### **Technical Inspection Checklist**

For Multiagent Control of Traffic Signals

Version 1.0

Submitted in partial fulfillment of the requirements of the degree of MSE

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#### 1 Introduction

This document contains the checklist and references for performing a technical inspection of the MACTS project. The document also identifies the items that are being inspected and the inspectors.

#### 2 References

- All items to inspect can be found at: <a href="http://people.cis.ksu.edu/~bnehl/">http://people.cis.ksu.edu/~bnehl/</a>.
- Sample technical inspection cover letters can be found on Deepti Gupta's MSE website: <a href="http://mse.cis.ksu.edu/deepti/">http://mse.cis.ksu.edu/deepti/</a>. They are in the column labeled Phase 3.

### 3 Items to be Inspected

The following items from the System Architecture Design Document will be inspected:

- 1. System Architecture (Section 4)
  - Component Design (Section 4.1)
  - Component Interface Specification (Section 4.2)
  - System Analysis (Section 4.3)
  - High-Level Design (Section 4.4)
- 2. Mid-Level Design (Section 5)
- 3. Component Interaction (Section 6)
- 4. Models (Section 7)
- 5. Formal USE/OCL Model (Section 8)

## **4 Technical Inspectors**

- Denise Case
- Sindhu Thotakura

**5 Technical Inspection Checklist** 

5 Technical inspection Checkist				
Inspection Item	Pass/Fail/Partial	Comments		
The reason for each				
component is clear. (4.1)				
The component design				
diagrams legal correct UML				
elements.				
The rationale for the system				
architecture is clear (4.4)				
The symbols used in the class				
diagrams conform to UML 2.0				
The symbols used in the				
sequence diagrams conform to				
UML 2.0				
The symbols used in the				
component diagrams conform				
to UML 2.0				
The Component Interface				
Specification (Section 4.2)				
clearly explains the major				
public methods.				
The Analysis Class Diagram				
clearly describes the high-				
level relationships between				
model elements.				
The High-Level class diagram				
correctly shows how the				
system interfaces with SUMO.				
Classes in the USE/OCL				
model are consistent with				
classes in the UML diagrams.				
Attributes in the USE/OCL are				
consistent with classes in the				
UML diagrams.				
Associations in the USE/OCL				
are consistent with				
associations in the classes in				
the UML diagrams.				
Multiplicities in the USE/OCL				
model are consistent with the				
multiplicities on the				
associations in the UML				
diagrams.				