

- 1 ZAMBONELLI, F.; JENNINGS, N. R.; WOOLDRIDGE, M. Developing multiagent systems: the Gaia Methodology. **ACM Transactions on Software Engineering and Methodology**, v. 12, n. 3, p. 317-370. 2003.
- 2 BRENNER, W.; ZARNEKOW, R.; WITTIG, H. **Intelligent Software Agents: Foundations and Applications**. Springer-Verlag. 19998.
- 3 ZAMBONELLI, F.; JENNINGS, N. R.; WOOLDRIDGE M. Organizational Abstractions for the Analysis and Design of Multi-Agent Systems. **Anais do International Workshop on Agent-Oriented Software Engineering**, Limerick , Ireland , p. 127-141. 2000.
- 4 JENNINGS N. R. An agent-based approach for building complex software systems. **Communications of the ACM**, v. 44, n. 4, p. 35-41. 2001.
- 5 JENNINGS, N. R.; SYCARA, K.; WOOLDRIDGE, M. A Roadmap of Agent Research and Development. **International Journal of Autonomous Agents and Multi-Agent Systems**, v. 1, n. 1, p. 7-38. 1998.
- 6 ODELL, J.; PARUNAK, H. V. D.; BAUER, B. Extending UML for Agents. **Anais do Agent-Oriented Information Systems Workshop** at the 17th National conference on Artificial Intelligence, Gerd Wagner, Yves Lesperance, e Eric Yu eds., Austin, TX, p. 3-17 accepted paper, AOIS Worshop at AAAI, 2000.
- 7 CHOREN, R.; LUCENA. C. J. P. ANote: A Modeling Language for Agent-Based Systems. **ACM Transactions on Software Engineering and Methodology**. 2003.
- 8 SILVA, V. T.; LUCENA, C. J. P. From a Conceptual Framework for Agents and Objects to a Multi-Agent System Modeling Language. Sycara, K., Wooldridge, M.(Edts.), **Journal of Autonomous Agents and Multi-Agent Systems**, Kluwer Academic Publishers. 2003.
- 9 WAGNER, G. The Agent-Object-Relationship Metamodel. **Proceedings of the 2nd International Symposium: From Agent Theory to Agent Implementation**. 2000.
- 10 HINDRIKS, K. V. et al. Agent programming in 3apl. **Autonomous Agents and Multi-Agent Systems**, v. 2, n. 4, p. 357-401. 1999.
- 11 VECCHIOLA, C. et al. An Agent Oriented Programming Language Targeting the Microsoft Common Language Runtime. **Anais do International Workshop on C# and .NET Technologies on Algorithms, Computer Graphics, Visualization, Computer Vision and Distributed Computing**, Pilsen (Czech Republic), p. 93-98. 2003.
- 12 PHILLIPS, B. **Metaglu**: A Programming Language for Multi-Agent Systems. M.Eng. Thesis (02139), MIT, Cambridge. 1999.
- 13 MYLOPOULOS, J.; KOLP, M.; CASTRO, J. UML for Agent-Oriented Software Development: the Tropos Proposal. **Proceedings of the Fourth**

- International Conference on the Unified Modeling Language (<<UML>> 2001)**, Toronto, Canada, p. 422-441. 2001.
- 14 CAIRE, G. et al. **Agent Oriented Analysis using MESSAGE/UML**. Lecture Notes in Computer Science. Springer-Verlag Heidelberg, v. 2222/2002. 2002.
 - 15 OMG. **OMG MDA Guide**. Versão 1.0.1. 2002. Disponível em: <<http://www.omg.org/docs/omg/03-06-01.pdf>>. Acesso em: 02 novembro 2004.
 - 16 OMG. **OMG Unified Modeling Language Specification**. Versão 1.5, 2003. Disponível em: <<http://www.omg.org/docs/formal/03-03-01.pdf>>. Acesso em: 02 novembro 2004.
 - 17 SILVA, V. T.; CORTÉS, M.; LUCENA, C. J. P. **An Object-Oriented Framework for Implementing Agent Societies**. Technical Report (MCC32/04), Computer Science Department, PUC-Rio. Rio de Janeiro, Brazil. 2004.
 - 18 OMG. **OMG XML Metadata Interchange**. Versão 1.2. 2003. Disponível em: <<http://www.omg.org/docs/formal/02-01-01.pdf>>. Acesso em: 02 novembro 2004.
 - 19 POKAHR, A.; BRAUBACH, L.; LAMERSDORF, W. Jadex: Implementing a BDI-Infrastructure for JADE Agents. **EXP – In Search of Innovation, Telecom Italia Lab**, Turin, Italy , Special Issue on JADE, v. 3, n. 3, p. 76-85. 2003.
 - 20 BRAUBACH L.; POKAHR, A.; LAMERSDORF, W. Jadex: A Short Overview. **Main Conference Net.ObjectDays, AgentExpo**, p. 76-85. 2004.
 - 21 JENNINGS, N.R. Agent-Oriented Software Engineering. **Proceedings 12th International Conference on Industrial and Engineering Applications of AI**, p. 4-10. 1999.
 - 22 OMG – Agent Platform Special Interest Group. **Agent Technology – Green Paper**. Technical Report ec#2000-03-01. 2000. Disponível em <<http://www.jamesodell.com/ec2000-08-01.pdf>>. Acesso em: 15 fevereiro 2005.
 - 23 AHMAD, H. F. Multi-agent Systems: Overview of a New Paradigm for Distributed Systems. **Proceedings 7th IEEE International Symposium on High Assurance Systems Engineering**, p. 101-107. 2002.
 - 24 STONE, P.; VELOSO, M. Multiagent systems: A survey from a machine learning perspective. **Autonomous Robots**, v. 8, n. 3, p. 345-383. 2000.
 - 25 WOOLDRIDGE, M. **Introduction to MultiAgent Systems**. John Wiley and Sons Ltd. 2002.
 - 26 SILVA, V. T. et al. Taming Agents and Objects in Software Engineering. A. Garcia, C. J. P. Lucena, F. Zamboneli, A. Omicini e J. Castro. (Edts.) **Software Engineering for Large-Scale Multi-Agent System**, n. 1, p. 1-26. 2003.
 - 27 KEPPLER, A.; WARMER, J.; BAST, W. **MDA Explained: The Model Driven Architecture: Practice and Promise**. Addison Wesley. 2003.
 - 28 W3C. **Extensible Markup Language (XML)**. Disponível em: <<http://www.w3.org/XML/>>. Acesso em: 27 janeiro 2005.

- 29 GROSE, T.; DONEY, G.; BRODSKY, S. **Mastering XML: Java Programming with XML, XML, and UML**. John Wiley and Sons, OMG Press. 2002.
- 30 DELOACH, S. A.; WOOD, M. F.; SPARKMAN, C. H. Multiagent Systems Engineering. **The International Journal of Software Engineering and Knowledge Engineering**, v. 11, n. 3. 2001.
- 31 DELOACH, S. A. Analysis and Design using MaSE and agentTool. **Proceedings of the 12th Midwest Artificial Intelligence and Cognitive Science Conference**. 2001.
- 32 BRESCIANI, P. et al. TROPOS: An Agent-Oriented Software Development Methodology. **Journal of Autonomous Agents and Multi-Agent Systems**, Kluwer Academic Publishers, v. 8, n. 3, p. 203 – 236. 2004.
- 33 GIUNCHIGLIA, F.; MYLOPOULOS, J.; PERINI, A. The Tropos Software Development Methodology: Processes, Models and Diagrams. **Anais do International Workshop on Agent-Oriented Software Engineering**, edited by F. Giunchiglia, J. Odell and G. Weiß, Bologna, v. 15, p. 162-173. 2002.
- 34 RAO, A. S.; GEORGE, M. P. Modelling rational agents within a BDI-architecture. **Proceedings of Knowledge Representation and Reasoning (KRR-91) Conference**. 1991.
- 35 **Jack**. Disponível em: <<http://www.agent-software.com>>. Acesso em: 28 janeiro 2005.
- 36 PADGHAM, L.; WINIKOFF, M. Prometheus: A Pragmatic Methodology for Engineering Intelligent Agents. **Proceedings of the Workshop on Agent-oriented methodologies**. 2002.
- 37 DAM, K. H.; WINIKOFF, M. Comparing Agent-Oriented Methodologies. **Anais do International Bi-Conference Workshop on Agent-Oriented Information Systems**, Melbourne. 2003
- 38 COSSENTINO, M.; POTTS, C. **PASSI**: a Process for Specifying and Implementing Multi-Agent Systems Using UML.
- 39 **Rational Rose**. Disponível em: <<http://www-306.ibm.com/software/rational/>>. Acesso em: 28 janeiro 2005.
- 40 FIPA. FIPA Methodology Technical Committee. **Foundation for Intelligent Physical Agents**. Disponível em: <<http://www.fipa.org/activities/methodology.html>>. Acesso em: 28 janeiro 2005.
- 41 CAIRE, G.; LEAL, F. **Message**: Methodology for Engineering Systems of Software Agents – Recommendations on supporting tools. Disponível em: <<http://www.eurescom.de/~pub-deliverables/P900-series/P907/TI2/>>. Acesso em: 28 janeiro 2005.
- 42 NOVIKAU, A. **Model Driven Architecture approach in Tropos**. Technical Report (T04-06-03), Istituto Trentino di Cultura, Italy. 2004.
- 43 CORRADINI, A. et al. **Algebraic Ap-proaches to Graph Transformation**. Part 1: Basic Concepts and Double Pushout Approach. Handbook of Graph Grammars and Computing by Graph Transformation, Foundations. 1997.
- 44 THIEFAINE, A.; GUESSOUM, Z. **MetaDIMA**: a Model Driven Architecture for Multi-Agent Systems.

- 45 VALLECILLO, A.; AMOR, M.; FUENTES, L. Bridging the Gap Between Agent-Oriented Design and Implementation Using MDA. **Anais do AAMAS Agent-Oriented Software Engineering Workshop**. 2004.
- 46 AMOR, M.; FUENTES, L.; TROYA, J. M. A Component-Based Approach for Interoperability Across FIPA-Compliant Plataforms. **Cooperative Information Agents VII**, LNAI, v. 2782, p. 266-288. 2003.
- 47 SYCARA, K. et al. The RETSINA MAS Infrastructure. **The Special Joint Issue of Autonomous Agents and MAS**, v. 7, n. 1 e 2. 2003.
- 48 **Linguagem Java**. Disponível em: <<http://java.sun.com/>>. Acesso em: 28 janeiro 2005.
- 49 OLIVEIRA, T. C. et al. Software Process Representation and Analysis for Framework Instatiation. **IEEE - Transaction on Software Engineering**. 2004.
- 50 OMG. **Meta Object Facility (MOF) 2.0 Core Specification**. Versão 2.0, 2003. Disponível em: <<http://www.omg.org/docs/ptc/03-10-04.pdf>>. Acesso em: 02 novembro 2004.
- 51 SILVA, V. T.; CHOREN, R.; LUCENA, C. J. P. A UML Based Approach for Modeling and Implementing Multi-Agent Systems. **3th. International Joint Conference on Autonomous Agents and Multiagent Systems**, v. 2 (AAMAS'04), 2004.
- 52 CZARNECKI, K.; HELSEN, S. Classification of Model Transformation Approaches. **2nd OOPSLA Workshop on Generative Techniques in the Context of the Model Driven Architecture**, 2003.
- 53 **Together**. Disponível em: <<http://www.borland.com/together/>>. Acesso em: 28 janeiro 2005.
- 54 **Poseidon for UML**. Disponível em: <<http://www.gentleware.com/>>. Acesso em: 28 janeiro 2005.
- 55 **AndroMDA**. Disponível em: <<http://www.andromda.org/>>. Acesso em: 28 janeiro 2005.
- 56 HE, M.; JENNINGS, N.; LEUNG, H. On Agent-Mediated Eletronic Commerce. **IEEE Trans on Knowledge and Data Engineering**, v. 15, n. 4, p. 985-1003. 2003.
- 57 LOMUSCIO, A. R.; WOOLDRIDGE, M.; JENNINGS, N. A classification scheme for negotiation in electronic commerce. **International Journal of Group Decision and Negotiation**, v. 12, n. 1, p. 31-56. 2003.
- 58 WOOLDRIDGE, M.; JENNINGS, N. Applications of Intelligent Agents. N. Jennings e M. Wooldridge (Eds.), **Agent Technology: Foundations, Applications, and Markets**, v. 3, n. 28. 1998.
- 59 **Eclipse**. Disponível em: <<http://www.eclipse.org>>. Acesso em: 28 janeiro 2005.
- 60 **Standard Widget Toolkit (SWT)**. Disponível em: <<http://www.eclipse.org/platform/>>. Acesso em: 28 janeiro 2005.
- 61 **Graphical Editing Framework (GEF)**. Disponível em: <<http://www.eclipse.org/gef/>>. Acesso em: 28 janeiro 2005.
- 62 **Draw2d**. Disponível em: <<http://eclipse.org/articles/Article-GEF-Draw2d/GEF-Draw2d.html>>. Acesso em: 28 janeiro 2005.

63 **Document Object Model** (DOM). Disponível em:
<<http://www.w3.org/DOM/>>. Acesso em: 28 janeiro 2005.

9

Anexo I – MAS-ML DTD

Neste Anexo são apresentados os trechos que foram modificados e adicionados ao UML DTD para a extensão do mesmo, visando criar a representação do MAS-ML DTD.

```

<!-- -->
<!-- -->
<!-- Elementos existentes no UML DTD que foram alterados para -->
<!-- atender o MAS-ML -->
<!-- -->
...
<!-- ===== UML:Namespace ===== -->
<!ELEMENT UML:Namespace.ownedElement (UML:ModelElement | UML:Instance | UML:Object
| UML:LinkObject | UML:DataValue | UML:ComponentInstance | UML:NodeInstance |
UML:SubsystemInstance | UML:UseCaseInstance | UML:AttributeLink | UML:Link |
UML:LinkEnd | UML:Stimulus | UML:Procedure | UML:ExtensionPoint | UML:StateMachine
| UML:ActivityGraph | UML:Event | UML:TimeEvent | UML:CallEvent | UML:SignalEvent
| UML:ChangeEvent | UML:StateVertex | UML:State | UML:CompositeState |
UML:SubmachineState | UML:SubactivityState | UML:SimpleState | UML:ActionState |
UML:CallState | UML:ObjectFlowState | UML:FinalState | UML:Pseudostate |
UML:SynchState | UML:StubState | UML:Transition | UML:Guard | UML:Message |
UML:Interaction | UML:InteractionInstanceSet | UML:CollaborationInstanceSet |
UML:Partition | UML:Variable | UML:ArgumentSpecification | UML:PrimitiveFunction |
UML:ControlFlow | UML:Action | UML:CollectionAction | UML:FilterAction |
UML:IterateAction | UML:MapAction | UML:ReduceAction | UML:ConditionalAction |
UML:GroupAction | UML:LoopAction | UML:HandlerAction | UML:PrimitiveAction |
UML:ApplyFunctionAction | UML:CodeAction | UML:LiteralValueAction |
UML:MarshalAction | UML:NullAction | UML:TestIdentityAction | UML:UnmarshalAction
| UML:JumpAction | UML:InvocationAction | UML:AsynchronousInvocationAction |
UML:SynchronousInvocationAction | UML:ClearAssociationAction | UML:LinkAction |
UML:ReadLinkAction | UML:WriteLinkAction | UML:CreateLinkAction |
UML:CreateLinkObjectAction | UML:DestroyLinkAction | UML:ReadLinkObjectEndAction |
UML:ReadLinkObjectQualifierAction | UML:AttributeAction | UML:ClearAttributeAction
| UML:ReadAttributeAction | UML:WriteAttributeAction | UML:AddAttributeValueAction
| UML:RemoveAttributeValueAction | UML:CreateObjectAction |
UML:DestroyObjectAction | UML:ReadIsClassifiedObjectAction |
UML:ReclassifyObjectAction | UML:ReadExtentAction | UML:ReadSelfAction |
UML:StartObjectStateMachineAction | UML:VariableAction | UML:ClearVariableAction |
UML:ReadVariableAction | UML:WriteVariableAction | UML:AddVariableValueAction |
UML:RemoveVariableValueAction | UML:ExplicitInvocationAction |
UML:CallOperationAction | UML:SendSignalAction | UML:BroadcastSignalAction |
UML:CallProcedureAction | UML>DataFlow | UML:Pin | UML:InputPin | UML:OutputPin |
UML:GeneralizableElement | UML:Collaboration | UML:Classifier | UML:Signal | UML:Exception
| UML:UseCase | UML:Actor | UML:ClassifierRole | UML:ClassifierInState | UML:Class
| MASML:AgentClass | MASML:OrganizationClass | MASML:PassiveEnvironmentClass |
MASML:ActiveEnvironmentClass | MASML:ObjectRoleClass | MASML:AgentRoleClass |
MASML:AgentAction | MASML:AgentPlan | MASML:AgentProtocol | MASML:Inhabit |
MASML:Ownership | MASML:Play | MASML:Control | UML:AssociationClass | UML:DataType
| UML:Primitive | UML:Enumeration | UML:ProgrammingLanguageDataType |
UML:Interface | UML:Component | UML:Node | UML:Artifact | UML:Subsystem |
UML:Association | UML:AssociationRole | UML:Stereotype | UML:Package | UML:Model |
UML:Namespace | UML:Feature | UML:StructuralFeature | UML:Attribute |
UML:BehavioralFeature | UML:Reception | UML:Operation | UML:Method |
UML:AssociationEnd | UML:AssociationEndRole | UML:Constraint | UML:Relationship |
UML:Extend | UML:Include | UML:Generalization | UML:Dependency | UML:Abstraction |
UML:Usage | UML:Binding | UML:Permission | UML:Flow | UML:Parameter | UML:Comment
| UML:EnumerationLiteral | UML:TagDefinition | UML:TaggedValue)*>
<!ENTITY % UML:NamespaceFeatures '%UML:ModelElementFeatures; |
UML:Namespace.ownedElement'>
<!ENTITY % UML:NamespaceAtts '%UML:ModelElementAtts;'>
<!ELEMENT UML:Namespace (%UML:NamespaceFeatures;)*>
<!ATTLIST UML:Namespace

```

```

    %UML:NamespaceAtts;
>
...
<!-- ===== UML:Classifier ===== -->
<!ELEMENT UML:Classifier.feature (UML:Feature | UML:StructuralFeature |
UML:Attribute | UML:BehavioralFeature | UML:Reception | UML:Operation |
MASML:AgentAction | MASML:AgentPlan | MASML:AgentProtocol | UML:Method)*>
<!ELEMENT UML:Classifier.powertypeRange (UML:Generalization)*>
<!ENTITY % UML:ClassifierFeatures '%UML:GeneralizableElementFeatures; |
    UML:Namespace.ownedElement |
    UML:Classifier.feature |
    UML:Classifier.powertypeRange'>
<!ENTITY % UML:ClassifierAtts '%UML:GeneralizableElementAtts;
    powertypeRange IDREFS #IMPLIED'>
<!ELEMENT UML:Classifier (%UML:ClassifierFeatures;)*>
<!ATTLIST UML:Classifier
    %UML:ClassifierAtts;
>
...
<!-- ===== UML:TemplateParameter ===== -->
<!ELEMENT UML:TemplateParameter.template (UML:ModelElement)*>
<!ELEMENT UML:TemplateParameter.parameter (UML:ModelElement | UML:Instance |
UML:Object | UML:LinkObject | UML:DataValue | UML:ComponentInstance |
UML:NodeInstance | UML:SubsystemInstance | UML:UseCaseInstance | UML:AttributeLink
| UML:Link | UML:LinkEnd | UML:Stimulus | UML:Procedure | UML:ExtensionPoint |
UML:StateMachine | UML:ActivityGraph | UML:Event | UML:TimeEvent | UML:CallEvent |
UML:SignalEvent | UML:ChangeEvent | UML:StateVertex | UML:State |
UML:CompositeState | UML:SubmachineState | UML:SubactivityState | UML:SimpleState
| UML:ActionState | UML:CallState | UML:ObjectFlowState | UML:FinalState |
UML:Pseudostate | UML:SynchState | UML:StubState | UML:Transition | UML:Guard |
UML:Message | UML:Interaction | UML:InteractionInstanceSet |
UML:CollaborationInstanceSet | UML:Partition | UML:Variable |
UML:ArgumentSpecification | UML:PrimitiveFunction | UML:ControlFlow | UML:Action |
UML:CollectionAction | UML:FilterAction | UML:IterateAction | UML:MapAction |
UML:ReduceAction | UML:ConditionalAction | UML:GroupAction | UML:LoopAction |
UML:HandlerAction | UML:PrimitiveAction | UML:ApplyFunctionAction | UML:CodeAction
| UML:LiteralValueAction | UML:MarshalAction | UML:NullAction |
UML:TestIdentityAction | UML:UnmarshalAction | UML:JumpAction |
UML:InvocationAction | UML:AsynchronousInvocationAction |
UML:SynchronousInvocationAction | UML:ClearAssociationAction | UML:LinkAction |
UML:ReadLinkAction | UML:WriteLinkAction | UML:CreateLinkAction |
UML:CreateLinkObjectAction | UML:DestroyLinkAction | UML:ReadLinkObjectEndAction |
UML:ReadLinkObjectQualifierAction | UML:AttributeAction | UML:ClearAttributeAction
| UML:ReadAttributeAction | UML:WriteAttributeAction | UML:AddAttributeValueAction
| UML:RemoveAttributeValueAction | UML:CreateObjectAction |
UML:DestroyObjectAction | UML:ReadIsClassifiedObjectAction |
UML:ReclassifyObjectAction | UML:ReadExtentAction | UML:ReadSelfAction |
UML:StartObjectStateMachineAction | UML:VariableAction | UML:ClearVariableAction |
UML:ReadVariableAction | UML:WriteVariableAction | UML:AddVariableValueAction |
UML:RemoveVariableValueAction | UML:ExplicitInvocationAction |
UML:CallOperationAction | UML:SendSignalAction | UML:BroadcastSignalAction |
UML:CallProcedureAction | UML:DataFlow | UML:Pin | UML:InputPin | UML:OutputPin |
UML:GeneralizableElement | UML:Collaboration | UML:Classifier | UML:Signal |
UML:Exception | UML:UseCase | UML:Actor | UML:ClassifierRole |
UML:ClassifierInState | UML:Class | MASML:AgentClass | MASML:OrganizationClass |
MASML:PassiveEnvironmentClass | MASML:ActiveEnvironmentClass |
MASML:ObjectRoleClass | MASML:AgentRoleClass | MASML:AgentAction | MASML:AgentPlan
| MASML:AgentProtocol | MASML:Inhabit | MASML:Ownership | MASML:Play |
MASML:Control | MASML:AgentMessage | UML:AssociationClass | UML:DataType |
UML:Primitive | UML:Enumeration | UML:ProgrammingLanguageDataType | UML:Interface
| UML:Component | UML:Node | UML:Artifact | UML:Subsystem | UML:Association |
UML:AssociationRole | UML:Stereotype | UML:Package | UML:Model | UML:Namespace |
UML:Feature | UML:StructuralFeature | UML:Attribute | UML:BehavioralFeature |
UML:Reception | UML:Operation | UML:Method | UML:AssociationEnd |
UML:AssociationEndRole | UML:Constraint | UML:Relationship | UML:Extend |
UML:Include | UML:Generalization | UML:Dependency | UML:Abstraction | UML:Usage |
UML:Binding | UML:Permission | UML:Flow | UML:Parameter | UML:Comment |
UML:EnumerationLiteral | UML:TagDefinition | UML:TaggedValue)*>
<!ELEMENT UML:TemplateParameter.defaultElement (UML:ModelElement)*>
<!ENTITY % UML:TemplateParameterFeatures 'XMI.extension |
    UML:TemplateParameter.template |
    UML:TemplateParameter.parameter |
    UML:TemplateParameter.defaultElement'>
<!ENTITY % UML:TemplateParameterAtts '%XMI.element.att; %XMI.link.att;
    template IDREFS #IMPLIED
    defaultElement IDREFS #IMPLIED'>

```

```

<!ELEMENT UML:TemplateParameter (%UML:TemplateParameterFeatures;)*>
<!ATTLIST UML:TemplateParameter
    %UML:TemplateParameterAtts;
>
...
<!-- -->
<!-- -->
<!-- Elementos criados para o MAS-ML DTD -->
<!-- -->

<!-- ===== MASML:AgentClass ===== -->
<!ELEMENT MASML:AgentClass.roles (MASML:AgentRoleClass)*>
<!ELEMENT MASML:AgentClass.goal (#PCDATA)>
<!ATTLIST MASML:AgentClass.goal
    plan IDREFS #IMPLIED
>
<!ENTITY % MASML:AgentClassFeatures '%UML:ClassifierFeatures; |
    MASML:AgentClass.roles | MASML:AgentClass.goal'>
<!ENTITY % MASML:AgentClassAtts '%UML:ClassifierAtts;
    plan IDREFS #IMPLIED'>
<!ELEMENT MASML:AgentClass (%MASML:AgentClassFeatures;)*>
<!ATTLIST MASML:AgentClass
    %MASML:AgentClassAtts;
>

<!-- ===== MASML:OrganizationClass ===== -->
<!ELEMENT MASML:OrganizationClass.roles (MASML:AgentRoleClass)*>
<!ELEMENT MASML:OrganizationClass.organizations (MASML:OrganizationClass)*>
<!ELEMENT MASML:OrganizationClass.commitments (MASML:AgentRoleClass)*>
<!ENTITY % MASML:OrganizationClassFeatures '%UML:ClassifierFeatures; |
    MASML:OrganizationClass.roles |
    MASML:OrganizationClass.organizations |
    MASML:OrganizationClass.commitments'>
<!ENTITY % MASML:OrganizationClassAtts '%UML:ClassifierAtts;
    isMain (true|false) #IMPLIED'>
<!ELEMENT MASML:OrganizationClass (%MASML:OrganizationClassFeatures;)*>
<!ATTLIST MASML:OrganizationClass
    %MASML:OrganizationClassAtts;
>

<!-- ===== MASML:PassiveEnvironmentClass ===== -->
<!ENTITY % MASML:PassiveEnvironmentClassFeatures '%UML:ClassifierFeatures;'>
<!ENTITY % MASML:PassiveEnvironmentClassAtts '%UML:ClassifierAtts;'>
<!ELEMENT MASML:PassiveEnvironmentClass
    (%MASML:PassiveEnvironmentClassFeatures;)*>
<!ATTLIST MASML:PassiveEnvironmentClass
    %MASML:PassiveEnvironmentClassAtts;
>

<!-- ===== MASML:ActiveEnvironmentClass ===== -->
<!ELEMENT MASML:ActiveEnvironmentClass.goal (#PCDATA)>
<!ATTLIST MASML:ActiveEnvironmentClass.goal
    plan IDREFS #IMPLIED
>
<!ENTITY % MASML:ActiveEnvironmentClassFeatures '%UML:ClassifierFeatures; |
    MASML:ActiveEnvironmentClass.goal'>
<!ENTITY % MASML:ActiveEnvironmentClassAtts '%UML:ClassifierAtts;
    plan IDREFS #IMPLIED'>
<!ELEMENT MASML:ActiveEnvironmentClass (%MASML:ActiveEnvironmentClassFeatures;)*>
<!ATTLIST MASML:ActiveEnvironmentClass
    %MASML:ActiveEnvironmentClassAtts;
>

<!-- ===== MASML:ObjectRoleClass ===== -->
<!ELEMENT MASML:ObjectRoleClass.multiplicity (#PCDATA | XMI.reference)*>
<!ELEMENT MASML:ObjectRoleClass.availableFeatures (UML:Feature)*>
<!ELEMENT MASML:ObjectRoleClass.conformingInstances (UML:Instance)*>
<!ELEMENT MASML:ObjectRoleClass.base (UML:Class)*>
<!ENTITY % MASML:ObjectRoleClassFeatures '%UML:ClassifierFeatures; |
    MASML:ObjectRoleClass.multiplicity |
    MASML:ObjectRoleClass.availableFeatures |
    MASML:ObjectRoleClass.conformingInstances |
    MASML:ObjectRoleClass.base'>
<!ENTITY % MASML:ObjectRoleClassAtts '%UML:ClassifierAtts;'>
<!ELEMENT MASML:ObjectRoleClass (%MASML:ObjectRoleClassFeatures;)*>
<!ATTLIST MASML:ObjectRoleClass
    %MASML:ObjectRoleClassAtts;
>

<!-- ===== MASML:AgentRoleClass ===== -->
<!ELEMENT MASML:AgentRoleClass.multiplicity (#PCDATA | XMI.reference)*>

```



```

<!ELEMENT MASML:AgentRoleClass.availableFeatures (UML:Feature)*>
<!ELEMENT MASML:AgentRoleClass.base (MASML:AgentClass)*>
<!ELEMENT MASML:AgentRoleClass.conformingInstances (UML:Instance)*>
<!ENTITY % MASML:AgentRoleClassFeatures '%UML:ClassifierFeatures; |
    MASML:AgentRoleClass.multiplicity |
    MASML:AgentRoleClass.availableFeatures |
    MASML:AgentRoleClass.base |
    MASML:AgentRoleClass.conformingInstances'>
<!ENTITY % MASML:AgentRoleClassAtts '%UML:ClassifierAtts;'>
<!ELEMENT MASML:AgentRoleClass (%MASML:AgentRoleClassFeatures;)*>
<!ATTLIST MASML:AgentRoleClass
    %MASML:AgentRoleClassAtts;
>
...
<!-- ===== MASML:AgentMessage ===== -->
<!ELEMENT MASML:AgentMessage.label (#PCDATA)>
<!ELEMENT MASML:AgentMessage.content (#PCDATA)>
<!ENTITY % MASML:AgentMessageFeatures '%UML:GeneralizableElementFeatures; |
    UML:Namespace.ownedElement |
    MASML:AgentMessage.label |
    MASML:AgentMessage.content'>
<!ENTITY % MASML:AgentMessageAtts '%UML:GeneralizableElementAtts;
    sender IDREFS #IMPLIED
    receiver IDREFS #IMPLIED'>
<!ELEMENT MASML:AgentMessage (%MASML:AgentMessageFeatures;)*>
<!ATTLIST MASML:AgentMessage
    %MASML:AgentMessageAtts;
>
<!-- ===== MASML:AgentAction ===== -->
<!ELEMENT Condition (#PCDATA)>
<!ATTLIST Condition
    name CDATA #IMPLIED
    type CDATA #IMPLIED
    default CDATA #IMPLIED
>
<!ELEMENT MASML:AgentAction.preConditions (Condition)*>
<!ELEMENT MASML:AgentAction.posConditions (Condition)*>
<!ENTITY % MASML:AgentActionFeatures '%UML:BehavioralFeatureFeatures; |
    MASML:AgentAction.preConditions |
    MASML:AgentAction.posConditions'>
<!ENTITY % MASML:AgentActionAtts '%UML:BehavioralFeatureAtts;'>
<!ELEMENT MASML:AgentAction (%MASML:AgentActionFeatures;)*>
<!ATTLIST MASML:AgentAction
    %MASML:AgentActionAtts;
>
<!-- ===== MASML:AgentPlan ===== -->
<!ELEMENT MASML:AgentPlan.actions (Action)*>
<!ELEMENT Action (#PCDATA)>
<!ATTLIST Action
    name CDATA #IMPLIED
    %XMI.element.att;
    %XMI.link.att;
>
<!ELEMENT MASML:AgentPlan.goal (#PCDATA)>
<!ATTLIST MASML:AgentPlan.goal
    name CDATA #IMPLIED
    stereotype IDREFS #IMPLIED
    %XMI.element.att;
    %XMI.link.att;
>
<!ENTITY % MASML:AgentPlanFeatures '%UML:BehavioralFeatureFeatures; |
    MASML:AgentPlan.actions |
    MASML:AgentPlan.goal'>
<!ENTITY % MASML:AgentPlanAtts '%UML:BehavioralFeatureAtts;'>
<!ELEMENT MASML:AgentPlan (%MASML:AgentPlanFeatures;)*>
<!ATTLIST MASML:AgentPlan
    %MASML:AgentPlanAtts;
>
<!-- ===== MASML:AgentProtocol ===== -->
<!ELEMENT MASML:AgentProtocol.messages (MASML:AgentMessage)*>
<!ENTITY % MASML:AgentProtocolFeatures '%UML:BehavioralFeatureFeatures; |
    MASML:AgentProtocol.messages'>
<!ENTITY % MASML:AgentProtocolAtts '%UML:BehavioralFeatureAtts;'>
<!ELEMENT MASML:AgentProtocol (%MASML:AgentProtocolFeatures;)*>
<!ATTLIST MASML:AgentProtocol
    %MASML:AgentProtocolAtts;

```

```

>
...
<!-- ===== MASML:Inhabit ===== -->
<!ELEMENT MASML:Inhabit.environment (UML:ModelElement)*>
<!ELEMENT MASML:Inhabit.citizen (UML:ModelElement)*>
<!ENTITY % MASML:InhabitFeatures '%UML:RelationshipFeatures; |
    MASML:Inhabit.environment |
    MASML:Inhabit.citizen'>
<!ENTITY % MASML:InhabitAtts '%UML:RelationshipAtts;
    environment IDREFS #IMPLIED
    citizen IDREFS #IMPLIED'>
<!ELEMENT MASML:Inhabit (%MASML:InhabitFeatures;)*>
<!ATTLIST MASML:Inhabit
    %MASML:InhabitAtts;
>
<!-- ===== MASML:Ownership ===== -->
<!ELEMENT MASML:Ownership.owner (UML:ModelElement)*>
<!ELEMENT MASML:Ownership.member (UML:ModelElement)*>
<!ENTITY % MASML:OwnershipFeatures '%UML:RelationshipFeatures; |
    MASML:Ownership.owner |
    MASML:Ownership.member'>
<!ENTITY % MASML:OwnershipAtts '%UML:RelationshipAtts;
    owner IDREFS #IMPLIED
    member IDREFS #IMPLIED'>
<!ELEMENT MASML:Ownership (%MASML:OwnershipFeatures;)*>
<!ATTLIST MASML:Ownership
    %MASML:OwnershipAtts;
>
<!-- ===== MASML:Play ===== -->
<!ELEMENT MASML:Play.player (UML:ModelElement)*>
<!ELEMENT MASML:Play.played (UML:ModelElement)*>
<!ELEMENT MASML:Play.member (UML:ModelElement)*>
<!ENTITY % MASML:PlayFeatures '%UML:RelationshipFeatures; |
    MASML:Play.player |
    MASML:Play.played |
    MASML:Play.member'>
<!ENTITY % MASML:PlayAtts '%UML:RelationshipAtts;
    player IDREFS #IMPLIED
    played IDREFS #IMPLIED
    member IDREFS #IMPLIED'>
<!ELEMENT MASML:Play (%MASML:PlayFeatures;)*>
<!ATTLIST MASML:Play
    %MASML:PlayAtts;
>
<!-- ===== MASML:Control ===== -->
<!ELEMENT MASML:Control.controller (UML:ModelElement)*>
<!ELEMENT MASML:Control.controlled (UML:ModelElement)*>
<!ENTITY % MASML:ControlFeatures '%UML:RelationshipFeatures; |
    MASML:Control.controller |
    MASML:Control.controlled'>
<!ENTITY % MASML:ControlAtts '%UML:RelationshipAtts;
    controller IDREFS #IMPLIED
    controlled IDREFS #IMPLIED'>
<!ELEMENT MASML:Control (%MASML:ControlFeatures;)*>
<!ATTLIST MASML:Control
    %MASML:ControlAtts;
>
...
<!-- ===== MASML:Diagram ===== -->
<!ELEMENT MASML:Diagram (MASML:GraphElement.semanticModel,
MASML:GraphElement.contained*)>
<!ATTLIST MASML:Diagram
    name CDATA #REQUIRED
    xmi.id CDATA #REQUIRED
>
<!ELEMENT MASML:GraphElement.contained (MASML:GraphNode)>
<!ELEMENT MASML:GraphElement.position (XMI.field*)>
<!ELEMENT MASML:GraphElement.semanticModel (MASML:SimpleSemanticModelElement |
MASML:Masml1SemanticModelBridge)>
<!ELEMENT MASML:GraphElement.size (XMI.field*)>
<!ELEMENT MASML:GraphNode (MASML:GraphElement.position, MASML:GraphElement.size,
MASML:GraphElement.semanticModel)>
<!ATTLIST MASML:GraphNode
    xmi.id CDATA #REQUIRED
>

```

```

<!ELEMENT MASML:Masml1SemanticModelBridge
(MASML:Masml1SemanticModelBridge.element)>
<!-- ATTLIST MASML:Masml1SemanticModelBridge
      xmi.id CDATA #REQUIRED
-->
<!ELEMENT MASML:Masml1SemanticModelBridge.element (UML:Class | MASML:AgentClass |
MASML:AgentRoleClass | MASML:ObjectRoleClass | MASML:OrganizationClass |
MASML:PassiveEnvironmentClass | MASML:ActiveEnvironmentClass | UML:Association |
UML:Generalization | UML:Dependency | MASML:Ownership | MASML:Control | MASML:Play
| MASML:Inhabit)>
<!ELEMENT MASML:SimpleSemanticModelElement EMPTY>
<!-- ATTLIST MASML:SimpleSemanticModelElement
      typeInfo CDATA #REQUIRED
-->
<!ELEMENT XMI.field (#PCDATA)>
<!-- ===== MASML:MASML ===== -->

```

10

Anexo II – Exemplo Virtual MarketPlace

10.1.

MAS-ML XMI

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<XMI xmi.version="1.1" xmlns:MASML="org/MASML1.0" xmlns:UML="org/UML1.0">
  <XMI.header>
    <XMI.documentation>
      <XMI.exporter>MAS-ML Tool</XMI.exporter>
      <XMI.exporterVersion>0.5</XMI.exporterVersion>
    </XMI.documentation>
    <XMI.metamodel xmi.name="UML" xmi.version="1.4"/>
  </XMI.header>
  <XMI.content>
    <UML:Model isAbstract="false" name="Virtual_MarketPlace" visibility="public"
xmi.id="S.1">
      <UML:Namespace.ownedElement>
        <UML:Class isAbstract="false" name="Item" namespace="S.1" visibility="public"
xmi.id="S.2">
          <UML:Classifier.feature>
            <UML:Attribute name="preco" visibility="public" xmi.id="S.11">
              <UML:StructuralFeature.multiplicity>
                <UML:Multiplicity>
                  <UML:Multiplicity.range>
                    <UML:MultiplicityRange lower="1" upper="1"/>
                  </UML:Multiplicity.range>
                </UML:Multiplicity>
              </UML:StructuralFeature.multiplicity>
            <UML:StructuralFeature.type>
              <UML:Classifier>
                <UML:Namespace.ownedElement>
                  <UML:DataType xmi.idref="G.1"/>
                </UML:Namespace.ownedElement>
              </UML:Classifier>
            </UML:StructuralFeature.type>
          </UML:Attribute>
          <UML:Attribute name="nome" visibility="public" xmi.id="S.12">
            <UML:StructuralFeature.multiplicity>
              <UML:Multiplicity>
                <UML:Multiplicity.range>
                  <UML:MultiplicityRange lower="1" upper="1"/>
                </UML:Multiplicity.range>
              </UML:Multiplicity>
            </UML:StructuralFeature.multiplicity>
            <UML:StructuralFeature.type>
              <UML:Classifier>
                <UML:Namespace.ownedElement>
                  <UML:DataType xmi.idref="G.2"/>
                </UML:Namespace.ownedElement>
              </UML:Classifier>
            </UML:StructuralFeature.type>
          </UML:Attribute>
          <UML:Operation isAbstract="false" name="setPreco" visibility="public"
xmi.id="S.13">
            <UML:BehavioralFeature.parameter>
              <UML:Parameter kind="in" name="intPreco" type="G.3" xmi.id="XX.1"/>
              <UML:Parameter kind="return" name="setPreco.return" type="G.4"
xmi.id="XX.2"/>
            </UML:BehavioralFeature.parameter>
          </UML:Operation>
          <UML:Operation isAbstract="false" name="getNome" visibility="public"
xmi.id="S.14">
            <UML:BehavioralFeature.parameter>

```

```

        <UML:Parameter kind="return" name="getNome.return" type="G.2"
xmi.id="XX.3"/>
    </UML:BehavioralFeature.parameter>
</UML:Operation>
    <UML:Operation isAbstract="false" name="setNome" visibility="public"
xmi.id="S.15">
        <UML:BehavioralFeature.parameter>
            <UML:Parameter kind="in" name="strNome" type="G.2" xmi.id="XX.4"/>
            <UML:Parameter kind="return" name="setNome.return" type="G.4"
xmi.id="XX.5"/>
        </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Operation isAbstract="false" name="getPreco" visibility="public"
xmi.id="S.16">
        <UML:BehavioralFeature.parameter>
            <UML:Parameter kind="return" name="getPreco.return" type="G.3"
xmi.id="XX.6"/>
        </UML:BehavioralFeature.parameter>
    </UML:Operation>
</UML:Classifier.feature>
</UML:Class>
<MASML:AgentClass isAbstract="false" name="Lojista" namespace="S.1"
visibility="public" xmi.id="S.3">
    <UML:Classifier.feature>
        <UML:Attribute name="venda_item" stereotype="SS.1" visibility="public"
xmi.id="S.17">
            <UML:StructuralFeature.type>
                <UML:Classifier>
                    <UML:Namespace.ownedElement>
                        <UML:DataType xmi.idref="G.1"/>
                    </UML:Namespace.ownedElement>
                </UML:Classifier>
            </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="nome" stereotype="SS.3" visibility="public"
xmi.id="S.18">
            <UML:StructuralFeature.type>
                <UML:Classifier>
                    <UML:Namespace.ownedElement>
                        <UML:DataType xmi.idref="G.2"/>
                    </UML:Namespace.ownedElement>
                </UML:Classifier>
            </UML:StructuralFeature.type>
        </UML:Attribute>
        <MASML:AgentAction name="Calcular_Preco" visibility="public" xmi.id="S.19"/>
        <MASML:AgentAction name="Oferecer item" visibility="public" xmi.id="S.20"/>
        <MASML:AgentAction name="Informar Venda" visibility="public" xmi.id="S.21"/>
        <MASML:AgentPlan name="Vendendo_Item" visibility="public" xmi.id="S.22">
            <MASML:AgentPlan.actions>
                <Action xmi.idref="S.19"/>
                <Action xmi.idref="S.20"/>
                <Action xmi.idref="S.21"/>
            </MASML:AgentPlan.actions>
        </MASML:AgentPlan>
    </UML:Classifier.feature>
</MASML:AgentClass>
<MASML:AgentClass isAbstract="false" name="Usuario" namespace="S.1"
visibility="public" xmi.id="S.4">
    <UML:Classifier.feature>
        <UML:Attribute name="compra_item" stereotype="SS.1" visibility="public"
xmi.id="S.23">
            <UML:Attribute.initialValue>
                <UML:Expression body="true"/>
            </UML:Attribute.initialValue>
            <UML:StructuralFeature.type>
                <UML:Classifier>
                    <UML:Namespace.ownedElement>
                        <UML:DataType xmi.idref="G.1"/>
                    </UML:Namespace.ownedElement>
                </UML:Classifier>
            </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="procura_vendedor" stereotype="SS.1" visibility="public"
xmi.id="S.24">
            <UML:Attribute.initialValue>
                <UML:Expression body="true"/>
            </UML:Attribute.initialValue>

```

```

        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
    </UML:Attribute>
    <UML:Attribute name="nome" stereotype="SS.3" visibility="public"
xmi.id="S.25">
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.2"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
    </UML:Attribute>
    <UML:Attribute name="item_desejado" stereotype="SS.3" visibility="public"
xmi.id="S.26">
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.5"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
    </UML:Attribute>
    <MASML:AgentAction name="Procurar_Item" visibility="public" xmi.id="S.27"/>
    <MASML:AgentAction name="Rejeitar_Oferta" visibility="public" xmi.id="S.28">
        <MASML:AgentAction.preConditions>
        <Condition default="" name="oferta" type="G.1"/>
        </MASML:AgentAction.preConditions>
    </MASML:AgentAction>
    <MASML:AgentAction name="Procurar_Vendedor" visibility="public"
xmi.id="S.29"/>
    <MASML:AgentAction name="Aceitar_Oferta" visibility="public" xmi.id="S.30">
        <MASML:AgentAction.preConditions>
        <Condition default="" name="oferta" type="G.1"/>
        </MASML:AgentAction.preConditions>
    </MASML:AgentAction>
    <MASML:AgentAction name="Avaliar_Proposta" visibility="public"
xmi.id="S.31"/>
    <MASML:AgentAction name="Pagar" visibility="public" xmi.id="S.32"/>
    <MASML:AgentPlan name="Comprando_Item" visibility="public" xmi.id="S.33">
        <MASML:AgentPlan.actions>
        <Action xmi.idref="S.28"/>
        <Action xmi.idref="S.27"/>
        <Action xmi.idref="S.30"/>
        <Action xmi.idref="S.31"/>
        <Action xmi.idref="S.32"/>
        </MASML:AgentPlan.actions>
        <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.23"/>
    </MASML:AgentPlan>
    <MASML:AgentPlan name="Procurando_Vendedor" visibility="public"
xmi.id="S.34">
        <MASML:AgentPlan.actions>
        <Action xmi.idref="S.29"/>
        </MASML:AgentPlan.actions>
        <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.24"/>
    </MASML:AgentPlan>
</UML:Classifier.feature>
</MASML:AgentClass>
<MASML:OrganizationClass isAbstract="false" isMain="true" name="Loja_Virtual"
namespace="S.1" visibility="public" xmi.id="S.5">
    <UML:Classifier.feature>
    <UML:Attribute name="gerencia_vendedores" stereotype="SS.1"
visibility="public" xmi.id="S.35">
        <UML:Attribute.initialValue>
        <UML:Expression body="true"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>

```

```

        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="gerencia_itens" stereotype="SS.1" visibility="public"
xmi.id="S.36">
        <UML:Attribute.initialValue>
        <UML:Expression body="true"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="vendedores" stereotype="SS.3" visibility="public"
xmi.id="S.37">
        <UML:Attribute.initialValue>
        <UML:Expression body="null"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.6"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="itens" stereotype="SS.3" visibility="public"
xmi.id="S.38">
        <UML:Attribute.initialValue>
        <UML:Expression body="null"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.6"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="compradores" stereotype="SS.3" visibility="public"
xmi.id="S.39">
        <UML:Attribute.initialValue>
        <UML:Expression body="null"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.6"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="informe_vendas" stereotype="SS.5" visibility="public"
xmi.id="S.40">
        <UML:Attribute.initialValue>
        <UML:Expression body="true"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <MASML:AgentAction name="Informar_Comprador_Vendedor" visibility="public"
xmi.id="S.41"/>
        <MASML:AgentAction name="Criar_Vendedor" visibility="public" xmi.id="S.42"/>
        <MASML:AgentAction name="Informar_Venda" visibility="public" xmi.id="S.43"/>
        <MASML:AgentPlan name="Informando_Venda" visibility="public" xmi.id="S.44">
        <MASML:AgentPlan.actions>
        <Action xmi.idref="S.43"/>

```

```

        </MASML:AgentPlan.actions>
        <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.36"/>
    </MASML:AgentPlan>
    <MASML:AgentPlan name="Criando_Vendedores" visibility="public"
xmi.id="S.45">
        <MASML:AgentPlan.actions>
            <Action xmi.idref="S.41"/>
            <Action xmi.idref="S.42"/>
        </MASML:AgentPlan.actions>
        <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.35"/>
    </MASML:AgentPlan>
</UML:Classifier.feature>
</MASML:OrganizationClass>
<MASML:ObjectRoleClass isAbstract="false" name="Oferta" namespace="S.1"
visibility="public" xmi.id="S.6">
    <UML:Classifier.feature>
        <UML:Attribute name="preco" visibility="public" xmi.id="S.46">
            <UML:StructuralFeature.multiplicity>
                <UML:Multiplicity>
                    <UML:Multiplicity.range>
                        <UML:MultiplicityRange lower="1" upper="1"/>
                    </UML:Multiplicity.range>
                </UML:Multiplicity>
            </UML:StructuralFeature.multiplicity>
            <UML:StructuralFeature.type>
                <UML:Classifier>
                    <UML:Namespace.ownedElement>
                        <UML:DataType xmi.idref="G.3"/>
                    </UML:Namespace.ownedElement>
                </UML:Classifier>
            </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="nome" visibility="public" xmi.id="S.47">
            <UML:StructuralFeature.multiplicity>
                <UML:Multiplicity>
                    <UML:Multiplicity.range>
                        <UML:MultiplicityRange lower="1" upper="1"/>
                    </UML:Multiplicity.range>
                </UML:Multiplicity>
            </UML:StructuralFeature.multiplicity>
            <UML:StructuralFeature.type>
                <UML:Classifier>
                    <UML:Namespace.ownedElement>
                        <UML:DataType xmi.idref="G.2"/>
                    </UML:Namespace.ownedElement>
                </UML:Classifier>
            </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Operation isAbstract="false" name="setPreco" visibility="public"
xmi.id="S.48">
            <UML:BehavioralFeature.parameter>
                <UML:Parameter kind="in" name="intPreco" type="G.3" xmi.id="XX.7"/>
                <UML:Parameter kind="return" name="setPreco.return" type="G.4"
xmi.id="XX.8"/>
            </UML:BehavioralFeature.parameter>
        </UML:Operation>
        <UML:Operation isAbstract="false" name="getNome" visibility="public"
xmi.id="S.49">
            <UML:BehavioralFeature.parameter>
                <UML:Parameter kind="return" name="getNome.return" type="G.2"
xmi.id="XX.9"/>
            </UML:BehavioralFeature.parameter>
        </UML:Operation>
    </UML:Classifier.feature>
</MASML:ObjectRoleClass>
<MASML:ObjectRoleClass isAbstract="false" name="Desejo" namespace="S.1"
visibility="public" xmi.id="S.7">
    <UML:Classifier.feature>
        <UML:Attribute name="preco" visibility="public" xmi.id="S.50">
            <UML:StructuralFeature.multiplicity>
                <UML:Multiplicity>
                    <UML:Multiplicity.range>
                        <UML:MultiplicityRange lower="1" upper="1"/>
                    </UML:Multiplicity.range>
                </UML:Multiplicity>
            </UML:StructuralFeature.multiplicity>

```



```

    <UML:StructuralFeature.type>
    <UML:Classifier>
    <UML:Namespace.ownedElement>
    <UML:DataType xmi.idref="G.3"/>
    </UML:Namespace.ownedElement>
    </UML:Classifier>
  </UML:StructuralFeature.type>
</UML:Attribute>
<UML:Attribute name="nome" visibility="public" xmi.id="S.51">
  <UML:StructuralFeature.multiplicity>
  <UML:Multiplicity>
  <UML:Multiplicity.range>
  <UML:MultiplicityRange lower="1" upper="1"/>
  </UML:Multiplicity.range>
  </UML:Multiplicity>
  </UML:StructuralFeature.multiplicity>
  <UML:StructuralFeature.type>
  <UML:Classifier>
  <UML:Namespace.ownedElement>
  <UML:DataType xmi.idref="G.2"/>
  </UML:Namespace.ownedElement>
  </UML:Classifier>
  </UML:StructuralFeature.type>
</UML:Attribute>
<UML:Operation isAbstract="false" name="setNome" visibility="public"
xmi.id="S.52">
  <UML:BehavioralFeature.parameter>
  <UML:Parameter kind="in" name="strNome" type="G.2" xmi.id="XX.10"/>
  <UML:Parameter kind="return" name="setNome.return" type="G.4"
xmi.id="XX.11"/>
  </UML:BehavioralFeature.parameter>
  </UML:Operation>
  <UML:Operation isAbstract="false" name="getPreco" visibility="public"
xmi.id="S.53">
  <UML:BehavioralFeature.parameter>
  <UML:Parameter kind="return" name="getPreco.return" type="G.3"
xmi.id="XX.12"/>
  </UML:BehavioralFeature.parameter>
  </UML:Operation>
</UML:Classifier.feature>
</MASML:ObjectRoleClass>
<MASML:AgentRoleClass isAbstract="false" name="Comprador" namespace="S.1"
visibility="public" xmi.id="S.8">
  <UML:Classifier.feature>
  <UML:Attribute name="procura_vendedor" stereotype="SS.1" visibility="public"
xmi.id="S.54">
    <UML:Attribute.initialValue>
    <UML:Expression body="true"/>
    </UML:Attribute.initialValue>
    <UML:StructuralFeature.type>
    <UML:Classifier>
    <UML:Namespace.ownedElement>
    <UML:DataType xmi.idref="G.1"/>
    </UML:Namespace.ownedElement>
    </UML:Classifier>
    </UML:StructuralFeature.type>
  </UML:Attribute>
  <UML:Attribute name="compra_item" stereotype="SS.1" visibility="public"
xmi.id="S.55">
    <UML:Attribute.initialValue>
    <UML:Expression body="true"/>
    </UML:Attribute.initialValue>
    <UML:StructuralFeature.type>
    <UML:Classifier>
    <UML:Namespace.ownedElement>
    <UML:DataType xmi.idref="G.1"/>
    </UML:Namespace.ownedElement>
    </UML:Classifier>
    </UML:StructuralFeature.type>
  </UML:Attribute>
  <MASML:AgentAction name="Rejeitar_Oferta" stereotype="SS.7"
visibility="public" xmi.id="S.56"/>
  <MASML:AgentAction name="Aceitar_Oferta" stereotype="SS.7"
visibility="public" xmi.id="S.57"/>
  <MASML:AgentAction name="Procurar_Vendedor" stereotype="SS.9"
visibility="public" xmi.id="S.58"/>

```

```

<MASML:AgentProtocol name="Simples_Negociacao" xmi.id="S.59">
  <MASML:AgentProtocol.messages>
    <MASML:AgentMessage receiver="S.9" sender="S.8">
      <MASML:AgentMessage.label>informe_pagamento</MASML:AgentMessage.label>
      <MASML:AgentMessage.content>?</MASML:AgentMessage.content>
    </MASML:AgentMessage>
    <MASML:AgentMessage receiver="S.9" sender="S.8">
      <MASML:AgentMessage.label>proposta_rejeitada</MASML:AgentMessage.label>
      <MASML:AgentMessage.content>?</MASML:AgentMessage.content>
    </MASML:AgentMessage>
    <MASML:AgentMessage receiver="S.9" sender="S.8">
      <MASML:AgentMessage.label>proposta_aceita</MASML:AgentMessage.label>
      <MASML:AgentMessage.content>?</MASML:AgentMessage.content>
    </MASML:AgentMessage>
    <MASML:AgentMessage receiver="S.9" sender="S.8">
      <MASML:AgentMessage.label>pedido_precoItem</MASML:AgentMessage.label>
      <MASML:AgentMessage.content>Item</MASML:AgentMessage.content>
    </MASML:AgentMessage>
    <MASML:AgentMessage receiver="S.8" sender="S.9">
      <MASML:AgentMessage.label>informe_venda</MASML:AgentMessage.label>
      <MASML:AgentMessage.content>?</MASML:AgentMessage.content>
    </MASML:AgentMessage>
    <MASML:AgentMessage receiver="S.8" sender="S.9">
      <MASML:AgentMessage.label>proposta_precoItem</MASML:AgentMessage.label>
      <MASML:AgentMessage.content>Item</MASML:AgentMessage.content>
    </MASML:AgentMessage>
  </MASML:AgentProtocol.messages>
</MASML:AgentProtocol>
</UML:Classifier.feature>
</MASML:AgentRoleClass>
<MASML:AgentRoleClass isAbstract="false" name="Vendedor" namespace="S.1"
visibility="public" xmi.id="S.9">
  <UML:Classifier.feature>
    <UML:Attribute name="venda_item" stereotype="SS.1" visibility="public"
xmi.id="S.60">
      <UML:Attribute.initialValue>
        <UML:Expression body="true"/>
      </UML:Attribute.initialValue>
      <UML:StructuralFeature.type>
        <UML:Classifier>
          <UML:Namespace.ownedElement>
            <UML:DataType xmi.idref="G.1"/>
          </UML:Namespace.ownedElement>
        </UML:Classifier>
      </UML:StructuralFeature.type>
    </UML:Attribute>
    <MASML:AgentAction name="Calcular_Preco" stereotype="SS.9"
visibility="public" xmi.id="S.61"/>
    <MASML:AgentAction name="Oferecer_Item" stereotype="SS.9"
visibility="public" xmi.id="S.62"/>
    <MASML:AgentAction name="Informar_Venda" stereotype="SS.9"
visibility="public" xmi.id="S.63"/>
    <MASML:AgentProtocol name="Simples_Negociacao" xmi.id="S.64">
      <MASML:AgentProtocol.messages>
        <MASML:AgentMessage receiver="S.9" sender="S.8">
          <MASML:AgentMessage.label>informe_pagamento</MASML:AgentMessage.label>
          <MASML:AgentMessage.content>?</MASML:AgentMessage.content>
        </MASML:AgentMessage>
        <MASML:AgentMessage receiver="S.9" sender="S.8">
          <MASML:AgentMessage.label>proposta_rejeitada</MASML:AgentMessage.label>
          <MASML:AgentMessage.content>?</MASML:AgentMessage.content>
        </MASML:AgentMessage>
        <MASML:AgentMessage receiver="S.9" sender="S.8">
          <MASML:AgentMessage.label>proposta_aceita</MASML:AgentMessage.label>
          <MASML:AgentMessage.content>?</MASML:AgentMessage.content>
        </MASML:AgentMessage>
        <MASML:AgentMessage receiver="S.9" sender="S.8">
          <MASML:AgentMessage.label>pedido_precoItem</MASML:AgentMessage.label>
          <MASML:AgentMessage.content>Item</MASML:AgentMessage.content>
        </MASML:AgentMessage>
        <MASML:AgentMessage receiver="S.8" sender="S.9">
          <MASML:AgentMessage.label>informe_venda</MASML:AgentMessage.label>
          <MASML:AgentMessage.content>?</MASML:AgentMessage.content>
        </MASML:AgentMessage>
        <MASML:AgentMessage receiver="S.8" sender="S.9">
          <MASML:AgentMessage.label>proposta_precoItem</MASML:AgentMessage.label>

```

```

    <MASML:AgentMessage.content>Item</MASML:AgentMessage.content>
  </MASML:AgentMessage>
</MASML:AgentProtocol.messages>
</MASML:AgentProtocol>
</UML:Classifier.feature>
</MASML:AgentRoleClass>
<MASML:PassiveEnvironmentClass isAbstract="false" name="Mercado_Virtual"
namespace="S.1" visibility="public" xmi.id="S.10">
  <UML:Classifier.feature>
    <UML:Attribute name="vendedores" visibility="public" xmi.id="S.65">
      <UML:StructuralFeature.multiplicity>
        <UML:Multiplicity>
          <UML:Multiplicity.range>
            <UML:MultiplicityRange lower="1" upper="1"/>
          </UML:Multiplicity.range>
        </UML:Multiplicity>
      </UML:StructuralFeature.multiplicity>
      <UML:Attribute.initialValue>
        <UML:Expression body="null"/>
      </UML:Attribute.initialValue>
      <UML:StructuralFeature.type>
        <UML:Classifier>
          <UML:Namespace.ownedElement>
            <UML:DataType xmi.idref="G.6"/>
          </UML:Namespace.ownedElement>
        </UML:Classifier>
      </UML:StructuralFeature.type>
    </UML:Attribute>
    <UML:Attribute name="itens" visibility="public" xmi.id="S.66">
      <UML:StructuralFeature.multiplicity>
        <UML:Multiplicity>
          <UML:Multiplicity.range>
            <UML:MultiplicityRange lower="1" upper="1"/>
          </UML:Multiplicity.range>
        </UML:Multiplicity>
      </UML:StructuralFeature.multiplicity>
      <UML:StructuralFeature.type>
        <UML:Classifier>
          <UML:Namespace.ownedElement>
            <UML:DataType xmi.idref="G.6"/>
          </UML:Namespace.ownedElement>
        </UML:Classifier>
      </UML:StructuralFeature.type>
    </UML:Attribute>
    <UML:Attribute name="compradores" visibility="public" xmi.id="S.67">
      <UML:StructuralFeature.multiplicity>
        <UML:Multiplicity>
          <UML:Multiplicity.range>
            <UML:MultiplicityRange lower="1" upper="1"/>
          </UML:Multiplicity.range>
        </UML:Multiplicity>
      </UML:StructuralFeature.multiplicity>
      <UML:Attribute.initialValue>
        <UML:Expression body="null"/>
      </UML:Attribute.initialValue>
      <UML:StructuralFeature.type>
        <UML:Classifier>
          <UML:Namespace.ownedElement>
            <UML:DataType xmi.idref="G.6"/>
          </UML:Namespace.ownedElement>
        </UML:Classifier>
      </UML:StructuralFeature.type>
    </UML:Attribute>
  </UML:Classifier.feature>
</MASML:PassiveEnvironmentClass>
<MASML:Play member="S.2" name="" played="S.7" player="S.5" xmi.id="L.1"/>
<MASML:Play member="S.2" name="" played="S.6" player="S.5" xmi.id="L.2"/>
<MASML:Play member="S.4" name="" played="S.8" player="S.5" xmi.id="L.3"/>
<MASML:Play member="S.3" name="" played="S.9" player="S.5" xmi.id="L.4"/>
<MASML:Inhabit citizen="S.5" environment="S.10" name="" xmi.id="L.5"/>
<MASML:Inhabit citizen="S.4" environment="S.10" name="" xmi.id="L.6"/>
<MASML:Inhabit citizen="S.3" environment="S.10" name="" xmi.id="L.7"/>
<MASML:Inhabit citizen="S.2" environment="S.10" name="" xmi.id="L.8"/>
<UML:DataType name="void" visibility="public" xmi.id="G.0"/>
<UML:DataType name="Vector" visibility="public" xmi.id="G.6"/>
<UML:DataType name="int" visibility="public" xmi.id="G.3"/>

```

```

<UML:DataType name="String" visibility="public" xmi.id="G.2"/>
<UML:DataType name="Item" visibility="public" xmi.id="G.5"/>
<UML:DataType name="" visibility="public" xmi.id="G.4"/>
<UML:DataType name="Boolean" visibility="public" xmi.id="G.1"/>
<UML:Stereotype name="Duty" xmi.id="SS.9">
  <UML:Stereotype.baseClass>S.58</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.61</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.62</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.63</UML:Stereotype.baseClass>
</UML:Stereotype>
<UML:Stereotype name="Right" xmi.id="SS.7">
  <UML:Stereotype.baseClass>S.56</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.57</UML:Stereotype.baseClass>
</UML:Stereotype>
<UML:Stereotype name="Axiom" xmi.id="SS.5">
  <UML:Stereotype.baseClass>S.40</UML:Stereotype.baseClass>
</UML:Stereotype>
<UML:Stereotype name="Goal" xmi.id="SS.1">
  <UML:Stereotype.baseClass>S.17</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.23</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.24</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.35</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.36</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.54</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.55</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.60</UML:Stereotype.baseClass>
</UML:Stereotype>
<UML:Stereotype name="Belief" xmi.id="SS.3">
  <UML:Stereotype.baseClass>S.18</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.25</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.26</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.37</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.38</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.39</UML:Stereotype.baseClass>
</UML:Stereotype>
</UML:Namespace.ownedElement>
</UML:Model>
<MASML:Diagram name="Diagrama_de_Organizacao" xmi.id="D.1">
  <MASML:GraphElement.semanticModel>
    <MASML:SimpleSemanticModelElement typeInfo="OrganizationDiagram"/>
  </MASML:GraphElement.semanticModel>
  <MASML:GraphElement.contained>
    <MASML:GraphNode xmi.id="D.10">
      <MASML:GraphElement.position>
        <XMI.field>461</XMI.field>
        <XMI.field>453</XMI.field>
      </MASML:GraphElement.position>
      <MASML:GraphElement.size>
        <XMI.field>349</XMI.field>
        <XMI.field>274</XMI.field>
      </MASML:GraphElement.size>
      <MASML:GraphElement.semanticModel>
        <MASML:Masml1SemanticModelBridge xmi.id="DD.10">
          <MASML:Masml1SemanticModelBridge.element>
            <MASML:PassiveEnvironmentClass xmi.idref="S.10"/>
          </MASML:Masml1SemanticModelBridge.element>
        </MASML:Masml1SemanticModelBridge>
      </MASML:GraphElement.semanticModel>
    </MASML:GraphNode>
  </MASML:GraphElement.contained>
  <MASML:GraphElement.contained>
    <MASML:GraphNode xmi.id="D.11">
      <MASML:GraphElement.position>
        <XMI.field>36</XMI.field>
        <XMI.field>11</XMI.field>
      </MASML:GraphElement.position>
      <MASML:GraphElement.size>
        <XMI.field>480</XMI.field>
        <XMI.field>193</XMI.field>
      </MASML:GraphElement.size>
      <MASML:GraphElement.semanticModel>
        <MASML:Masml1SemanticModelBridge xmi.id="DD.11">
          <MASML:Masml1SemanticModelBridge.element>
            <MASML:OrganizationClass xmi.idref="S.5"/>
          </MASML:Masml1SemanticModelBridge.element>
        </MASML:Masml1SemanticModelBridge>
      </MASML:GraphElement.semanticModel>
    </MASML:GraphNode>
  </MASML:GraphElement.contained>

```

```

    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.12">
    <MASML:GraphElement.position>
      <XMI.field>26</XMI.field>
      <XMI.field>474</XMI.field>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field>384</XMI.field>
      <XMI.field>129</XMI.field>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.12">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:AgentClass xmi.idref="S.3"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.13">
    <MASML:GraphElement.position>
      <XMI.field>509</XMI.field>
      <XMI.field>85</XMI.field>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field>162</XMI.field>
      <XMI.field>129</XMI.field>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.13">
        <MASML:Masml1SemanticModelBridge.element>
          <UML:Class xmi.idref="S.2"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.14">
    <MASML:GraphElement.position>
      <XMI.field>241</XMI.field>
      <XMI.field>515</XMI.field>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field>162</XMI.field>
      <XMI.field>91</XMI.field>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.14">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:ObjectRoleClass xmi.idref="S.7"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.15">
    <MASML:GraphElement.position>
      <XMI.field>450</XMI.field>
      <XMI.field>467</XMI.field>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field>156</XMI.field>
      <XMI.field>91</XMI.field>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.15">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:ObjectRoleClass xmi.idref="S.6"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>

```

```

    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.16">
    <MASML:GraphElement.position>
      <XMI.field>85</XMI.field>
      <XMI.field>374</XMI.field>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field>3342</XMI.field>
      <XMI.field>129</XMI.field>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.16">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:AgentRoleClass xmi.idref="S.8"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.17">
    <MASML:GraphElement.position>
      <XMI.field>22</XMI.field>
      <XMI.field>321</XMI.field>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field>3342</XMI.field>
      <XMI.field>110</XMI.field>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.17">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:AgentRoleClass xmi.idref="S.9"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.18">
    <MASML:GraphElement.position>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.18">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:Inhabit xmi.idref="L.6"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.19">
    <MASML:GraphElement.position>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.19">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:Inhabit xmi.idref="L.7"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>

```

```

    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.110">
    <MASML:GraphElement.position>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.110">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:Inhabit xmi.idref="L.5"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.111">
    <MASML:GraphElement.position>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.111">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:Play xmi.idref="L.2"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.112">
    <MASML:GraphElement.position>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.112">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:Play xmi.idref="L.3"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.113">
    <MASML:GraphElement.position>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.113">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:Play xmi.idref="L.4"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>

```

```

    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.114">
    <MASML:GraphElement.position>
      <XMI.field>56</XMI.field>
      <XMI.field>107</XMI.field>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field>636</XMI.field>
      <XMI.field>243</XMI.field>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.114">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:AgentClass xmi.idref="S.4"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.115">
    <MASML:GraphElement.position>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.115">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:Play xmi.idref="L.1"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.116">
    <MASML:GraphElement.position>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.116">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:Inhabit xmi.idref="L.8"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
</MASML:Diagram>
</XMI.content>
</XMI>

```

10.2. UML XMI

O UML XMI apresentado nesta seção corresponde apenas ao pacote da aplicação do exemplo Virtual MarketPlace. O pacote referente ao framework ASF não está representado.


```

<UML:Package isAbstract="false" name="application" visibility="public"
xmi.id="A.1">
  <UML:Namespace.ownedElement>
    <UML:Class isAbstract="false" name="Item" visibility="public" xmi.id="A.2">
      <UML:Classifier.feature>
        <UML:Attribute name="preco" visibility="public" xmi.id="A.3">
          <UML:StructuralFeature.type>
            <UML:DataType xmi.idref="H.5"/>
          </UML:StructuralFeature.type>
          <UML:StructuralFeature.multiplicity>
            <UML:Multiplicity xmi.id="A.4">
              <UML:Multiplicity.range>
                <UML:MultiplicityRange lower="1" upper="1" xmi.id="A.5"/>
              </UML:Multiplicity.range>
            </UML:Multiplicity>
          </UML:StructuralFeature.multiplicity>
        </UML:Attribute>
        <UML:Attribute name="nome" visibility="public" xmi.id="A.6">
          <UML:StructuralFeature.type>
            <UML:DataType xmi.idref="H.1"/>
          </UML:StructuralFeature.type>
          <UML:StructuralFeature.multiplicity>
            <UML:Multiplicity xmi.id="A.7">
              <UML:Multiplicity.range>
                <UML:MultiplicityRange lower="1" upper="1" xmi.id="A.8"/>
              </UML:Multiplicity.range>
            </UML:Multiplicity>
          </UML:StructuralFeature.multiplicity>
        </UML:Attribute>
        <UML:Operation isAbstract="false" name="setPreco" visibility="public"
xmi.id="A.9">
          <UML:BehavioralFeature.parameter>
            <UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.10"/>
            <UML:Parameter kind="in" name="intPreco" type="H.7" xmi.id="A.11"/>
          </UML:BehavioralFeature.parameter>
        </UML:Operation>
        <UML:Operation isAbstract="false" name="getNome" visibility="public"
xmi.id="A.12">
          <UML:BehavioralFeature.parameter>
            <UML:Parameter kind="return" name="return" type="H.1" xmi.id="A.13"/>
          </UML:BehavioralFeature.parameter>
        </UML:Operation>
        <UML:Operation isAbstract="false" name="setNome" visibility="public"
xmi.id="A.14">
          <UML:BehavioralFeature.parameter>
            <UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.15"/>
            <UML:Parameter kind="in" name="strNome" type="H.1" xmi.id="A.16"/>
          </UML:BehavioralFeature.parameter>
        </UML:Operation>
        <UML:Operation isAbstract="false" name="getPreco" visibility="public"
xmi.id="A.17">
          <UML:BehavioralFeature.parameter>
            <UML:Parameter kind="return" name="return" type="H.7" xmi.id="A.18"/>
          </UML:BehavioralFeature.parameter>
        </UML:Operation>
      </UML:Classifier.feature>
    </UML:Class>
    <UML:Class isAbstract="false" name="Lojista" visibility="public" xmi.id="A.19">
      <UML:Classifier.feature>
        <UML:Operation isAbstract="false" name="Lojista" visibility="public"
xmi.id="A.20">
          <UML:ModelElement.stereotype>
            <UML:Stereotype xmi.idref="T.1"/>
          </UML:ModelElement.stereotype>
          <UML:BehavioralFeature.parameter>
            <UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.21"/>
            <UML:Parameter kind="in" name="theEnvironment" type="H.16" xmi.id="A.22"/>
            <UML:Parameter kind="in" name="initialOrg" type="H.15" xmi.id="A.23"/>
            <UML:Parameter kind="in" name="initialRole" type="H.14" xmi.id="A.24"/>
          </UML:BehavioralFeature.parameter>
        </UML:Operation>
        <UML:Method xmi.id="A.25">
          <UML:Method.body>
            <UML:ProcedureExpression body="
environment = theEnvironment;
environment.registerAgents( this ); setRolesBeingPlayed( initialRole, initialOrg
); LeafGoal objectGoal = null; goals = new Vector (); objectGoal = new LeafGoal

```

```

("Boolean","venda_item",""); this.goals.add (objectGoal); LeafBelief objectBelief
= null; beliefs = new Vector ();objectBelief = new LeafBelief ("String","nome",
"");this.beliefs.add (objectBelief); Condition objectCondition = null; Action
objectAction= null; actions = new Vector(); objectAction = new Calcular_Preco();
this.actions.add(objectAction); objectAction = new Oferecer_item();
this.actions.add(objectAction); objectAction = new Informar_Venda();
this.actions.add(objectAction); Goal goalAux = null; Action actionAux = null;
Enumeration enumActions = null; Enumeration enumGoals = null; Plan objectPlan =
null; plans = new Vector(); objectPlan = new Vendendo Item();
this.plans.add(objectPlan); actionAux = null; enumActions =
this.actions.elements(); while (enumActions.hasMoreElements()){ actionAux =
(Action)enumActions.nextElement(); if
(actionAux.getClass().getName().equals("application.Calcular_Preco")){
objectPlan.setAction(actionAux); } } actionAux = null; enumActions =
this.actions.elements(); while (enumActions.hasMoreElements()){ actionAux =
(Action)enumActions.nextElement(); if
(actionAux.getClass().getName().equals("application.Oferecer_item")){
objectPlan.setAction(actionAux); } } actionAux = null; enumActions =
this.actions.elements(); while (enumActions.hasMoreElements()){ actionAux =
(Action)enumActions.nextElement(); if
(actionAux.getClass().getName().equals("application.Informar_Venda")){
objectPlan.setAction(actionAux); } }" language="java" xmi.id="A.26"/>
</UML:Method.body>
<UML:Method.specification>
<UML:Operation xmi.idref="A.20"/>
</UML:Method.specification>
</UML:Method>
<UML:Operation isAbstract="false" name="checkIfWillContinue"
visibility="protected" xmi.id="A.27">
<UML:BehavioralFeature.parameter>
<UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.28"/>
</UML:BehavioralFeature.parameter>
</UML:Operation>
<UML:Method xmi.id="A.29">
<UML:Method.body>
<UML:ProcedureExpression body=" return false;" language="java"
xmi.id="A.30"/>
</UML:Method.body>
<UML:Method.specification>
<UML:Operation xmi.idref="A.27"/>
</UML:Method.specification>
</UML:Method>
<UML:Operation isAbstract="false" name="selectingPlan" visibility="protected"
xmi.id="A.31">
<UML:BehavioralFeature.parameter>
<UML:Parameter kind="return" name="return" type="H.17" xmi.id="A.32"/>
<UML:Parameter kind="in" name="vPlansExecuted" type="H.4" xmi.id="A.33"/>
<UML:Parameter kind="in" name="goal" type="H.12" xmi.id="A.34"/>
</UML:BehavioralFeature.parameter>
</UML:Operation>
<UML:Method xmi.id="A.35">
<UML:Method.body>
<UML:ProcedureExpression body=" return null;" language="java"
xmi.id="A.36"/>
</UML:Method.body>
<UML:Method.specification>
<UML:Operation xmi.idref="A.31"/>
</UML:Method.specification>
</UML:Method>
<UML:Operation isAbstract="false" name="executingPlan" visibility="protected"
xmi.id="A.37">
<UML:BehavioralFeature.parameter>
<UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.38"/>
<UML:Parameter kind="in" name="plan" type="H.17" xmi.id="A.39"/>
</UML:BehavioralFeature.parameter>
</UML:Operation>
<UML:Method xmi.id="A.40">
<UML:Method.body>
<UML:ProcedureExpression body="" language="java" xmi.id="A.41"/>
</UML:Method.body>
<UML:Method.specification>
<UML:Operation xmi.idref="A.37"/>
</UML:Method.specification>
</UML:Method>
<UML:Operation isAbstract="false" name="selectingGoalToAchieve"
visibility="protected" xmi.id="A.42">
<UML:BehavioralFeature.parameter>

```

```

        <UML:Parameter kind="return" name="return" type="H.12" xmi.id="A.43"/>
    </UML:BehavioralFeature.parameter>
</UML:Operation>
<UML:Method xmi.id="A.44">
    <UML:Method.body>
        <UML:ProcedureExpression body="    return null;" language="java"
xmi.id="A.45"/>
    </UML:Method.body>
    <UML:Method.specification>
        <UML:Operation xmi.idref="A.42"/>
    </UML:Method.specification>
</UML:Method>
</UML:Classifier.feature>
<UML:GeneralizableElement.generalization>
    <UML:Generalization xmi.idref="A.46"/>
</UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.46">
    <UML:Generalization.child>
        <UML:Class xmi.idref="A.19"/>
    </UML:Generalization.child>
    <UML:Generalization.parent>
        <UML:Class xmi.idref="F.1271"/>
    </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Usuario" visibility="public" xmi.id="A.47">
    <UML:Classifier.feature>
        <UML:Operation isAbstract="false" name="Usuario" visibility="public"
xmi.id="A.48">
            <UML:ModelElement.stereotype>
                <UML:Stereotype xmi.idref="T.1"/>
            </UML:ModelElement.stereotype>
            <UML:BehavioralFeature.parameter>
                <UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.49"/>
                <UML:Parameter kind="in" name="theEnvironment" type="H.16" xmi.id="A.50"/>
                <UML:Parameter kind="in" name="initialOrg" type="H.15" xmi.id="A.51"/>
                <UML:Parameter kind="in" name="initialRole" type="H.14" xmi.id="A.52"/>
            </UML:BehavioralFeature.parameter>
        </UML:Operation>
        <UML:Method xmi.id="A.53">
            <UML:Method.body>
                <UML:ProcedureExpression body=" environment = theEnvironment;
environment.registerAgents( this ); setRolesBeingPlayed( initialRole, initialOrg
); LeafGoal objectGoal = null; goals = new Vector (); objectGoal = new LeafGoal
("Boolean","compra item","true"); this.goals.add (objectGoal);
objectGoal.setPlan("Comprando Item"); objectGoal = new LeafGoal
("Boolean","procura vendedor","true"); this.goals.add (objectGoal);
objectGoal.setPlan("Procurando Vendedor"); LeafBelief objectBelief = null; beliefs
= new Vector (); objectBelief = new LeafBelief ("String","nome", "");
this.beliefs.add (objectBelief); objectBelief = new LeafBelief
("Item","item desejado", ""); this.beliefs.add (objectBelief); Condition
objectCondition = null; Action objectAction= null; actions = new Vector();
objectAction = new Procurar Item(); this.actions.add(objectAction); objectAction =
new Rejeitar_Oferta(); this.actions.add(objectAction); objectCondition = new
Condition("Boolean", "oferta", ""); objectAction.setPreCondition(objectCondition);
objectAction = new Procurar_Vendedor(); this.actions.add(objectAction);
objectAction = new Aceitar_Oferta(); this.actions.add(objectAction);
objectCondition = new Condition("Boolean", "oferta", "");
objectAction.setPreCondition(objectCondition); objectAction = new
Avaliar_Proposta(); this.actions.add(objectAction); objectAction = new Pagar();
this.actions.add(objectAction); goalAux = null; Action actionAux = null;
Enumeration enumActions = null; Enumeration enumGoals = null; Plan objectPlan =
null; plans = new Vector(); objectPlan = new Comprando Item();
this.plans.add(objectPlan); actionAux = null; enumActions =
this.actions.elements(); while (enumActions.hasMoreElements()){ actionAux =
(Action)enumActions.nextElement(); if
(actionAux.getClass().getName().equals("application.Procurar_Item")){
objectPlan.setAction(actionAux); } } actionAux = null; enumActions =
this.actions.elements(); while (enumActions.hasMoreElements()){ actionAux =
(Action)enumActions.nextElement(); if
(actionAux.getClass().getName().equals("application.Rejeitar_Oferta")){
objectPlan.setAction(actionAux); } } actionAux = null; enumActions =
this.actions.elements(); while (enumActions.hasMoreElements()){ actionAux =
(Action)enumActions.nextElement(); if
(actionAux.getClass().getName().equals("application.Aceitar Oferta")){
objectPlan.setAction(actionAux); } } actionAux = null; enumActions =

```

```

this.actions.elements(); while (enumActions.hasMoreElements()){ actionAux =
(Action)enumActions.nextElement(); if
(actionAux.getClass().getName().equals("application.Avaliar_Proposta")){
objectPlan.setAction(actionAux); } } actionAux = null; enumActions =
this.actions.elements(); while (enumActions.hasMoreElements()){ actionAux =
(Action)enumActions.nextElement(); if
(actionAux.getClass().getName().equals("application.Pagar")){
objectPlan.setAction(actionAux); } } goalAux = null; enumGoals =
this.goals.elements(); while (enumGoals.hasMoreElements()) { goalAux =
(Goal)enumGoals.nextElement(); if (goalAux.getName().equals("compra item")){
objectPlan.setGoal(goalAux); } } objectPlan = new Procurando_Vendedor();
this.plans.add(objectPlan); actionAux = null; enumActions =
this.actions.elements(); while (enumActions.hasMoreElements()){ actionAux =
(Action)enumActions.nextElement(); if
(actionAux.getClass().getName().equals("application.Procurar_Vendedor")){
objectPlan.setAction(actionAux); } } goalAux = null; enumGoals =
this.goals.elements(); while (enumGoals.hasMoreElements()) { goalAux =
(Goal)enumGoals.nextElement(); if (goalAux.getName().equals("procura_vendedor")){
objectPlan.setGoal(goalAux); } }" language="java" xmi.id="A.54"/>
</UML:Method.body>
<UML:Method.specification>
<UML:Operation xmi.idref="A.48"/>
</UML:Method.specification>
</UML:Method>
<UML:Operation isAbstract="false" name="checkIfWillContinue"
visibility="protected" xmi.id="A.55">
<UML:BehavioralFeature.parameter>
<UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.56"/>
</UML:BehavioralFeature.parameter>
</UML:Operation>
<UML:Method xmi.id="A.57">
<UML:Method.body>
<UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.58"/>
</UML:Method.body>
<UML:Method.specification>
<UML:Operation xmi.idref="A.55"/>
</UML:Method.specification>
</UML:Method>
<UML:Operation isAbstract="false" name="selectingPlan" visibility="protected"
xmi.id="A.59">
<UML:BehavioralFeature.parameter>
<UML:Parameter kind="return" name="return" type="H.17" xmi.id="A.60"/>
<UML:Parameter kind="in" name="vPlansExecuted" type="H.4" xmi.id="A.61"/>
<UML:Parameter kind="in" name="goal" type="H.12" xmi.id="A.62"/>
</UML:BehavioralFeature.parameter>
</UML:Operation>
<UML:Method xmi.id="A.63">
<UML:Method.body>
<UML:ProcedureExpression body="    return null;" language="java"
xmi.id="A.64"/>
</UML:Method.body>
<UML:Method.specification>
<UML:Operation xmi.idref="A.59"/>
</UML:Method.specification>
</UML:Method>
<UML:Operation isAbstract="false" name="executingPlan" visibility="protected"
xmi.id="A.65">
<UML:BehavioralFeature.parameter>
<UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.66"/>
<UML:Parameter kind="in" name="plan" type="H.17" xmi.id="A.67"/>
</UML:BehavioralFeature.parameter>
</UML:Operation>
<UML:Method xmi.id="A.68">
<UML:Method.body>
<UML:ProcedureExpression body="" language="java" xmi.id="A.69"/>
</UML:Method.body>
<UML:Method.specification>
<UML:Operation xmi.idref="A.65"/>
</UML:Method.specification>
</UML:Method>
<UML:Operation isAbstract="false" name="selectingGoalToAchieve"
visibility="protected" xmi.id="A.70">
<UML:BehavioralFeature.parameter>
<UML:Parameter kind="return" name="return" type="H.12" xmi.id="A.71"/>
</UML:BehavioralFeature.parameter>
</UML:Operation>

```

```

<UML:Method xmi.id="A.72">
  <UML:Method.body>
    <UML:ProcedureExpression body="    return null;" language="java"
xmi.id="A.73"/>
  </UML:Method.body>
  <UML:Method.specification>
    <UML:Operation xmi.idref="A.70"/>
  </UML:Method.specification>
</UML:Method>
</UML:Classifier.feature>
<UML:GeneralizableElement.generalization>
  <UML:Generalization xmi.idref="A.74"/>
</UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.74">
  <UML:Generalization.child>
    <UML:Class xmi.idref="A.47"/>
  </UML:Generalization.child>
  <UML:Generalization.parent>
    <UML:Class xmi.idref="F.1271"/>
  </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Loja_Virtual" visibility="public"
xmi.id="A.75">
  <UML:Classifier.feature>
    <UML:Operation isAbstract="false" name="Loja_Virtual" visibility="public"
xmi.id="A.76">
    <UML:ModelElement.stereotype>
      <UML:Stereotype xmi.idref="T.1"/>
    </UML:ModelElement.stereotype>
    <UML:BehavioralFeature.parameter>
      <UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.77"/>
      <UML:Parameter kind="in" name="theEnvironment" type="H.16" xmi.id="A.78"/>
    </UML:BehavioralFeature.parameter>
  </UML:Operation>
  <UML:Method xmi.id="A.79">
    <UML:Method.body>
      <UML:ProcedureExpression body="this.theEnvironment = theEnvironment;
this.theEnvironment.registerOrganizations( this ); LeafGoal objectGoal = null;
goals = new Vector (); objectGoal = new LeafGoal
("Boolean","gerencia vendedores","true"); this.goals.add (objectGoal);
objectGoal.setPlan("Criando_Vendedores"); objectGoal = new LeafGoal
("Boolean","gerencia itens","true"); this.goals.add (objectGoal);
objectGoal.setPlan("Informando_Venda"); LeafBelief objectBelief = null; beliefs =
new Vector(); objectBelief = new LeafBelief ("Vector","vendedores", "null");
this.beliefs.add (objectBelief); objectBelief = new LeafBelief ("Vector","itens",
"null"); this.beliefs.add (objectBelief); objectBelief = new LeafBelief
("Vector","compradors", "null"); this.beliefs.add (objectBelief); Axiom
objectAxiom = null; axioms = new Vector(); objectAxiom = new Axiom
("Boolean","informe_vendas", "true"); this.axioms.add (objectAxiom); Condition
condition = null; Action action = null; actions = new Vector(); action = new
Informar Comprador Vendedor();this.actions.add(action); action = new
Criar Vendedor(); this.actions.add(action); action = new Informar Venda();
this.actions.add(action); Goal goalAux = null; Action actionAux = null;
Enumeration enumActions = null; Plan objectPlan = null; plans = new Vector();
objectPlan = new Informando_Venda(); this.plans.add(objectPlan); actionAux = null;
enumActions = this.actions.elements(); while (enumActions.hasMoreElements()){
actionAux = (Action)enumActions.nextElement(); if
(actionAux.getClass().getName().equals("application.Informar_Venda")){
objectPlan.setAction(actionAux); } } goalAux = null; enumGoals =
this.goals.elements();while (enumGoals.hasMoreElements()) { goalAux =
(Goal)enumGoals.nextElement(); if (goalAux.getName().equals("gerencia itens")){
objectPlan.setGoal(goalAux); } } objectPlan = new Criando_Vendedores();
this.plans.add(objectPlan); actionAux = null; enumActions =
this.actions.elements();while (enumActions.hasMoreElements()){ actionAux =
(Action)enumActions.nextElement(); if
(actionAux.getClass().getName().equals("application.Informar_Comprador_Vendedor"))
{ objectPlan.setAction(actionAux); } } actionAux = null; enumActions =
this.actions.elements(); while (enumActions.hasMoreElements()){ actionAux =
(Action)enumActions.nextElement(); if
(actionAux.getClass().getName().equals("application.Criar_Vendedor")){
objectPlan.setAction(actionAux); } } goalAux = null; enumGoals =
this.goals.elements(); while (enumGoals.hasMoreElements()) { goalAux =
(Goal)enumGoals.nextElement(); if
(goalAux.getName().equals("gerencia_vendedores")){ objectPlan.setGoal(goalAux); }
}" language="java" xmi.id="A.80"/>

```

```

        </UML:Method.body>
        <UML:Method.specification>
        <UML:Operation xmi.idref="A.76"/>
        </UML:Method.specification>
        </UML:Method>
        <UML:Operation isAbstract="false" name="checkIfWillContinue"
visibility="protected" xmi.id="A.81">
        <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.82"/>
        </UML:BehavioralFeature.parameter>
        </UML:Operation>
        <UML:Method xmi.id="A.83">
        <UML:Method.body>
        <UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.84"/>
        </UML:Method.body>
        <UML:Method.specification>
        <UML:Operation xmi.idref="A.81"/>
        </UML:Method.specification>
        </UML:Method>
        <UML:Operation isAbstract="false" name="selectingPlan" visibility="protected"
xmi.id="A.85">
        <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.17" xmi.id="A.86"/>
        <UML:Parameter kind="in" name="vPlansExecuted" type="H.4" xmi.id="A.87"/>
        <UML:Parameter kind="in" name="goal" type="H.12" xmi.id="A.88"/>
        </UML:BehavioralFeature.parameter>
        </UML:Operation>
        <UML:Method xmi.id="A.89">
        <UML:Method.body>
        <UML:ProcedureExpression body="    return null;" language="java"
xmi.id="A.90"/>
        </UML:Method.body>
        <UML:Method.specification>
        <UML:Operation xmi.idref="A.85"/>
        </UML:Method.specification>
        </UML:Method>
        <UML:Operation isAbstract="false" name="executingPlan" visibility="protected"
xmi.id="A.91">
        <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.92"/>
        <UML:Parameter kind="in" name="plan" type="H.17" xmi.id="A.93"/>
        </UML:BehavioralFeature.parameter>
        </UML:Operation>
        <UML:Method xmi.id="A.94">
        <UML:Method.body>
        <UML:ProcedureExpression body="" language="java" xmi.id="A.95"/>
        </UML:Method.body>
        <UML:Method.specification>
        <UML:Operation xmi.idref="A.91"/>
        </UML:Method.specification>
        </UML:Method>
        <UML:Operation isAbstract="false" name="selectingGoalToAchieve"
visibility="protected" xmi.id="A.96">
        <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.12" xmi.id="A.97"/>
        </UML:BehavioralFeature.parameter>
        </UML:Operation>
        <UML:Method xmi.id="A.98">
        <UML:Method.body>
        <UML:ProcedureExpression body="    return null;" language="java"
xmi.id="A.99"/>
        </UML:Method.body>
        <UML:Method.specification>
        <UML:Operation xmi.idref="A.96"/>
        </UML:Method.specification>
        </UML:Method>
        </UML:Classifier.feature>
        <UML:GeneralizableElement.generalization>
        <UML:Generalization xmi.idref="A.100"/>
        </UML:GeneralizableElement.generalization>
        </UML:Class>
        <UML:Generalization xmi.id="A.100">
        <UML:Generalization.child>
        <UML:Class xmi.idref="A.75"/>
        </UML:Generalization.child>

```

```

    <UML:Generalization.parent>
    <UML:Class xmi.idref="F.670"/>
  </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Oferta" visibility="public" xmi.id="A.101">
  <UML:Classifier.feature>
    <UML:Attribute name="preco" visibility="public" xmi.id="A.102">
      <UML:StructuralFeature.type>
        <UML:DataType xmi.idref="H.7"/>
      </UML:StructuralFeature.type>
      <UML:StructuralFeature.multiplicity>
        <UML:Multiplicity xmi.id="A.103">
          <UML:Multiplicity.range>
            <UML:MultiplicityRange lower="1" upper="1" xmi.id="A.104"/>
          </UML:Multiplicity.range>
        </UML:Multiplicity>
      </UML:StructuralFeature.multiplicity>
    </UML:Attribute>
    <UML:Attribute name="nome" visibility="public" xmi.id="A.105">
      <UML:StructuralFeature.type>
        <UML:DataType xmi.idref="H.1"/>
      </UML:StructuralFeature.type>
      <UML:StructuralFeature.multiplicity>
        <UML:Multiplicity xmi.id="A.106">
          <UML:Multiplicity.range>
            <UML:MultiplicityRange lower="1" upper="1" xmi.id="A.107"/>
          </UML:Multiplicity.range>
        </UML:Multiplicity>
      </UML:StructuralFeature.multiplicity>
    </UML:Attribute>
    <UML:Operation isAbstract="false" name="setPreco" visibility="public"
xmi.id="A.108">
      <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.109"/>
        <UML:Parameter kind="in" name="intPreco" type="H.7" xmi.id="A.110"/>
      </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Operation isAbstract="false" name="getNome" visibility="public"
xmi.id="A.111">
      <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.1" xmi.id="A.112"/>
      </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Operation isAbstract="false" name="Oferta" visibility="public"
xmi.id="A.113">
      <UML:ModelElement.stereotype>
        <UML:Stereotype xmi.idref="T.1"/>
      </UML:ModelElement.stereotype>
      <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.114"/>
        <UML:Parameter kind="in" name="owner" type="H.15" xmi.id="A.115"/>
      </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Method xmi.id="A.116">
      <UML:Method.body>
        <UML:ProcedureExpression body=" super.setOwner( owner );
owner.setObjectRole( this );" language="java" xmi.id="A.117"/>
      </UML:Method.body>
      <UML:Method.specification>
        <UML:Operation xmi.idref="A.113"/>
      </UML:Method.specification>
    </UML:Method>
  </UML:Classifier.feature>
  <UML:GeneralizableElement.generalization>
    <UML:Generalization xmi.idref="A.118"/>
  </UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.118">
  <UML:Generalization.child>
    <UML:Class xmi.idref="A.101"/>
  </UML:Generalization.child>
  <UML:Generalization.parent>
    <UML:Class xmi.idref="F.1504"/>
  </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Desejo" visibility="public" xmi.id="A.119">

```

```

<UML:Classifier.feature>
  <UML:Attribute name="preco" visibility="public" xmi.id="A.120">
    <UML:StructuralFeature.type>
      <UML:DataType xmi.idref="H.7"/>
    </UML:StructuralFeature.type>
    <UML:StructuralFeature.multiplicity>
      <UML:Multiplicity xmi.id="A.121">
        <UML:Multiplicity.range>
          <UML:MultiplicityRange lower="1" upper="1" xmi.id="A.122"/>
        </UML:Multiplicity.range>
      </UML:Multiplicity>
    </UML:StructuralFeature.multiplicity>
  </UML:Attribute>
  <UML:Attribute name="nome" visibility="public" xmi.id="A.123">
    <UML:StructuralFeature.type>
      <UML:DataType xmi.idref="H.1"/>
    </UML:StructuralFeature.type>
    <UML:StructuralFeature.multiplicity>
      <UML:Multiplicity xmi.id="A.124">
        <UML:Multiplicity.range>
          <UML:MultiplicityRange lower="1" upper="1" xmi.id="A.125"/>
        </UML:Multiplicity.range>
      </UML:Multiplicity>
    </UML:StructuralFeature.multiplicity>
  </UML:Attribute>
  <UML:Operation isAbstract="false" name="setNome" visibility="public"
xmi.id="A.126">
    <UML:BehavioralFeature.parameter>
      <UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.127"/>
      <UML:Parameter kind="in" name="strNome" type="H.1" xmi.id="A.128"/>
    </UML:BehavioralFeature.parameter>
  </UML:Operation>
  <UML:Operation isAbstract="false" name="getPreco" visibility="public"
xmi.id="A.129">
    <UML:BehavioralFeature.parameter>
      <UML:Parameter kind="return" name="return" type="H.7" xmi.id="A.130"/>
    </UML:BehavioralFeature.parameter>
  </UML:Operation>
  <UML:Operation isAbstract="false" name="Desejo" visibility="public"
xmi.id="A.131">
    <UML:ModelElement.stereotype>
      <UML:Stereotype xmi.idref="T.1"/>
    </UML:ModelElement.stereotype>
    <UML:BehavioralFeature.parameter>
      <UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.132"/>
      <UML:Parameter kind="in" name="owner" type="H.15" xmi.id="A.133"/>
    </UML:BehavioralFeature.parameter>
  </UML:Operation>
  <UML:Method xmi.id="A.134">
    <UML:Method.body>
      <UML:ProcedureExpression body="    super.setOwner( owner );
owner.setObjectRole( this );" language="java" xmi.id="A.135"/>
    </UML:Method.body>
    <UML:Method.specification>
      <UML:Operation xmi.idref="A.131"/>
    </UML:Method.specification>
  </UML:Method>
</UML:Classifier.feature>
<UML:GeneralizableElement.generalization>
  <UML:Generalization xmi.idref="A.136"/>
</UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.136">
  <UML:Generalization.child>
    <UML:Class xmi.idref="A.119"/>
  </UML:Generalization.child>
  <UML:Generalization.parent>
    <UML:Class xmi.idref="F.1504"/>
  </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Comprador" visibility="public"
xmi.id="A.137">
  <UML:Classifier.feature>
    <UML:Operation isAbstract="false" name="Comprador" visibility="public"
xmi.id="A.138">
      <UML:ModelElement.stereotype>

```



```

    <UML:Stereotype xmi.idref="T.1"/>
  </UML:ModelElement.stereotype>
  <UML:BehavioralFeature.parameter>
    <UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.139"/>
    <UML:Parameter kind="in" name="owner" type="H.15" xmi.id="A.140"/>
  </UML:BehavioralFeature.parameter>
</UML:Operation>
<UML:Method xmi.id="A.141">
  <UML:Method.body>
    <UML:ProcedureExpression body=" super.setOwner( owner ); owner.setAgentRole(
this ); LeafGoal objectGoal = null; goals = new Vector (); objectGoal = new
LeafGoal ("Boolean","procura vendedor","true"); this.goals.add (objectGoal);
objectGoal = new LeafGoal ("Boolean","compra_item","true"); this.goals.add
(objectGoal); LeafBelief objectBelief = null; beliefs = new Vector (); duties =
new Vector (); rights = new Vector (); this.rights.add (new Right
("Rejeitar_Oferta")); this.rights.add (new Right ("Aceitar_Oferta"));
this.duties.add (new Duty ("Procurar Vendedor")); Message objectMessage = null;
Protocol objectProtocol = null; protocols = new Vector (); objectProtocol = new
application.Simples_Negociacao(); this.protocols.add (objectProtocol);
objectMessage = new Message("informe_pagamento","?", "Comprador", "Vendedor");
objectProtocol.setMessage (objectMessage); objectMessage = new
Message("pedido_precoItem","Item","Comprador", "Vendedor");
objectProtocol.setMessage (objectMessage); objectMessage = new
Message("proposta aceita","?", "Comprador", "Vendedor"); objectProtocol.setMessage
(objectMessage); objectMessage = new Message("proposta_rejeitada","?", "Comprador",
"Vendedor"); objectProtocol.setMessage (objectMessage); objectMessage = new
Message("informe_venda","?", "Vendedor", "Comprador"); objectProtocol.setMessage
(objectMessage); objectMessage = new
Message("proposta precoItem","Item","Vendedor", &"Comprador");
objectProtocol.setMessage (objectMessage); " language="java" xmi.id="A.142"/>
  </UML:Method.body>
  <UML:Method.specification>
    <UML:Operation xmi.idref="A.138"/>
  </UML:Method.specification>
</UML:Method>
</UML:Classifier.feature>
<UML:GeneralizableElement.generalization>
  <UML:Generalization xmi.idref="A.143"/>
</UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.143">
  <UML:Generalization.child>
    <UML:Class xmi.idref="A.137"/>
  </UML:Generalization.child>
  <UML:Generalization.parent>
    <UML:Class xmi.idref="F.1040"/>
  </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Vendedor" visibility="public"
xmi.id="A.144">
  <UML:Classifier.feature>
    <UML:Operation isAbstract="false" name="Vendedor" visibility="public"
xmi.id="A.145">
      <UML:ModelElement.stereotype>
        <UML:Stereotype xmi.idref="T.1"/>
      </UML:ModelElement.stereotype>
      <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.3" xmi.id="A.146"/>
        <UML:Parameter kind="in" name="owner" type="H.15" xmi.id="A.147"/>
      </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Method xmi.id="A.148">
      <UML:Method.body>
        <UML:ProcedureExpression body="super.setOwner( owner ); owner.setAgentRole(
this ); LeafGoal objectGoal = null; goals = new Vector (); objectGoal = new
LeafGoal ("Boolean","venda_item",&"true"); this.goals.add (objectGoal); LeafBelief
objectBelief = null; beliefs = new Vector (); duties = new Vector (); rights = new
Vector (); this.duties.add (new Duty ("Calcular Preco")); this.duties.add (new
Duty ("Oferecer Item")); this.duties.add (new Duty ("Informar Venda")); Message
objectMessage = null; Protocol objectProtocol = null; protocols = new Vector ();
objectProtocol = new application.Simples_Negociacao(); this.protocols.add
(objectProtocol); objectMessage = new Message("informe_pagamento","?", "Comprador",
"Vendedor"); objectProtocol.setMessage (objectMessage); objectMessage = new
Message("pedido precoItem","Item","Comprador", "Vendedor");
objectProtocol.setMessage (objectMessage); objectMessage = new
Message("proposta aceita","?", "Comprador", "Vendedor"); objectProtocol.setMessage

```

```

(objectMessage); objectMessage = new Message("proposta_rejeitada","?", "Comprador",
"Vendedor"); objectProtocol.setMessage (objectMessage); objectMessage = new
Message("informe_venda","?", "Vendedor", "Comprador"); objectProtocol.setMessage
(objectMessage); objectMessage = new
Message("proposta_precoItem","Item", "Vendedor&", "Comprador");
objectProtocol.setMessage (objectMessage);" language="java" xmi.id="A.149"/>
</UML:Method.body>
<UML:Method.specification>
<UML:Operation xmi.idref="A.145"/>
</UML:Method.specification>
</UML:Method>
</UML:Classifier.feature>
<UML:GeneralizableElement.generalization>
<UML:Generalization xmi.idref="A.150"/>
</UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.150">
<UML:Generalization.child>
<UML:Class xmi.idref="A.144"/>
</UML:Generalization.child>
<UML:Generalization.parent>
<UML:Class xmi.idref="F.1040"/>
</UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Mercado_Virtual" visibility="public"
xmi.id="A.151">
<UML:Classifier.feature>
<UML:Attribute name="vendedores" visibility="public" xmi.id="A.152">
<UML:StructuralFeature.type>
<UML:DataType xmi.idref="H.4"/>
</UML:StructuralFeature.type>
<UML:StructuralFeature.multiplicity>
<UML:Multiplicity xmi.id="A.153">
<UML:Multiplicity.range>
<UML:MultiplicityRange lower="1" upper="1" xmi.id="A.154"/>
</UML:Multiplicity.range>
</UML:Multiplicity>
</UML:StructuralFeature.multiplicity>
<UML:Attribute.initialValue>
<UML:Expression body="null" xmi.id="A.155"/>
</UML:Attribute.initialValue>
</UML:Attribute>
<UML:Attribute name="itens" visibility="public" xmi.id="A.156">
<UML:StructuralFeature.type>
<UML:DataType xmi.idref="H.4"/>
</UML:StructuralFeature.type>
<UML:StructuralFeature.multiplicity>
<UML:Multiplicity xmi.id="A.157">
<UML:Multiplicity.range>
<UML:MultiplicityRange lower="1" upper="1" xmi.id="A.158"/>
</UML:Multiplicity.range>
</UML:Multiplicity>
</UML:StructuralFeature.multiplicity>
</UML:Attribute>
<UML:Attribute name="compradores" visibility="public" xmi.id="A.159">
<UML:StructuralFeature.type>
<UML:DataType xmi.idref="H.4"/>
</UML:StructuralFeature.type>
<UML:StructuralFeature.multiplicity>
<UML:Multiplicity xmi.id="A.160">
<UML:Multiplicity.range>
<UML:MultiplicityRange lower="1" upper="1" xmi.id="A.161"/>
</UML:Multiplicity.range>
</UML:Multiplicity>
</UML:StructuralFeature.multiplicity>
<UML:Attribute.initialValue>
<UML:Expression body="null" xmi.id="A.162"/>
</UML:Attribute.initialValue>
</UML:Attribute>
</UML:Classifier.feature>
<UML:GeneralizableElement.generalization>
<UML:Generalization xmi.idref="A.163"/>
</UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.163">
<UML:Generalization.child>
<UML:Class xmi.idref="A.151"/>

```

```

    </UML:Generalization.child>
    <UML:Generalization.parent>
      <UML:Class xmi.idref="F.1540"/>
    </UML:Generalization.parent>
  </UML:Generalization>
  <UML:Class isAbstract="false" name="Procurar_Vendedor" visibility="public"
xmi.id="A.164">
    <UML:Classifier.feature>
      <UML:Operation isAbstract="false" name="execute" visibility="public"
xmi.id="A.165">
        <UML:BehavioralFeature.parameter>
          <UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.166"/>
        </UML:BehavioralFeature.parameter>
      </UML:Operation>
      <UML:Method xmi.id="A.167">
        <UML:Method.body>
          <UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.168"/>
        </UML:Method.body>
        <UML:Method.specification>
          <UML:Operation xmi.idref="A.165"/>
        </UML:Method.specification>
      </UML:Method>
    </UML:Classifier.feature>
    <UML:GeneralizableElement.generalization>
      <UML:Generalization xmi.idref="A.169"/>
    </UML:GeneralizableElement.generalization>
  </UML:Class>
  <UML:Generalization xmi.id="A.169">
    <UML:Generalization.child>
      <UML:Class xmi.idref="A.164"/>
    </UML:Generalization.child>
    <UML:Generalization.parent>
      <UML:Class xmi.idref="F.51"/>
    </UML:Generalization.parent>
  </UML:Generalization>
  <UML:Class isAbstract="false" name="Oferecer_item" visibility="public"
xmi.id="A.170">
    <UML:Classifier.feature>
      <UML:Operation isAbstract="false" name="execute" visibility="public"
xmi.id="A.171">
        <UML:BehavioralFeature.parameter>
          <UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.172"/>
        </UML:BehavioralFeature.parameter>
      </UML:Operation>
      <UML:Method xmi.id="A.173">
        <UML:Method.body>
          <UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.174"/>
        </UML:Method.body>
        <UML:Method.specification>
          <UML:Operation xmi.idref="A.171"/>
        </UML:Method.specification>
      </UML:Method>
    </UML:Classifier.feature>
    <UML:GeneralizableElement.generalization>
      <UML:Generalization xmi.idref="A.175"/>
    </UML:GeneralizableElement.generalization>
  </UML:Class>
  <UML:Generalization xmi.id="A.175">
    <UML:Generalization.child>
      <UML:Class xmi.idref="A.170"/>
    </UML:Generalization.child>
    <UML:Generalization.parent>
      <UML:Class xmi.idref="F.51"/>
    </UML:Generalization.parent>
  </UML:Generalization>
  <UML:Class isAbstract="false" name="Avaliar_Proposta" visibility="public"
xmi.id="A.176">
    <UML:Classifier.feature>
      <UML:Operation isAbstract="false" name="execute" visibility="public"
xmi.id="A.177">
        <UML:BehavioralFeature.parameter>
          <UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.178"/>
        </UML:BehavioralFeature.parameter>
      </UML:Operation>

```

```

    <UML:Method xmi.id="A.179">
      <UML:Method.body>
        <UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.180"/>
      </UML:Method.body>
      <UML:Method.specification>
        <UML:Operation xmi.idref="A.177"/>
      </UML:Method.specification>
    </UML:Method>
  </UML:Classifier.feature>
  <UML:GeneralizableElement.generalization>
    <UML:Generalization xmi.idref="A.181"/>
  </UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.181">
  <UML:Generalization.child>
    <UML:Class xmi.idref="A.176"/>
  </UML:Generalization.child>
  <UML:Generalization.parent>
    <UML:Class xmi.idref="F.51"/>
  </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Informar_Venda" visibility="public"
xmi.id="A.182">
  <UML:Classifier.feature>
    <UML:Operation isAbstract="false" name="execute" visibility="public"
xmi.id="A.183">
      <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.184"/>
      </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Method xmi.id="A.185">
      <UML:Method.body>
        <UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.186"/>
      </UML:Method.body>
      <UML:Method.specification>
        <UML:Operation xmi.idref="A.183"/>
      </UML:Method.specification>
    </UML:Method>
  </UML:Classifier.feature>
  <UML:GeneralizableElement.generalization>
    <UML:Generalization xmi.idref="A.187"/>
  </UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.187">
  <UML:Generalization.child>
    <UML:Class xmi.idref="A.182"/>
  </UML:Generalization.child>
  <UML:Generalization.parent>
    <UML:Class xmi.idref="F.51"/>
  </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Calcular_Preco" visibility="public"
xmi.id="A.188">
  <UML:Classifier.feature>
    <UML:Operation isAbstract="false" name="execute" visibility="public"
xmi.id="A.189">
      <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.190"/>
      </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Method xmi.id="A.191">
      <UML:Method.body>
        <UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.192"/>
      </UML:Method.body>
      <UML:Method.specification>
        <UML:Operation xmi.idref="A.189"/>
      </UML:Method.specification>
    </UML:Method>
  </UML:Classifier.feature>
  <UML:GeneralizableElement.generalization>
    <UML:Generalization xmi.idref="A.193"/>
  </UML:GeneralizableElement.generalization>
</UML:Class>

```

```

<UML:Generalization xmi.id="A.193">
  <UML:Generalization.child>
    <UML:Class xmi.idref="A.188"/>
  </UML:Generalization.child>
  <UML:Generalization.parent>
    <UML:Class xmi.idref="F.51"/>
  </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Pagar" visibility="public" xmi.id="A.194">
  <UML:Classifier.feature>
    <UML:Operation isAbstract="false" name="execute" visibility="public"
xmi.id="A.195">
      <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.196"/>
      </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Method xmi.id="A.197">
      <UML:Method.body>
        <UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.198"/>
      </UML:Method.body>
      <UML:Method.specification>
        <UML:Operation xmi.idref="A.195"/>
      </UML:Method.specification>
    </UML:Method>
  </UML:Classifier.feature>
  <UML:GeneralizableElement.generalization>
    <UML:Generalization xmi.idref="A.199"/>
  </UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.199">
  <UML:Generalization.child>
    <UML:Class xmi.idref="A.194"/>
  </UML:Generalization.child>
  <UML:Generalization.parent>
    <UML:Class xmi.idref="F.51"/>
  </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Oferecer_Item" visibility="public"
xmi.id="A.200">
  <UML:Classifier.feature>
    <UML:Operation isAbstract="false" name="execute" visibility="public"
xmi.id="A.201">
      <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.202"/>
      </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Method xmi.id="A.203">
      <UML:Method.body>
        <UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.204"/>
      </UML:Method.body>
      <UML:Method.specification>
        <UML:Operation xmi.idref="A.201"/>
      </UML:Method.specification>
    </UML:Method>
  </UML:Classifier.feature>
  <UML:GeneralizableElement.generalization>
    <UML:Generalization xmi.idref="A.205"/>
  </UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.205">
  <UML:Generalization.child>
    <UML:Class xmi.idref="A.200"/>
  </UML:Generalization.child>
  <UML:Generalization.parent>
    <UML:Class xmi.idref="F.51"/>
  </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Criar_Vendedor" visibility="public"
xmi.id="A.206">
  <UML:Classifier.feature>
    <UML:Operation isAbstract="false" name="execute" visibility="public"
xmi.id="A.207">
      <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.208"/>

```

```

        </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Method xmi.id="A.209">
        <UML:Method.body>
            <UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.210"/>
        </UML:Method.body>
        <UML:Method.specification>
            <UML:Operation xmi.idref="A.207"/>
        </UML:Method.specification>
    </UML:Method>
</UML:Classifier.feature>
<UML:GeneralizableElement.generalization>
    <UML:Generalization xmi.idref="A.211"/>
</UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.211">
    <UML:Generalization.child>
        <UML:Class xmi.idref="A.206"/>
    </UML:Generalization.child>
    <UML:Generalization.parent>
        <UML:Class xmi.idref="F.51"/>
    </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Aceitar_Oferta" visibility="public"
xmi.id="A.212">
    <UML:Classifier.feature>
        <UML:Operation isAbstract="false" name="execute" visibility="public"
xmi.id="A.213">
            <UML:BehavioralFeature.parameter>
                <UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.214"/>
            </UML:BehavioralFeature.parameter>
        </UML:Operation>
        <UML:Method xmi.id="A.215">
            <UML:Method.body>
                <UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.216"/>
            </UML:Method.body>
            <UML:Method.specification>
                <UML:Operation xmi.idref="A.213"/>
            </UML:Method.specification>
        </UML:Method>
    </UML:Classifier.feature>
    <UML:GeneralizableElement.generalization>
        <UML:Generalization xmi.idref="A.217"/>
    </UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.217">
    <UML:Generalization.child>
        <UML:Class xmi.idref="A.212"/>
    </UML:Generalization.child>
    <UML:Generalization.parent>
        <UML:Class xmi.idref="F.51"/>
    </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Procurar_Item" visibility="public"
xmi.id="A.218">
    <UML:Classifier.feature>
        <UML:Operation isAbstract="false" name="execute" visibility="public"
xmi.id="A.219">
            <UML:BehavioralFeature.parameter>
                <UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.220"/>
            </UML:BehavioralFeature.parameter>
        </UML:Operation>
        <UML:Method xmi.id="A.221">
            <UML:Method.body>
                <UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.222"/>
            </UML:Method.body>
            <UML:Method.specification>
                <UML:Operation xmi.idref="A.219"/>
            </UML:Method.specification>
        </UML:Method>
    </UML:Classifier.feature>
    <UML:GeneralizableElement.generalization>
        <UML:Generalization xmi.idref="A.223"/>
    </UML:GeneralizableElement.generalization>

```

```

</UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.223">
  <UML:Generalization.child>
    <UML:Class xmi.idref="A.218"/>
  </UML:Generalization.child>
  <UML:Generalization.parent>
    <UML:Class xmi.idref="F.51"/>
  </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Informar_Comprador_Vendedor"
visibility="public" xmi.id="A.224">
  <UML:Classifier.feature>
    <UML:Operation isAbstract="false" name="execute" visibility="public"
xmi.id="A.225">
      <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.226"/>
      </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Method xmi.id="A.227">
      <UML:Method.body>
        <UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.228"/>
      </UML:Method.body>
    <UML:Method.specification>
      <UML:Operation xmi.idref="A.225"/>
    </UML:Method.specification>
  </UML:Method>
</UML:Classifier.feature>
<UML:GeneralizableElement.generalization>
  <UML:Generalization xmi.idref="A.229"/>
</UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.229">
  <UML:Generalization.child>
    <UML:Class xmi.idref="A.224"/>
  </UML:Generalization.child>
  <UML:Generalization.parent>
    <UML:Class xmi.idref="F.51"/>
  </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Rejeitar_Oferta" visibility="public"
xmi.id="A.230">
  <UML:Classifier.feature>
    <UML:Operation isAbstract="false" name="execute" visibility="public"
xmi.id="A.231">
      <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="return" type="H.5" xmi.id="A.232"/>
      </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Method xmi.id="A.233">
      <UML:Method.body>
        <UML:ProcedureExpression body="    return false;" language="java"
xmi.id="A.234"/>
      </UML:Method.body>
    <UML:Method.specification>
      <UML:Operation xmi.idref="A.231"/>
    </UML:Method.specification>
  </UML:Method>
</UML:Classifier.feature>
<UML:GeneralizableElement.generalization>
  <UML:Generalization xmi.idref="A.235"/>
</UML:GeneralizableElement.generalization>
</UML:Class>
<UML:Generalization xmi.id="A.235">
  <UML:Generalization.child>
    <UML:Class xmi.idref="A.230"/>
  </UML:Generalization.child>
  <UML:Generalization.parent>
    <UML:Class xmi.idref="F.51"/>
  </UML:Generalization.parent>
</UML:Generalization>
<UML:Class isAbstract="false" name="Simples_Negociacao" visibility="public"
xmi.id="A.236">
  <UML:Classifier.feature>

```

```

    <UML:Operation isAbstract="false" name="execute" visibility="public"
xmi.id="A.237">
    <UML:BehavioralFeature.parameter>
    <UML:Parameter kind="return" name="return" xmi.id="A.238">
    <UML:Parameter.type>
    <UML:Class xmi.idref="H.18"/>
    </UML:Parameter.type>
    </UML:Parameter>
    </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Method xmi.id="A.239">
    <UML:Method.body>
    <UML:ProcedureExpression body="    return null;" language="java"
xmi.id="A.240"/>
    </UML:Method.body>
    <UML:Method.specification>
    <UML:Operation xmi.idref="A.237"/>
    </UML:Method.specification>
    </UML:Method>
    </UML:Classifier.feature>
    <UML:GeneralizableElement.generalization>
    <UML:Generalization xmi.idref="A.241"/>
    </UML:GeneralizableElement.generalization>
    </UML:Class>
    <UML:Generalization xmi.id="A.241">
    <UML:Generalization.child>
    <UML:Class xmi.idref="A.236"/>
    </UML:Generalization.child>
    <UML:Generalization.parent>
    <UML:Class xmi.idref="F.1190"/>
    </UML:Generalization.parent>
    </UML:Generalization>
    <UML:Class isAbstract="false" name="Vendendo_Item" visibility="public"
xmi.id="A.242">
    <UML:Classifier.feature/>
    <UML:GeneralizableElement.generalization>
    <UML:Generalization xmi.idref="A.243"/>
    </UML:GeneralizableElement.generalization>
    </UML:Class>
    <UML:Generalization xmi.id="A.243">
    <UML:Generalization.child>
    <UML:Class xmi.idref="A.242"/>
    </UML:Generalization.child>
    <UML:Generalization.parent>
    <UML:Class xmi.idref="F.557"/>
    </UML:Generalization.parent>
    </UML:Generalization>
    <UML:Class isAbstract="false" name="Criando_Vendedores" visibility="public"
xmi.id="A.244">
    <UML:Classifier.feature/>
    <UML:GeneralizableElement.generalization>
    <UML:Generalization xmi.idref="A.245"/>
    </UML:GeneralizableElement.generalization>
    </UML:Class>
    <UML:Generalization xmi.id="A.245">
    <UML:Generalization.child>
    <UML:Class xmi.idref="A.244"/>
    </UML:Generalization.child>
    <UML:Generalization.parent>
    <UML:Class xmi.idref="F.557"/>
    </UML:Generalization.parent>
    </UML:Generalization>
    <UML:Class isAbstract="false" name="Informando_Venda" visibility="public"
xmi.id="A.246">
    <UML:Classifier.feature/>
    <UML:GeneralizableElement.generalization>
    <UML:Generalization xmi.idref="A.247"/>
    </UML:GeneralizableElement.generalization>
    </UML:Class>
    <UML:Generalization xmi.id="A.247">
    <UML:Generalization.child>
    <UML:Class xmi.idref="A.246"/>
    </UML:Generalization.child>
    <UML:Generalization.parent>
    <UML:Class xmi.idref="F.557"/>
    </UML:Generalization.parent>

```



```

    </UML:Generalization>
    <UML:Class isAbstract="false" name="Comprando_Item" visibility="public"
xmi.id="A.248">
      <UML:Classifier.feature/>
      <UML:GeneralizableElement.generalization>
        <UML:Generalization xmi.idref="A.249"/>
      </UML:GeneralizableElement.generalization>
    </UML:Class>
    <UML:Generalization xmi.id="A.249">
      <UML:Generalization.child>
        <UML:Class xmi.idref="A.248"/>
      </UML:Generalization.child>
      <UML:Generalization.parent>
        <UML:Class xmi.idref="F.557"/>
      </UML:Generalization.parent>
    </UML:Generalization>
    <UML:Class isAbstract="false" name="Procurando_Vendedor" visibility="public"
xmi.id="A.250">
      <UML:Classifier.feature/>
      <UML:GeneralizableElement.generalization>
        <UML:Generalization xmi.idref="A.251"/>
      </UML:GeneralizableElement.generalization>
    </UML:Class>
    <UML:Generalization xmi.id="A.251">
      <UML:Generalization.child>
        <UML:Class xmi.idref="A.250"/>
      </UML:Generalization.child>
      <UML:Generalization.parent>
        <UML:Class xmi.idref="F.557"/>
      </UML:Generalization.parent>
    </UML:Generalization>
  </UML:Namespace.ownedElement>
</UML:Package>

```

11

Anexo III – Exemplo Expert Committee

11.1.

MAS-ML XMI

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<XMI xmi.version="1.1" xmlns:MASML="org/MASML1.0" xmlns:UML="org/UML1.0">
  <XMI.header>
    <XMI.documentation>
      <XMI.exporter>MAS-ML Tool</XMI.exporter>
      <XMI.exporterVersion>0.5</XMI.exporterVersion>
    </XMI.documentation>
    <XMI.metamodel xmi.name="UML" xmi.version="1.4"/>
  </XMI.header>
  <XMI.content>
    <UML:Model isAbstract="false" name="Expert_Committee" visibility="public"
xmi.id="S.1">
      <UML:Namespace.ownedElement>
        <UML:Class isAbstract="false" name="Artigo" namespace="S.1"
visibility="public" xmi.id="S.2">
          <UML:Classifier.feature>
            <UML:Attribute name="areas" visibility="public" xmi.id="S.12">
              <UML:StructuralFeature.multiplicity>
                <UML:Multiplicity>
                  <UML:Multiplicity.range>
                    <UML:MultiplicityRange lower="1" upper="1"/>
                  </UML:Multiplicity.range>
                </UML:Multiplicity>
              </UML:StructuralFeature.multiplicity>
              <UML:Attribute.initialValue>
                <UML:Expression body="null"/>
              </UML:Attribute.initialValue>
              <UML:StructuralFeature.type>
                <UML:Classifier>
                  <UML:Namespace.ownedElement>
                    <UML:DataType xmi.idref="G.1"/>
                  </UML:Namespace.ownedElement>
                </UML:Classifier>
              </UML:StructuralFeature.type>
            </UML:Attribute>
            <UML:Attribute name="titulo" visibility="public" xmi.id="S.13">
              <UML:StructuralFeature.multiplicity>
                <UML:Multiplicity>
                  <UML:Multiplicity.range>
                    <UML:MultiplicityRange lower="1" upper="1"/>
                  </UML:Multiplicity.range>
                </UML:Multiplicity>
              </UML:StructuralFeature.multiplicity>
              <UML:StructuralFeature.type>
                <UML:Classifier>
                  <UML:Namespace.ownedElement>
                    <UML:DataType xmi.idref="G.2"/>
                  </UML:Namespace.ownedElement>
                </UML:Classifier>
              </UML:StructuralFeature.type>
            </UML:Attribute>
            <UML:Attribute name="instituicoes" visibility="public" xmi.id="S.14">
              <UML:StructuralFeature.multiplicity>
                <UML:Multiplicity>
                  <UML:Multiplicity.range>
                    <UML:MultiplicityRange lower="1" upper="1"/>
                  </UML:Multiplicity.range>
                </UML:Multiplicity>
              </UML:StructuralFeature.multiplicity>

```

```

    <UML:Attribute.initialValue>
      <UML:Expression body="null"/>
    </UML:Attribute.initialValue>
    <UML:StructuralFeature.type>
      <UML:Classifier>
        <UML:Namespace.ownedElement>
          <UML:DataType xmi.idref="G.3"/>
        </UML:Namespace.ownedElement>
      </UML:Classifier>
    </UML:StructuralFeature.type>
  </UML:Attribute>
  <UML:Attribute name="resumo" visibility="public" xmi.id="S.15">
    <UML:StructuralFeature.multiplicity>
      <UML:Multiplicity>
        <UML:Multiplicity.range>
          <UML:MultiplicityRange lower="1" upper="1"/>
        </UML:Multiplicity.range>
      </UML:Multiplicity>
    </UML:StructuralFeature.multiplicity>
    <UML:StructuralFeature.type>
      <UML:Classifier>
        <UML:Namespace.ownedElement>
          <UML:DataType xmi.idref="G.2"/>
        </UML:Namespace.ownedElement>
      </UML:Classifier>
    </UML:StructuralFeature.type>
  </UML:Attribute>
  <UML:Attribute name="autores" visibility="public" xmi.id="S.16">
    <UML:StructuralFeature.multiplicity>
      <UML:Multiplicity>
        <UML:Multiplicity.range>
          <UML:MultiplicityRange lower="1" upper="1"/>
        </UML:Multiplicity.range>
      </UML:Multiplicity>
    </UML:StructuralFeature.multiplicity>
    <UML:Attribute.initialValue>
      <UML:Expression body="null"/>
    </UML:Attribute.initialValue>
    <UML:StructuralFeature.type>
      <UML:Classifier>
        <UML:Namespace.ownedElement>
          <UML:DataType xmi.idref="G.3"/>
        </UML:Namespace.ownedElement>
      </UML:Classifier>
    </UML:StructuralFeature.type>
  </UML:Attribute>
  <UML:Operation isAbstract="false" name="getAutores" visibility="public"
xmi.id="S.17">
    <UML:BehavioralFeature.parameter>
      <UML:Parameter kind="return" name="getAutores.return" type="G.3"
xmi.id="XX.1"/>
    </UML:BehavioralFeature.parameter>
  </UML:Operation>
  <UML:Operation isAbstract="false" name="getInstituicoes" visibility="public"
xmi.id="S.18">
    <UML:BehavioralFeature.parameter>
      <UML:Parameter kind="return" name="getInstituicoes.return" type="G.3"
xmi.id="XX.2"/>
    </UML:BehavioralFeature.parameter>
  </UML:Operation>
  <UML:Operation isAbstract="false" name="getResumo" visibility="public"
xmi.id="S.19">
    <UML:BehavioralFeature.parameter>
      <UML:Parameter kind="return" name="getResumo.return" type="G.2"
xmi.id="XX.3"/>
    </UML:BehavioralFeature.parameter>
  </UML:Operation>
  <UML:Operation isAbstract="false" name="setAreas" visibility="public"
xmi.id="S.20">
    <UML:BehavioralFeature.parameter>
      <UML:Parameter kind="in" name="vAreas" type="G.3" xmi.id="XX.4"/>
      <UML:Parameter kind="return" name="setAreas.return" type="G.4"
xmi.id="XX.5"/>
    </UML:BehavioralFeature.parameter>
  </UML:Operation>

```

```

    <UML:Operation isAbstract="false" name="getAreas" visibility="public"
xmi.id="S.21">
    <UML:BehavioralFeature.parameter>
    <UML:Parameter kind="return" name="getAreas.return" type="G.3"
xmi.id="XX.6"/>
    </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Operation isAbstract="false" name="setResumo" visibility="public"
xmi.id="S.22">
    <UML:BehavioralFeature.parameter>
    <UML:Parameter kind="in" name="strResumo" type="G.2" xmi.id="XX.7"/>
    <UML:Parameter kind="return" name="setResumo.return" type="G.4"
xmi.id="XX.8"/>
    </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Operation isAbstract="false" name="setInstituicoes" visibility="public"
xmi.id="S.23">
    <UML:BehavioralFeature.parameter>
    <UML:Parameter kind="in" name="vInstituicoes" type="G.3" xmi.id="XX.9"/>
    <UML:Parameter kind="return" name="setInstituicoes.return" type="G.4"
xmi.id="XX.10"/>
    </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Operation isAbstract="false" name="getTitulo" visibility="public"
xmi.id="S.24">
    <UML:BehavioralFeature.parameter>
    <UML:Parameter kind="return" name="getTitulo.return" type="G.2"
xmi.id="XX.11"/>
    </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Operation isAbstract="false" name="setTitulo" visibility="public"
xmi.id="S.25">
    <UML:BehavioralFeature.parameter>
    <UML:Parameter kind="in" name="strTitulo" type="G.2" xmi.id="XX.12"/>
    <UML:Parameter kind="return" name="setTitulo.return" type="G.4"
xmi.id="XX.13"/>
    </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Operation isAbstract="false" name="setAutores" visibility="public"
xmi.id="S.26">
    <UML:BehavioralFeature.parameter>
    <UML:Parameter kind="in" name="vAutores" type="G.3" xmi.id="XX.14"/>
    <UML:Parameter kind="return" name="setAutores.return" type="G.4"
xmi.id="XX.15"/>
    </UML:BehavioralFeature.parameter>
    </UML:Operation>
    </UML:Classifier.feature>
    </UML:Class>
    <MASML:AgentClass isAbstract="false" name="Pesquisador" namespace="S.1"
visibility="public" xmi.id="S.3">
    <UML:Classifier.feature>
    <UML:Attribute name="fornece_revisores" stereotype="SS.1"
visibility="public" xmi.id="S.27">
    <UML:Attribute.initialValue>
    <UML:Expression body="false"/>
    </UML:Attribute.initialValue>
    <UML:StructuralFeature.type>
    <UML:Classifier>
    <UML:Namespace.ownedElement>
    <UML:DataType xmi.idref="G.1"/>
    </UML:Namespace.ownedElement>
    </UML:Classifier>
    </UML:StructuralFeature.type>
    </UML:Attribute>
    <UML:Attribute name="proposta_revisao" stereotype="SS.1" visibility="public"
xmi.id="S.28">
    <UML:Attribute.initialValue>
    <UML:Expression body="false"/>
    </UML:Attribute.initialValue>
    <UML:StructuralFeature.type>
    <UML:Classifier>
    <UML:Namespace.ownedElement>
    <UML:DataType xmi.idref="G.1"/>
    </UML:Namespace.ownedElement>
    </UML:Classifier>
    </UML:StructuralFeature.type>

```

```

        </UML:Attribute>
        <UML:Attribute name="analisa_conflito" stereotype="SS.1" visibility="public"
xmi.id="S.29">
        <UML:Attribute.initialValue>
        <UML:Expression body="false"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="analisa_conflitos" stereotype="SS.1"
visibility="public" xmi.id="S.30">
        <UML:Attribute.initialValue>
        <UML:Expression body="false"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="organiza_artigos" stereotype="SS.1" visibility="public"
xmi.id="S.31">
        <UML:Attribute.initialValue>
        <UML:Expression body="false"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="envia artigos_revisores" stereotype="SS.1"
visibility="public" xmi.id="S.32">
        <UML:Attribute.initialValue>
        <UML:Expression body="false"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="revisao" stereotype="SS.1" visibility="public"
xmi.id="S.33">
        <UML:Attribute.initialValue>
        <UML:Expression body="false"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="recebe_resultado" stereotype="SS.1" visibility="public"
xmi.id="S.34">
        <UML:Attribute.initialValue>
        <UML:Expression body="false"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>

```

```

        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="recebe_camera" stereotype="SS.1" visibility="public"
xmi.id="S.35">
        <UML:Attribute.initialValue>
        <UML:Expression body="false"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="submete_artigo" stereotype="SS.1" visibility="public"
xmi.id="S.36">
        <UML:Attribute.initialValue>
        <UML:Expression body="false"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="distribui_resultado_autor" stereotype="SS.1"
visibility="public" xmi.id="S.37">
        <UML:Attribute.initialValue>
        <UML:Expression body="false"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="recebe_artigo" stereotype="SS.1" visibility="public"
xmi.id="S.38">
        <UML:Attribute.initialValue>
        <UML:Expression body="false"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="instituicao" stereotype="SS.3" visibility="public"
xmi.id="S.39">
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.2"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="compromissos" stereotype="SS.3" visibility="public"
xmi.id="S.40">
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.3"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>

```

```

    <UML:Attribute name="area" stereotype="SS.3" visibility="public"
xmi.id="S.41">
    <UML:StructuralFeature.type>
    <UML:Classifier>
    <UML:Namespace.ownedElement>
    <UML:DataType xmi.idref="G.2"/>
    </UML:Namespace.ownedElement>
    </UML:Classifier>
    </UML:StructuralFeature.type>
    </UML:Attribute>
    <MASML:AgentAction name="Receber_Artigo" visibility="public" xmi.id="S.42"/>
    <MASML:AgentAction name="Distribuir_Artigos_Revisores" visibility="public"
xmi.id="S.43"/>
    <MASML:AgentAction name="Distribuir_Artigos_Revisao" visibility="public"
xmi.id="S.44"/>
    <MASML:AgentAction name="Receber_Resultado" visibility="public"
xmi.id="S.45"/>
    <MASML:AgentAction name="Organizar_Artigos" visibility="public"
xmi.id="S.46"/>
    <MASML:AgentAction name="Analisar_Conflitos" visibility="public"
xmi.id="S.47"/>
    <MASML:AgentAction name="Analisar_Proposta_Revisao" visibility="public"
xmi.id="S.48"/>
    <MASML:AgentAction name="Receber_Conflito" visibility="public"
xmi.id="S.49"/>
    <MASML:AgentAction name="Receber_Revisao" visibility="public"
xmi.id="S.50"/>
    <MASML:AgentAction name="Distribuir_Resultado_Autor" visibility="public"
xmi.id="S.51"/>
    <MASML:AgentAction name="Submeter_Artigo" visibility="public"
xmi.id="S.52"/>
    <MASML:AgentAction name="Analisar_Voto" visibility="public" xmi.id="S.53"/>
    <MASML:AgentAction name="Enviar_Camera" visibility="public" xmi.id="S.54"/>
    <MASML:AgentAction name="Receber_Conflitos" visibility="public"
xmi.id="S.55"/>
    <MASML:AgentAction name="Receber_Camera" visibility="public" xmi.id="S.56"/>
    <MASML:AgentAction name="Receber_Avaliacao_Revisao" visibility="public"
xmi.id="S.57"/>
    <MASML:AgentPlan name="Organizando_Artigos" visibility="public"
xmi.id="S.58">
    <MASML:AgentPlan.actions>
    <Action xmi.idref="S.46"/>
    <Action xmi.idref="S.43"/>
    </MASML:AgentPlan.actions>
    <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.31"/>
    </MASML:AgentPlan>
    <MASML:AgentPlan name="Recebendo_Proposta_Revisao" visibility="public"
xmi.id="S.59">
    <MASML:AgentPlan.actions>
    <Action xmi.idref="S.48"/>
    </MASML:AgentPlan.actions>
    <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.28"/>
    </MASML:AgentPlan>
    <MASML:AgentPlan name="Recebendo_Revisao" visibility="public" xmi.id="S.60">
    <MASML:AgentPlan.actions>
    <Action xmi.idref="S.50"/>
    </MASML:AgentPlan.actions>
    <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.33"/>
    </MASML:AgentPlan>
    <MASML:AgentPlan name="Recebendo_Conflito" visibility="public"
xmi.id="S.61">
    <MASML:AgentPlan.actions>
    <Action xmi.idref="S.49"/>
    </MASML:AgentPlan.actions>
    <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.27"/>
    </MASML:AgentPlan>
    <MASML:AgentPlan name="Recebendo_Resultado" visibility="public"
xmi.id="S.62">
    <MASML:AgentPlan.actions>
    <Action xmi.idref="S.54"/>
    <Action xmi.idref="S.45"/>
    </MASML:AgentPlan.actions>
    <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.34"/>
    </MASML:AgentPlan>
    <MASML:AgentPlan name="Recebendo_Avaliacao_Revisao" visibility="public"
xmi.id="S.63">

```

```

        <MASML:AgentPlan.actions>
        <Action xmi.idref="S.57"/>
    </MASML:AgentPlan.actions>
</MASML:AgentPlan>
<MASML:AgentPlan name="Submetendo_Artigo" visibility="public" xmi.id="S.64">
    <MASML:AgentPlan.actions>
    <Action xmi.idref="S.52"/>
    </MASML:AgentPlan.actions>
    <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.36"/>
    </MASML:AgentPlan>
    <MASML:AgentPlan name="Analisando_Conflitos" visibility="public"
xmi.id="S.65">
        <MASML:AgentPlan.actions>
        <Action xmi.idref="S.47"/>
        </MASML:AgentPlan.actions>
        <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.30"/>
        </MASML:AgentPlan>
        <MASML:AgentPlan name="Recebendo_Camera" visibility="public" xmi.id="S.66">
            <MASML:AgentPlan.actions>
            <Action xmi.idref="S.56"/>
            </MASML:AgentPlan.actions>
            <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.35"/>
            </MASML:AgentPlan>
            <MASML:AgentPlan name="Enviando_Artigos_Revisao" visibility="public"
xmi.id="S.67">
                <MASML:AgentPlan.actions>
                <Action xmi.idref="S.44"/>
                </MASML:AgentPlan.actions>
                <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.32"/>
                </MASML:AgentPlan>
                <MASML:AgentPlan name="Recebendo_Conflitos" visibility="public"
xmi.id="S.68">
                    <MASML:AgentPlan.actions>
                    <Action xmi.idref="S.49"/>
                    </MASML:AgentPlan.actions>
                    <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.29"/>
                    </MASML:AgentPlan>
                    <MASML:AgentPlan name="Distribuindo_Resultado_Autor" visibility="public"
xmi.id="S.69">
                        <MASML:AgentPlan.actions>
                        <Action xmi.idref="S.53"/>
                        <Action xmi.idref="S.51"/>
                        </MASML:AgentPlan.actions>
                        <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.37"/>
                        </MASML:AgentPlan>
                        <MASML:AgentPlan name="Recebendo_Artigo" visibility="public" xmi.id="S.70">
                            <MASML:AgentPlan.actions>
                            <Action xmi.idref="S.42"/>
                            </MASML:AgentPlan.actions>
                            <MASML:AgentPlan.goal stereotype="SS.1" xmi.idref="S.38"/>
                            </MASML:AgentPlan>
                        </UML:Classifier.feature>
                    </MASML:AgentClass>
                    <MASML:OrganizationClass isAbstract="false" isLeaf="false" isMain="true"
isRoot="false" name="Organizacao" namespace="S.1" visibility="public"
xmi.id="S.4">
                        <UML:Classifier.feature>
                        <UML:Attribute name="gerencia_artigos" stereotype="SS.1" visibility="public"
xmi.id="S.71">
                            <UML:Attribute.initialValue>
                            <UML:Expression body="true"/>
                            </UML:Attribute.initialValue>
                            <UML:StructuralFeature.type>
                            <UML:Classifier>
                            <UML:Namespace.ownedElement>
                            <UML:DataType xmi.idref="G.1"/>
                            </UML:Namespace.ownedElement>
                            </UML:Classifier>
                            </UML:StructuralFeature.type>
                        </UML:Attribute>
                        <UML:Attribute name="dataAceitacaoProposta" stereotype="SS.3"
visibility="public" xmi.id="S.72">
                            <UML:StructuralFeature.type>
                            <UML:Classifier>
                            <UML:Namespace.ownedElement>
                            <UML:DataType xmi.idref="G.2"/>

```



```

        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="dataEnvioCamera" stereotype="SS.3" visibility="public"
xmi.id="S.73">
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.2"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="membros" stereotype="SS.3" visibility="public"
xmi.id="S.74">
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.3"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="dataSubmissao" stereotype="SS.3" visibility="public"
xmi.id="S.75">
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.2"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="dataRecebimentoRevisao" stereotype="SS.3"
visibility="public" xmi.id="S.76">
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.2"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="dataRevisao" stereotype="SS.3" visibility="public"
xmi.id="S.77">
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.2"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="coordenador" stereotype="SS.3" visibility="public"
xmi.id="S.78">
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.5"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="dataEnvioRevisao" stereotype="SS.3" visibility="public"
xmi.id="S.79">
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.2"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="dataEnvioRespostaAutor" stereotype="SS.3"
visibility="public" xmi.id="S.80">

```

```

    <UML:StructuralFeature.type>
    <UML:Classifier>
    <UML:Namespace.ownedElement>
    <UML:DataType xmi.idref="G.2"/>
    </UML:Namespace.ownedElement>
    </UML:Classifier>
  </UML:StructuralFeature.type>
</UML:Attribute>
<UML:Attribute name="artigos" stereotype="SS.3" visibility="public"
xmi.id="S.81">
  <UML:StructuralFeature.type>
  <UML:Classifier>
  <UML:Namespace.ownedElement>
  <UML:DataType xmi.idref="G.3"/>
  </UML:Namespace.ownedElement>
  </UML:Classifier>
  </UML:StructuralFeature.type>
</UML:Attribute>
<UML:Attribute name="chair" stereotype="SS.3" visibility="public"
xmi.id="S.82">
  <UML:StructuralFeature.type>
  <UML:Classifier>
  <UML:Namespace.ownedElement>
  <UML:DataType xmi.idref="G.5"/>
  </UML:Namespace.ownedElement>
  </UML:Classifier>
  </UML:StructuralFeature.type>
</UML:Attribute>
<UML:Attribute name="dataRecebimentoConflito" stereotype="SS.3"
visibility="public" xmi.id="S.83">
  <UML:Attribute.initialValue>
  <UML:Expression body="sdasdad"/>
  </UML:Attribute.initialValue>
  <UML:StructuralFeature.type>
  <UML:Classifier>
  <UML:Namespace.ownedElement>
  <UML:DataType xmi.idref="G.2"/>
  </UML:Namespace.ownedElement>
  </UML:Classifier>
  </UML:StructuralFeature.type>
</UML:Attribute>
<UML:Attribute name="informe_artigos" stereotype="SS.5" visibility="public"
xmi.id="S.84">
  <UML:Attribute.initialValue>
  <UML:Expression body="true"/>
  </UML:Attribute.initialValue>
  <UML:StructuralFeature.type>
  <UML:Classifier>
  <UML:Namespace.ownedElement>
  <UML:DataType xmi.idref="G.1"/>
  </UML:Namespace.ownedElement>
  </UML:Classifier>
  </UML:StructuralFeature.type>
</UML:Attribute>
<MASML:AgentAction name="Gerenciar_Artigos" visibility="public"
xmi.id="S.85"/>
<MASML:AgentPlan name="Gerenciando_Artigos" visibility="public"
xmi.id="S.86">
  <MASML:AgentPlan.actions>
  <Action xmi.idref="S.85"/>
  </MASML:AgentPlan.actions>
</MASML:AgentPlan>
</UML:Classifier.feature>
</MASML:OrganizationClass>
<MASML:ObjectRoleClass isAbstract="false" name="Pacote_Revisao"
namespace="S.1" visibility="public" xmi.id="S.5">
  <UML:Classifier.feature>
  <UML:Attribute name="areas" visibility="public" xmi.id="S.87">
    <UML:StructuralFeature.multiplicity>
    <UML:Multiplicity>
    <UML:Multiplicity.range>
    <UML:MultiplicityRange lower="1" upper="1"/>
    </UML:Multiplicity.range>
    </UML:Multiplicity>
  </UML:StructuralFeature.multiplicity>
  <UML:Attribute.initialValue>

```

```

    <UML:Expression body="null"/>
  </UML:Attribute.initialValue>
  <UML:StructuralFeature.type>
    <UML:Classifier>
      <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.3"/>
      </UML:Namespace.ownedElement>
    </UML:Classifier>
  </UML:StructuralFeature.type>
</UML:Attribute>
<UML:Attribute name="titulo" visibility="public" xmi.id="S.88">
  <UML:StructuralFeature.multiplicity>
    <UML:Multiplicity>
      <UML:Multiplicity.range>
        <UML:MultiplicityRange lower="1" upper="1"/>
      </UML:Multiplicity.range>
    </UML:Multiplicity>
  </UML:StructuralFeature.multiplicity>
  <UML:StructuralFeature.type>
    <UML:Classifier>
      <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.2"/>
      </UML:Namespace.ownedElement>
    </UML:Classifier>
  </UML:StructuralFeature.type>
</UML:Attribute>
<UML:Attribute name="instituicoes" visibility="public" xmi.id="S.89">
  <UML:StructuralFeature.multiplicity>
    <UML:Multiplicity>
      <UML:Multiplicity.range>
        <UML:MultiplicityRange lower="1" upper="1"/>
      </UML:Multiplicity.range>
    </UML:Multiplicity>
  </UML:StructuralFeature.multiplicity>
  <UML:Attribute.initialValue>
    <UML:Expression body="null"/>
  </UML:Attribute.initialValue>
  <UML:StructuralFeature.type>
    <UML:Classifier>
      <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.3"/>
      </UML:Namespace.ownedElement>
    </UML:Classifier>
  </UML:StructuralFeature.type>
</UML:Attribute>
<UML:Attribute name="autores" visibility="public" xmi.id="S.90">
  <UML:StructuralFeature.multiplicity>
    <UML:Multiplicity>
      <UML:Multiplicity.range>
        <UML:MultiplicityRange lower="1" upper="1"/>
      </UML:Multiplicity.range>
    </UML:Multiplicity>
  </UML:StructuralFeature.multiplicity>
  <UML:Attribute.initialValue>
    <UML:Expression body="null"/>
  </UML:Attribute.initialValue>
  <UML:StructuralFeature.type>
    <UML:Classifier>
      <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.3"/>
      </UML:Namespace.ownedElement>
    </UML:Classifier>
  </UML:StructuralFeature.type>
</UML:Attribute>
  <UML:Operation isAbstract="false" name="getTitulo" visibility="public"
xmi.id="S.91">
    <UML:BehavioralFeature.parameter>
      <UML:Parameter kind="return" name="getTitulo.return" type="G.2"
xmi.id="XX.16"/>
    </UML:BehavioralFeature.parameter>
  </UML:Operation>
  <UML:Operation isAbstract="false" name="getAutores" visibility="public"
xmi.id="S.92">
    <UML:BehavioralFeature.parameter>
      <UML:Parameter kind="return" name="getAutores.return" type="G.3"
xmi.id="XX.17"/>

```

```

        </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Operation isAbstract="false" name="getInstituicoes" visibility="public"
xmi.id="S.93">
        <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="getInstituicoes.return" type="G.3"
xmi.id="XX.18"/>
        </UML:BehavioralFeature.parameter>
    </UML:Operation>
    <UML:Operation isAbstract="false" name="getAreas" visibility="public"
xmi.id="S.94">
        <UML:BehavioralFeature.parameter>
        <UML:Parameter kind="return" name="getAreas.return" type="G.3"
xmi.id="XX.19"/>
        </UML:BehavioralFeature.parameter>
    </UML:Operation>
</UML:Classifier.feature>
</MASML:ObjectRoleClass>
<MASML:AgentRoleClass isAbstract="false" name="Autor" namespace="S.1"
visibility="public" xmi.id="S.6">
    <UML:Classifier.feature>
    <UML:Attribute name="recebe_resultado" stereotype="SS.1" visibility="public"
xmi.id="S.95">
        <UML:Attribute.initialValue>
        <UML:Expression body="true"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
    </UML:Attribute>
    <UML:Attribute name="submete_artigo" stereotype="SS.1" visibility="public"
xmi.id="S.96">
        <UML:Attribute.initialValue>
        <UML:Expression body="true"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
    </UML:Attribute>
    <UML:Attribute name="artigo" stereotype="SS.3" visibility="public"
xmi.id="S.97">
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.6"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
    </UML:Attribute>
    <MASML:AgentAction name="Submeter_Artigo" stereotype="SS.7"
visibility="public" xmi.id="S.98"/>
    <MASML:AgentAction name="Enviar_Camera" stereotype="SS.9"
visibility="public" xmi.id="S.99"/>
    <MASML:AgentAction name="Receber_Resultado" stereotype="SS.7"
visibility="public" xmi.id="S.100"/>
    <MASML:AgentProtocol name="Protocolo" xmi.id="S.101">
        <MASML:AgentProtocol.messages>
        <MASML:AgentMessage receiver="S.9" sender="S.6">
            <MASML:AgentMessage.label>submete_artigo</MASML:AgentMessage.label>
            <MASML:AgentMessage.content>Artigo</MASML:AgentMessage.content>
        </MASML:AgentMessage>
        <MASML:AgentMessage receiver="S.9" sender="S.6">
            <MASML:AgentMessage.label>envia_camera</MASML:AgentMessage.label>
            <MASML:AgentMessage.content>camera</MASML:AgentMessage.content>
        </MASML:AgentMessage>
        </MASML:AgentProtocol.messages>
    </MASML:AgentProtocol>
</UML:Classifier.feature>

```

```

</MASML:AgentRoleClass>
<MASML:AgentRoleClass isAbstract="false" name="Coordenador" namespace="S.1"
visibility="public" xmi.id="S.7">
  <UML:Classifier.feature>
    <UML:Attribute name="fornece_revisores" stereotype="SS.1"
visibility="public" xmi.id="S.102">
      <UML:Attribute.initialValue>
        <UML:Expression body="true"/>
      </UML:Attribute.initialValue>
      <UML:StructuralFeature.type>
        <UML:Classifier>
          <UML:Namespace.ownedElement>
            <UML:DataType xmi.idref="G.1"/>
          </UML:Namespace.ownedElement>
        </UML:Classifier>
      </UML:StructuralFeature.type>
    </UML:Attribute>
    <UML:Attribute name="revisores" stereotype="SS.3" visibility="public"
xmi.id="S.103">
      <UML:StructuralFeature.type>
        <UML:Classifier>
          <UML:Namespace.ownedElement>
            <UML:DataType xmi.idref="G.3"/>
          </UML:Namespace.ownedElement>
        </UML:Classifier>
      </UML:StructuralFeature.type>
    </UML:Attribute>
    <MASML:AgentAction name="Fornecer_Revisores" stereotype="SS.7"
visibility="public" xmi.id="S.104"/>
    <MASML:AgentProtocol name="Protocolo" xmi.id="S.105">
      <MASML:AgentProtocol.messages>
        <MASML:AgentMessage receiver="S.9" sender="S.7">

<MASML:AgentMessage.label>envia_lista_revisores</MASML:AgentMessage.label>
        <MASML:AgentMessage.content>revisores</MASML:AgentMessage.content>
      </MASML:AgentMessage>
    </MASML:AgentProtocol.messages>
  </MASML:AgentProtocol>
</UML:Classifier.feature>
</MASML:AgentRoleClass>
<MASML:AgentRoleClass isAbstract="false" name="Membro" namespace="S.1"
visibility="public" xmi.id="S.8">
  <UML:Classifier.feature>
    <UML:Attribute name="analisa_conflito" stereotype="SS.1" visibility="public"
xmi.id="S.106">
      <UML:Attribute.initialValue>
        <UML:Expression body="true"/>
      </UML:Attribute.initialValue>
      <UML:StructuralFeature.type>
        <UML:Classifier>
          <UML:Namespace.ownedElement>
            <UML:DataType xmi.idref="G.1"/>
          </UML:Namespace.ownedElement>
        </UML:Classifier>
      </UML:StructuralFeature.type>
    </UML:Attribute>
    <MASML:AgentAction name="Receber_Conflito" stereotype="SS.7"
visibility="public" xmi.id="S.107"/>
    <MASML:AgentProtocol name="Protocolo" xmi.id="S.108">
      <MASML:AgentProtocol.messages>
        <MASML:AgentMessage receiver="S.8" sender="S.9">
          <MASML:AgentMessage.label>envia_conflitos</MASML:AgentMessage.label>
          <MASML:AgentMessage.content>conflitos</MASML:AgentMessage.content>
        </MASML:AgentMessage>
        <MASML:AgentMessage receiver="S.9" sender="S.8">
          <MASML:AgentMessage.label>envia_voto</MASML:AgentMessage.label>
          <MASML:AgentMessage.content>voto</MASML:AgentMessage.content>
        </MASML:AgentMessage>
      </MASML:AgentProtocol.messages>
    </MASML:AgentProtocol>
  </UML:Classifier.feature>
</MASML:AgentRoleClass>
<MASML:AgentRoleClass isAbstract="false" name="Chair" namespace="S.1"
visibility="public" xmi.id="S.9">
  <UML:Classifier.feature>

```

```

    <UML:Attribute name="recebe resultado_revisao" stereotype="SS.1"
visibility="public" xmi.id="S.109">
    <UML:Attribute.initialValue>
    <UML:Expression body="true"/>
    </UML:Attribute.initialValue>
    <UML:StructuralFeature.type>
    <UML:Classifier>
    <UML:Namespace.ownedElement>
    <UML:DataType xmi.idref="G.1"/>
    </UML:Namespace.ownedElement>
    </UML:Classifier>
    </UML:StructuralFeature.type>
    </UML:Attribute>
    <UML:Attribute name="organiza_artigos" stereotype="SS.1" visibility="public"
xmi.id="S.110">
    <UML:Attribute.initialValue>
    <UML:Expression body="true"/>
    </UML:Attribute.initialValue>
    <UML:StructuralFeature.type>
    <UML:Classifier>
    <UML:Namespace.ownedElement>
    <UML:DataType xmi.idref="G.1"/>
    </UML:Namespace.ownedElement>
    </UML:Classifier>
    </UML:StructuralFeature.type>
    </UML:Attribute>
    <UML:Attribute name="analisa_conflitos" stereotype="SS.1"
visibility="public" xmi.id="S.111">
    <UML:Attribute.initialValue>
    <UML:Expression body="true"/>
    </UML:Attribute.initialValue>
    <UML:StructuralFeature.type>
    <UML:Classifier>
    <UML:Namespace.ownedElement>
    <UML:DataType xmi.idref="G.1"/>
    </UML:Namespace.ownedElement>
    </UML:Classifier>
    </UML:StructuralFeature.type>
    </UML:Attribute>
    <UML:Attribute name="envia artigos_revisores" stereotype="SS.1"
visibility="public" xmi.id="S.112">
    <UML:Attribute.initialValue>
    <UML:Expression body="true"/>
    </UML:Attribute.initialValue>
    <UML:StructuralFeature.type>
    <UML:Classifier>
    <UML:Namespace.ownedElement>
    <UML:DataType xmi.idref="G.1"/>
    </UML:Namespace.ownedElement>
    </UML:Classifier>
    </UML:StructuralFeature.type>
    </UML:Attribute>
    <UML:Attribute name="recebe_artigo" stereotype="SS.1" visibility="public"
xmi.id="S.113">
    <UML:Attribute.initialValue>
    <UML:Expression body="true"/>
    </UML:Attribute.initialValue>
    <UML:StructuralFeature.type>
    <UML:Classifier>
    <UML:Namespace.ownedElement>
    <UML:DataType xmi.idref="G.1"/>
    </UML:Namespace.ownedElement>
    </UML:Classifier>
    </UML:StructuralFeature.type>
    </UML:Attribute>
    <UML:Attribute name="recebe_camera" stereotype="SS.1" visibility="public"
xmi.id="S.114">
    <UML:Attribute.initialValue>
    <UML:Expression body="true"/>
    </UML:Attribute.initialValue>
    <UML:StructuralFeature.type>
    <UML:Classifier>
    <UML:Namespace.ownedElement>
    <UML:DataType xmi.idref="G.1"/>
    </UML:Namespace.ownedElement>
    </UML:Classifier>

```

```

        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="distribui_resultado_autor" stereotype="SS.1"
visibility="public" xmi.id="S.115">
        <UML:Attribute.initialValue>
        <UML:Expression body="true"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.1"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="revisores" stereotype="SS.3" visibility="public"
xmi.id="S.116">
        <UML:Attribute.initialValue>
        <UML:Expression body="null"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.3"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="respostaAutores" stereotype="SS.3" visibility="public"
xmi.id="S.117">
        <UML:Attribute.initialValue>
        <UML:Expression body="null"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.3"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="artigosRevisores" stereotype="SS.3" visibility="public"
xmi.id="S.118">
        <UML:Attribute.initialValue>
        <UML:Expression body="null"/>
        </UML:Attribute.initialValue>
        <UML:StructuralFeature.type>
        <UML:Classifier>
        <UML:Namespace.ownedElement>
        <UML:DataType xmi.idref="G.3"/>
        </UML:Namespace.ownedElement>
        </UML:Classifier>
        </UML:StructuralFeature.type>
        </UML:Attribute>
        <MASML:AgentAction name="Receber_Artigo" stereotype="SS.7"
visibility="public" xmi.id="S.119"/>
        <MASML:AgentAction name="Distribuir_Artigos_Revisores" stereotype="SS.7"
visibility="public" xmi.id="S.120"/>
        <MASML:AgentAction name="Distribuir_Artigos_Revisao" stereotype="SS.7"
visibility="public" xmi.id="S.121"/>
        <MASML:AgentAction name="Organizar_Artigos" stereotype="SS.7"
visibility="public" xmi.id="S.122"/>
        <MASML:AgentAction name="Analisar_Conflitos" stereotype="SS.9"
visibility="public" xmi.id="S.123"/>
        <MASML:AgentAction name="Receber_camera" stereotype="SS.9"
visibility="public" xmi.id="S.124"/>
        <MASML:AgentAction name="Distribuir_Resultado_Autor" stereotype="SS.7"
visibility="public" xmi.id="S.125"/>
        <MASML:AgentAction name="Analisar_Voto" stereotype="SS.9"
visibility="public" xmi.id="S.126"/>
        <MASML:AgentAction name="Receber_Avaliacao_Revisao" stereotype="SS.7"
visibility="public" xmi.id="S.127"/>
        <MASML:AgentProtocol name="Protocolo" xmi.id="S.128">
        <MASML:AgentProtocol.messages>
        <MASML:AgentMessage receiver="S.10" sender="S.9">
<MASML:AgentMessage.label>envia_artigo_revisores</MASML:AgentMessage.label>

```

```

        <MASML:AgentMessage.content>artigos</MASML:AgentMessage.content>
    </MASML:AgentMessage>
    <MASML:AgentMessage receiver="S.10" sender="S.9">

<MASML:AgentMessage.label>envia_proposta_revisao</MASML:AgentMessage.label>
    <MASML:AgentMessage.content>Pacote_Revisao</MASML:AgentMessage.content>
    </MASML:AgentMessage>
    </MASML:AgentProtocol.messages>
    </MASML:AgentProtocol>
    </UML:Classifier.feature>
    </MASML:AgentRoleClass>
    <MASML:AgentRoleClass isAbstract="false" name="Revisor" namespace="S.1"
visibility="public" xmi.id="S.10">
    <UML:Classifier.feature>
        <UML:Attribute name="revisao" stereotype="SS.1" visibility="public"
xmi.id="S.129">
            <UML:Attribute.initialValue>
                <UML:Expression body="true"/>
            </UML:Attribute.initialValue>
            <UML:StructuralFeature.type>
                <UML:Classifier>
                    <UML:Namespace.ownedElement>
                        <UML:DataType xmi.idref="G.1"/>
                    </UML:Namespace.ownedElement>
                </UML:Classifier>
            </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="proposta_revisao" stereotype="SS.1" visibility="public"
xmi.id="S.130">
            <UML:Attribute.initialValue>
                <UML:Expression body="true"/>
            </UML:Attribute.initialValue>
            <UML:StructuralFeature.type>
                <UML:Classifier>
                    <UML:Namespace.ownedElement>
                        <UML:DataType xmi.idref="G.1"/>
                    </UML:Namespace.ownedElement>
                </UML:Classifier>
            </UML:StructuralFeature.type>
        </UML:Attribute>
        <UML:Attribute name="pacotesRecebidos" stereotype="SS.3" visibility="public"
xmi.id="S.131">
            <UML:Attribute.initialValue>
                <UML:Expression body="null"/>
            </UML:Attribute.initialValue>
            <UML:StructuralFeature.type>
                <UML:Classifier>
                    <UML:Namespace.ownedElement>
                        <UML:DataType xmi.idref="G.3"/>
                    </UML:Namespace.ownedElement>
                </UML:Classifier>
            </UML:StructuralFeature.type>
        </UML:Attribute>
        <MASML:AgentAction name="Analisar_Proposta_Revisao" stereotype="SS.7"
visibility="public" xmi.id="S.132"/>
        <MASML:AgentAction name="Receber_Revisao" stereotype="SS.7"
visibility="public" xmi.id="S.133"/>
        <MASML:AgentProtocol name="Protocolo" xmi.id="S.134">
            <MASML:AgentProtocol.messages>
                <MASML:AgentMessage receiver="S.9" sender="S.10">

<MASML:AgentMessage.label>resposta_proposta_revisao_aceita</MASML:AgentMessage.lab
el>
            <MASML:AgentMessage.content>resposta</MASML:AgentMessage.content>
            </MASML:AgentMessage>
            </MASML:AgentProtocol.messages>
            </MASML:AgentProtocol>
            </UML:Classifier.feature>
            </MASML:AgentRoleClass>
            <MASML:PassiveEnvironmentClass isAbstract="false" name="Conferencia"
namespace="S.1" visibility="public" xmi.id="S.11"/>
            <MASML:Play member="S.3" name="" played="S.8" player="S.4" xmi.id="L.1"/>
            <MASML:Play member="S.3" name="" played="S.9" player="S.4" xmi.id="L.2"/>
            <MASML:Play member="S.3" name="" played="S.6" player="S.4" xmi.id="L.3"/>
            <MASML:Play member="S.2" name="" played="S.5" player="S.4" xmi.id="L.4"/>
            <MASML:Play member="S.3" name="" played="S.7" player="S.4" xmi.id="L.5"/>

```



```

<MASML:Play member="S.3" name="" played="S.10" player="S.4" xmi.id="L.6"/>
<MASML:Inhabit citizen="S.4" environment="S.11" name="" xmi.id="L.7"/>
<MASML:Inhabit citizen="S.2" environment="S.11" name="" xmi.id="L.8"/>
<MASML:Inhabit citizen="S.3" environment="S.11" name="" xmi.id="L.9"/>
<UML:DataType name="void" visibility="public" xmi.id="G.0"/>
<UML:DataType name="Artigo" visibility="public" xmi.id="G.6"/>
<UML:DataType name="Pesquisador" visibility="public" xmi.id="G.5"/>
<UML:DataType name="Vector" visibility="public" xmi.id="G.3"/>
<UML:DataType name="String" visibility="public" xmi.id="G.2"/>
<UML:DataType name="" visibility="public" xmi.id="G.4"/>
<UML:DataType name="Boolean" visibility="public" xmi.id="G.1"/>
<UML:Stereotype name="Duty" xmi.id="SS.7">
  <UML:Stereotype.baseClass>S.98</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.100</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.104</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.107</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.119</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.120</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.121</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.122</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.125</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.127</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.132</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.133</UML:Stereotype.baseClass>
</UML:Stereotype>
<UML:Stereotype name="Right" xmi.id="SS.9">
  <UML:Stereotype.baseClass>S.99</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.123</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.124</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.126</UML:Stereotype.baseClass>
</UML:Stereotype>
<UML:Stereotype name="Axiom" xmi.id="SS.5">
  <UML:Stereotype.baseClass>S.84</UML:Stereotype.baseClass>
</UML:Stereotype>
<UML:Stereotype name="Goal" xmi.id="SS.1">
  <UML:Stereotype.baseClass>S.27</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.28</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.29</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.30</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.31</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.32</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.33</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.34</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.35</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.36</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.37</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.38</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.71</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.95</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.96</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.102</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.106</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.109</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.110</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.111</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.112</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.113</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.114</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.115</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.129</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.130</UML:Stereotype.baseClass>
</UML:Stereotype>
<UML:Stereotype name="Belief" xmi.id="SS.3">
  <UML:Stereotype.baseClass>S.39</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.40</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.41</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.72</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.73</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.74</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.75</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.76</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.77</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.78</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.79</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.80</UML:Stereotype.baseClass>
  <UML:Stereotype.baseClass>S.81</UML:Stereotype.baseClass>

```

```

    <UML:Stereotype.baseClass>S.82</UML:Stereotype.baseClass>
    <UML:Stereotype.baseClass>S.83</UML:Stereotype.baseClass>
    <UML:Stereotype.baseClass>S.97</UML:Stereotype.baseClass>
    <UML:Stereotype.baseClass>S.103</UML:Stereotype.baseClass>
    <UML:Stereotype.baseClass>S.116</UML:Stereotype.baseClass>
    <UML:Stereotype.baseClass>S.117</UML:Stereotype.baseClass>
    <UML:Stereotype.baseClass>S.118</UML:Stereotype.baseClass>
    <UML:Stereotype.baseClass>S.131</UML:Stereotype.baseClass>
  </UML:Stereotype>
</UML:Namespace.ownedElement>
</UML:Model>
<MASML:Diagram name="Diagrama Organizacao_1" xmi.id="D.1">
  <MASML:GraphElement.semanticModel>
    <MASML:SimpleSemanticModelElement typeInfo="OrganizationDiagram"/>
  </MASML:GraphElement.semanticModel>
  <MASML:GraphElement.contained>
    <MASML:GraphNode xmi.id="D.10">
      <MASML:GraphElement.position>
        <XMI.field>63</XMI.field>
        <XMI.field>414</XMI.field>
      </MASML:GraphElement.position>
      <MASML:GraphElement.size>
        <XMI.field>522</XMI.field>
        <XMI.field>851</XMI.field>
      </MASML:GraphElement.size>
      <MASML:GraphElement.semanticModel>
        <MASML:Masml1SemanticModelBridge xmi.id="DD.10">
          <MASML:Masml1SemanticModelBridge.element>
            <MASML:AgentClass xmi.idref="S.3"/>
          </MASML:Masml1SemanticModelBridge.element>
        </MASML:Masml1SemanticModelBridge>
      </MASML:GraphElement.semanticModel>
    </MASML:GraphNode>
  </MASML:GraphElement.contained>
  <MASML:GraphElement.contained>
    <MASML:GraphNode xmi.id="D.11">
      <MASML:GraphElement.position>
        <XMI.field>623</XMI.field>
        <XMI.field>90</XMI.field>
      </MASML:GraphElement.position>
      <MASML:GraphElement.size>
        <XMI.field>246</XMI.field>
        <XMI.field>300</XMI.field>
      </MASML:GraphElement.size>
      <MASML:GraphElement.semanticModel>
        <MASML:Masml1SemanticModelBridge xmi.id="DD.11">
          <MASML:Masml1SemanticModelBridge.element>
            <UML:Class xmi.idref="S.2"/>
          </MASML:Masml1SemanticModelBridge.element>
        </MASML:Masml1SemanticModelBridge>
      </MASML:GraphElement.semanticModel>
    </MASML:GraphNode>
  </MASML:GraphElement.contained>
  <MASML:GraphElement.contained>
    <MASML:GraphNode xmi.id="D.12">
      <MASML:GraphElement.position>
        <XMI.field>16</XMI.field>
        <XMI.field>22</XMI.field>
      </MASML:GraphElement.position>
      <MASML:GraphElement.size>
        <XMI.field>1074</XMI.field>
        <XMI.field>148</XMI.field>
      </MASML:GraphElement.size>
      <MASML:GraphElement.semanticModel>
        <MASML:Masml1SemanticModelBridge xmi.id="DD.12">
          <MASML:Masml1SemanticModelBridge.element>
            <MASML:AgentRoleClass xmi.idref="S.6"/>
          </MASML:Masml1SemanticModelBridge.element>
        </MASML:Masml1SemanticModelBridge>
      </MASML:GraphElement.semanticModel>
    </MASML:GraphNode>
  </MASML:GraphElement.contained>
  <MASML:GraphElement.contained>
    <MASML:GraphNode xmi.id="D.13">
      <MASML:GraphElement.position>
        <XMI.field>235</XMI.field>

```

```

<XMI.field>228</XMI.field>
</MASML:GraphElement.position>
<MASML:GraphElement.size>
<XMI.field>1260</XMI.field>
<XMI.field>395</XMI.field>
</MASML:GraphElement.size>
<MASML:GraphElement.semanticModel>
<MASML:Masml1SemanticModelBridge xmi.id="DD.13">
<MASML:Masml1SemanticModelBridge.element>
<MASML:AgentRoleClass xmi.idref="S.9"/>
</MASML:Masml1SemanticModelBridge.element>
</MASML:Masml1SemanticModelBridge>
</MASML:GraphElement.semanticModel>
</MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
<MASML:GraphNode xmi.id="D.14">
<MASML:GraphElement.position>
<XMI.field>50</XMI.field>
<XMI.field>312</XMI.field>
</MASML:GraphElement.position>
<MASML:GraphElement.size>
<XMI.field>1086</XMI.field>
<XMI.field>72</XMI.field>
</MASML:GraphElement.size>
<MASML:GraphElement.semanticModel>
<MASML:Masml1SemanticModelBridge xmi.id="DD.14">
<MASML:Masml1SemanticModelBridge.element>
<MASML:AgentRoleClass xmi.idref="S.8"/>
</MASML:Masml1SemanticModelBridge.element>
</MASML:Masml1SemanticModelBridge>
</MASML:GraphElement.semanticModel>
</MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
<MASML:GraphNode xmi.id="D.15">
<MASML:GraphElement.position>
<XMI.field>406</XMI.field>
<XMI.field>59</XMI.field>
</MASML:GraphElement.position>
<MASML:GraphElement.size>
<XMI.field>714</XMI.field>
<XMI.field>129</XMI.field>
</MASML:GraphElement.size>
<MASML:GraphElement.semanticModel>
<MASML:Masml1SemanticModelBridge xmi.id="DD.15">
<MASML:Masml1SemanticModelBridge.element>
<MASML:AgentRoleClass xmi.idref="S.10"/>
</MASML:Masml1SemanticModelBridge.element>
</MASML:Masml1SemanticModelBridge>
</MASML:GraphElement.semanticModel>
</MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
<MASML:GraphNode xmi.id="D.16">
<MASML:GraphElement.position>
<XMI.field>11</XMI.field>
<XMI.field>489</XMI.field>
</MASML:GraphElement.position>
<MASML:GraphElement.size>
<XMI.field>161</XMI.field>
<XMI.field>160</XMI.field>
</MASML:GraphElement.size>
<MASML:GraphElement.semanticModel>
<MASML:Masml1SemanticModelBridge xmi.id="DD.16">
<MASML:Masml1SemanticModelBridge.element>
<MASML:PassiveEnvironmentClass xmi.idref="S.11"/>
</MASML:Masml1SemanticModelBridge.element>
</MASML:Masml1SemanticModelBridge>
</MASML:GraphElement.semanticModel>
</MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
<MASML:GraphNode xmi.id="D.17">
<MASML:GraphElement.position>
<XMI.field>647</XMI.field>

```

```

    <XMI.field>188</XMI.field>
  </MASML:GraphElement.position>
  <MASML:GraphElement.size>
    <XMI.field>180</XMI.field>
    <XMI.field>167</XMI.field>
  </MASML:GraphElement.size>
  <MASML:GraphElement.semanticModel>
    <MASML:Masml1SemanticModelBridge xmi.id="DD.17">
      <MASML:Masml1SemanticModelBridge.element>
        <MASML:ObjectRoleClass xmi.idref="S.5"/>
      </MASML:Masml1SemanticModelBridge.element>
    </MASML:Masml1SemanticModelBridge>
  </MASML:GraphElement.semanticModel>
</MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.18">
    <MASML:GraphElement.position>
      <XMI.field>413</XMI.field>
      <XMI.field>200</XMI.field>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field>281</XMI.field>
      <XMI.field>268</XMI.field>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.18">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:OrganizationClass xmi.idref="S.4"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.19">
    <MASML:GraphElement.position>
      <XMI.field>55</XMI.field>
      <XMI.field>205</XMI.field>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field>678</XMI.field>
      <XMI.field>91</XMI.field>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.19">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:AgentRoleClass xmi.idref="S.7"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.110">
    <MASML:GraphElement.position>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.110">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:Inhabit xmi.idref="L.9"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.111">
    <MASML:GraphElement.position>
      <XMI.field/>

```

```

<XMI.field/>
</MASML:GraphElement.position>
<MASML:GraphElement.size>
<XMI.field/>
<XMI.field/>
</MASML:GraphElement.size>
<MASML:GraphElement.semanticModel>
<MASML:Masml1SemanticModelBridge xmi.id="DD.111">
  <MASML:Masml1SemanticModelBridge.element>
    <MASML:Inhabit xmi.idref="L.8"/>
  </MASML:Masml1SemanticModelBridge.element>
</MASML:Masml1SemanticModelBridge>
</MASML:GraphElement.semanticModel>
</MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
<MASML:GraphNode xmi.id="D.112">
  <MASML:GraphElement.position>
    <XMI.field/>
    <XMI.field/>
  </MASML:GraphElement.position>
  <MASML:GraphElement.size>
    <XMI.field/>
    <XMI.field/>
  </MASML:GraphElement.size>
  <MASML:GraphElement.semanticModel>
    <MASML:Masml1SemanticModelBridge xmi.id="DD.112">
      <MASML:Masml1SemanticModelBridge.element>
        <MASML:Inhabit xmi.idref="L.7"/>
      </MASML:Masml1SemanticModelBridge.element>
    </MASML:Masml1SemanticModelBridge>
  </MASML:GraphElement.semanticModel>
</MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
<MASML:GraphNode xmi.id="D.113">
  <MASML:GraphElement.position>
    <XMI.field/>
    <XMI.field/>
  </MASML:GraphElement.position>
  <MASML:GraphElement.size>
    <XMI.field/>
    <XMI.field/>
  </MASML:GraphElement.size>
  <MASML:GraphElement.semanticModel>
    <MASML:Masml1SemanticModelBridge xmi.id="DD.113">
      <MASML:Masml1SemanticModelBridge.element>
        <MASML:Play xmi.idref="L.4"/>
      </MASML:Masml1SemanticModelBridge.element>
    </MASML:Masml1SemanticModelBridge>
  </MASML:GraphElement.semanticModel>
</MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
<MASML:GraphNode xmi.id="D.114">
  <MASML:GraphElement.position>
    <XMI.field/>
    <XMI.field/>
  </MASML:GraphElement.position>
  <MASML:GraphElement.size>
    <XMI.field/>
    <XMI.field/>
  </MASML:GraphElement.size>
  <MASML:GraphElement.semanticModel>
    <MASML:Masml1SemanticModelBridge xmi.id="DD.114">
      <MASML:Masml1SemanticModelBridge.element>
        <MASML:Play xmi.idref="L.3"/>
      </MASML:Masml1SemanticModelBridge.element>
    </MASML:Masml1SemanticModelBridge>
  </MASML:GraphElement.semanticModel>
</MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
<MASML:GraphNode xmi.id="D.115">
  <MASML:GraphElement.position>
    <XMI.field/>

```

```

    <XMI.field/>
  </MASML:GraphElement.position>
  <MASML:GraphElement.size>
    <XMI.field/>
    <XMI.field/>
  </MASML:GraphElement.size>
  <MASML:GraphElement.semanticModel>
    <MASML:Masml1SemanticModelBridge xmi.id="DD.115">
      <MASML:Masml1SemanticModelBridge.element>
        <MASML:Play xmi.idref="L.2"/>
      </MASML:Masml1SemanticModelBridge.element>
    </MASML:Masml1SemanticModelBridge>
  </MASML:GraphElement.semanticModel>
</MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.116">
    <MASML:GraphElement.position>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.116">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:Play xmi.idref="L.1"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.117">
    <MASML:GraphElement.position>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.117">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:Play xmi.idref="L.6"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
<MASML:GraphElement.contained>
  <MASML:GraphNode xmi.id="D.118">
    <MASML:GraphElement.position>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.position>
    <MASML:GraphElement.size>
      <XMI.field/>
      <XMI.field/>
    </MASML:GraphElement.size>
    <MASML:GraphElement.semanticModel>
      <MASML:Masml1SemanticModelBridge xmi.id="DD.118">
        <MASML:Masml1SemanticModelBridge.element>
          <MASML:Play xmi.idref="L.5"/>
        </MASML:Masml1SemanticModelBridge.element>
      </MASML:Masml1SemanticModelBridge>
    </MASML:GraphElement.semanticModel>
  </MASML:GraphNode>
</MASML:GraphElement.contained>
</MASML:Diagram>
</XMI.content>
</XMI>

```