*NANOSIM*: A ROLE-PLAYING SIMULATION

OF THE NANOTECHNOLOGY TRADING ZONES

Risks Document Round 0

**Hypothesis**

A role playing simulation of the NNI (NanoSim) is a good environment for second year undergraduate students to learn:

* Problem-solving and decision-making skills
* Critical and analytical thinking
* Writing and communicating capabilities
* Multidisciplinary teamwork
* Creativity and moral imagination
* Focus on learning environment and community
* Technical curiosity and extra motivation for involvement in the subject
* Trading Zones

Develop software system that supports a role playing simulation with carefully thought educational purposes.

# Objectives

Stakeholders:

* Students
* Instructor
* Developers

# Constraints

* Time: 1 month
* The system must be easy to use, for second year undergraduate engineering students
* The system should support participant not being in the same geographical location

# Alternatives

* Adopt and modify current version
* Start from scratch
* Pay for a similar system available in the market

# Risks

* Objectives:
  + Product fails pedagogical goal
  + Product is not of easy use to the instructor and the students
  + Product is not of easy portability
* Time:
  + Not having a working system on time(Dic. 1 2009)
  + Not having enough time to do testing before the course in spring
* Design:
  + Taking bad design choices and commitments (in terms of tools, architecture, language, etc…)
  + Having incomplete requirements
* Software
  + Buggy software
  + Hard to maintain

# Risks resolution

* Working sessions with the instructor to define requirements
* Getting more experienced people on board
* Tools and architectures research