**0: Outline**

**0.1: Mision**

**0.2: Vision**

**1.: Use Cases**

**1.1: Problem**

**1.2.: Solution**

**2.: Approach**

**2.1.: Augmentation Dataflow KB**

**2.2.: Ontology Matching**

**2.3.: Reactive Event Driven Architecture**

**3.: RDF: Introduction**

**4.: RDF Quads / Object Mapping (OGM)**

**5.: Models**

**5.1.: Contexts Quads Layers**

**5.2.: Meta Resources**

**5.3.: Meta Model**

Classes:

ID<ID>

Context<ID>

Message<Context>

Template<Message> : Augmentation Mapping range

Mapping<Template> : Functional Transform. Resource materialized results (query / assert: Dialogs)

Transform<Mapping> : Augmentation Mapping domain

Augmentation<Transform> : Resource is Augmentation Mapping Transform result / instance

Resource<Augmentation> : Augmentation Transform Mapping materialized result

Role<Resource> : CSPO Role

Statement<Role> : CSPO Quad

Model<Statement> : Set of Statements. Facets (Mappings)

Layers:

(ID, ID, ID, ID);

(Context, ID, ID, ID);

(Message, Context, ID, ID);

(Template, Message, Context, ID);

(Mapping, Template, Message, Context);

(Transform, Mapping, Template, Message);

(Augmentation, Transform, Mapping, Template);

(Resource, Augmentation, Transform, Mapping);

(Role, Resource, Augmentation, Transform);

(Statement, Role, Resource, Augmentation);

(Model, Statement, Role, Resource);

**5.3.1.: Facets**

**5.3.1.1.: Functional Facet**

(Statement, Role, Resource, Augmentation);

(Entity, Statement, Role, Resource);

(Kind, Entity, Statement, Role);

(Class, Kind, Entity, Statement);

(Flow, Class, Kind, Entity);

(Behavior, Flow, Class, Kind);

**5.3.1.2.: Semiotic Facet**

(Context, Sign, Concept, Object);

Object as Sign: Concepts represents attributes (DOM / OGM). Ontology Matching (shapes).

**5.3.1.3.: Dimensional Facet**

(Value, Previous, Distance, Next);

(Measure, Value, Previous, Distance);

(Unit, Measure, Value, Previous);

(Dimension, Unit, Measure, Value);

(Concept, Dimension, Unit, Measure);

**5.3.2.: Layer Levels**

**6.: ID: Context Reactive Abstraction**

**7.: Encoding**

Model Encoding: Property graph. Properties (prefix codes, key / value, reification). Sets, groups, categories. Functors applications: Transforms as graph navigation / browse. Template Message parsing (grammar, verbs, state flow). Contextual Quad Context ID: ID according occurrence in Statement context (normalized forms). Occurrence Context IDs indices / mappings.

**8.: Signatures**

**9.: Routes / Dataflow**

**10.: Event Bus**

**11.: Model I/O**

**11.1.: Messages: Events Transforms Declarations**

**11.2.: Layers / Facets Transforms**

**11.2.1.: Aggregation**

**11.2.2.: Alignment**

**11.2.3.: Activation**

**11.3.: Augmentation: Events Mappings Realizations**

**12.: Backend**

**12.1.: Model Containers**

**12.1.1.: Services**

**12.2.1.: Models Declarative Encoding**

**12.2.2.: Functional APIs / Services**

**12.3.: Persistence**