an *action* and the *resources* needed to accomplish the action.

Stock is a collection of *tangible resources* having on hand. A stock may be described by an *inventory*. A stock may be increased by *purchase* and decreased by *sale*.

Stockholder is a *stakeholder* owning an *enterprise* or part of it.

Supplier is a *business partner* providing an *enterprise* with *goods* in order to supply with *resources* needed for enterprise functioning.

Support Activity is an *activity* in the *value chain framework* necessary for *primary activities*. Support activities are *firm infrastructure*, *human resource management*, *technical development* and *procurement*.

System is an artifact. A system is a composition of related components working together. A system has one or more *missons*[2]. A system interacts with *system environment*. A system has one or more *stakeholders*[2].

System Environment is the part of reality outside the *system* interacting with system.

Tangible Resource includes financial and physical assets of *enterprise*.

Examples are *cash*, *raw material*, *semi-products*, *products*, *machinery*, and *equipment*. Tangible resources may be collected in a *stock*.

Technical Development is *support activities* for developing and improving *goods* and *activities*.

Trade is doing buing and selling *goods*. A *retail enterprise* is doing trade.

User see *Business User*.

User Portal is an interface. User portal has an attribute, permission. User portal may be connected to many *Activity Center*s via the association *Portal Center Assoc*.

User Role is an attribute connected to a *user*, defining ...

Value Chain Framework is a model describing the value creation processes for an *enterprise*. The framework is divided into *primary activities* and *support activities*. The model is constructed by Michel E. Porter.

Vendor is a *business partner* selling *goods* or *equipment* to an *enterprise*. A vendor is part of the *enterprise environment*.

View is a representation of a *system*. A view consists of one or more *models* conforming to a *viewpoint*. One or more views form an *architectural description*.

Viewpoint is a representation framework for a *view*. A viewpoint specifies model notation and methods, analysis techniques and product types. One or more viewpoints refer an *architectural description*. A viewpoint may have a *library viewpoint*.

Workflow is a structure of procedures with arguments and results describing *enterprise* functioning at the *operational level*.

Navision Jamaica Terms

Action is a combination of a *method* and an *event* by *event-wiring*. Action is triggered by a *user task*.

Activity Center is an aggregation of some *task* and some *business objects*. An activity center can be attached to some *user portals*.

Address is a specialization of *element* for defining a postal address.

Business Object is an aggregation of *Elements*. Business object is part of *business object type*. Business objects are part of an *activity center*

Business Object Base is the whole for *business object type* and *element base*.

Business Object Type is an aggregation of *business object*. Business object type is part of *business object base*.

Classification is a specialization of an *element* for defining groups and categories of *business objects*.

Containment is a *element* for defining a part relationship between two *business objects* Containment is a specialization of *element*.

Create is a kind of *user task* to *Designer*. The effect is creating of a new *business object*.

Consultant is a person who can construct *models* by interacting with a *customer*.

Customer is a person about his business. The customer is interacting with a *consultant*.

Delete is a kind of *user task* to *Designer*. The effect is a deletion of a *business object*.

Dependency is an *element* linking two elements together. The dependency transfers a value from an element in a *business object* to another element in another business object. The transfer is triggered by certain system *events*. The transfer may also be dependent certain values (states) for the elements in the dependency.

Description is an *element* containing a comment or a note.

Designer is part of *Jamaica System* for modeling and executing *enterprise solutions*.

DoAction is a kind of *user task* to *Designer*. The effect is that a specific *method* is executed.

Element is the basic building block in Navision. Element has both data and functionality. Element is a specialization of *address*, *classification*, *containment*, *description*, *milestone*, *reconciliation*, *registration* and *relation*.

Element is part of *business object*.

Element Base is an aggregation of all *elements*. Element base is part of *business object base*.

Element Type is an abstraction of some *elements* of the same kind by typification. Element type is an aggregation of some *elements*. Element type is part of *element base*.

Event is an occurrence that is relevant for the information system can be triggered by the system or a user through an *action*. Events are either system events or user events.

Event-Wiring is the means for an invocation of a *method* by an *event*.

Jamaica System is a business information system for modeling business objects and solution. Jamaica System has a subsystem *Designer*. The system uses a *platform* based on Visual Studio.NET framework and it includes a database, Microsoft SQL Server and Web Services.

Method provides functionality. A method is connected to some *business objects*. A method is invoked by an *event* by means of *event-wiring*.

Milestone is a time point specifying an expiration date. Milestone is a specialization of *element*. When the date occurs, an *event* is fired.

Model Driven Architecture (MDA) is a software technology. MDA provides development of software appclications which can work on different *platforms*.

Modeling tool is a software system for constructing and maintaining *models*

Modify is a kind of *user task* to *Designer*. The effect is a modification of a specific *business object*

Navision Yamaica Strategy is construction of *models enterprise solutions* and execute them.

Platform is the kind of services offered to a *task* by an operating system or a more a specialized level of software. In Jamaica

Platform Independent Model is a *model* describing a software application or a *business solution* being independent of the *platform*.

Platform Specific Model is a *model* describing a software application or a *business solution* combined with the specific *platform*.

Print is a kind of *user task* to *Designer*. The effect is the creation of a hardcopy of some specific *business objects*.

Reconciliation is a specialization of *element*. The purpose of reconciliation is to keep track of *resources*. Reconciliation specifies a condition and an action to be done if the condition is true. The condition includes a *registration* for a *business object*.

Registration is a set of *elements* for representing *legal affairs* like unsatisfied *claims* and *commitments*. Registration is a specialization of *element*.

Relation is an association between an Eelement in a *business object* with another element in another business object. Relation is a specialization of *element*.

Report is a description of some *business objects* controled by a *template*.

Sub-View is part of a *view*. Each sub-view includes one *element* from the *business object*.

Solution in Jamaica is a *model*. The solution is directly executable by an interpreter included in the Jamaica *platform*.

System Code

Task is describing some of execution of a in *Designer*. A task is specialized into *task step*, *user task*, and *Web part*. Task is part of an *activity center*.

Task Step is a unit of interpretation and execution in *Designer*. Task step is a generalization of *user task* and *Web task*. Task step is may be part of a sequence *task*.

Template is a mapping of a *view* into a *report*.

Transform is a kind of *user task* to *Designer*. The effect is creating a new *business object* based on a specific existing business object.

User is a person getting services from a business information system. The user has a *role*. A user is connected to one *user portal*.

User Portal is the entry for a specific *user*. The user portal has a *permission*. The user portal has an aggregation of some *activity centers*.

User Task provides user interaction with *business objects*, access to data and functionality. A user task may be a sequence of *task steps*. A user task ia specialized into: *Create*, *View*, *Modify*, *Delete*, *Print*, *DoAction* and *Transform*. User task is a specialization of *user task*.

View is a kind of *user task* showing a number of *elements* from *business objects*. Each view is an aggregation of *sub-views*. In the View, the *user* might update the data in the elements.

Web Task ....