International trade

The following table (Table 1) presents how the main entities are modeled by using the appropriate classes. As can be seen, each distinct concept and entity is modeled using a different class. The business information is modeled using classes from well-known ontologies. The namespaces are presented in Table 3.

|  |  |
| --- | --- |
| **Concept/Entity** | **Class** |
| Trade Activity | elod:TradeActivity |
| Importing/exporting country | elod:GroupNationalAgent |
| Amount | elod:Amount |
| Commodity  Country  Currency | skos:Concept |

Table 1: The core classes of the proposed general model

The following table (Table 2) presents how the core classes are related with the appropriate properties.

|  |  |  |
| --- | --- | --- |
| **Domain** | **Property** | **Range** |
| - | elod:concerns | skos:Concept |
| elod:TradeActivity | elod:hasOrigin | elod:GroupNationalAgent |
| elod:TradeActivity | elod:hasDestination | elod:GroupNationalAgent |
| - | elod:amount | - |
| - | elod:hasCurrency | skos:Concept |
| - | elod:countryIsoCode | skos:Concept |
| skos:Concept | Skos:inScheme | skos:ConceptScheme |

Table 2: The interconnections among the classes using the appropriate properties

**Prefixes**

|  |  |  |
| --- | --- | --- |
| **Prefix** | **Namespace** | **Ontology name** |
| elod | http://linkedeconomy.org/ontology# | Linked Economy |
| skos: | http://www.w3.org/2004/02/skos/core# | SKOS Simple Knowledge Organization System |

Table 3: The namespaces

**Datatype Properties**

|  |  |  |
| --- | --- | --- |
| **Domain** | **Property** | **Range** |
| - | elod:financialYear | xsd:gYear |
| - | elod:hasCurrencyValue | xsd:float |
| skos:Concept | skos:altLabel | - |
| skos:Concept | skos:definition | - |
| skos:Concept | skos:notation | - |
| skos:Concept | skos:prefLabel | - |
| - | elod:valueAddedTaxIncluded | xsd:boolean |

Table 4: Datatype properties