# Project Proposal: International Student Mobility Information Management System (ISMIMS)

## 1. Executive Summary

The International Student Mobility Information Management System (ISMIMS) is a comprehensive, centralized platform designed to streamline the complex lifecycle of international student exchange programs. By integrating four distinct enterprises— Universities (Home & Host), Government, and Corporate Partners—the system replaces fragmented manual processes with a unified, role-based workflow.

## 2. Problem Statement

Managing student mobility currently involves disjointed communication between disparate entities. Students struggle to track the status of applications, financial aid, and visas. Administrators face bottlenecks in verifying eligibility, processing nominations, and validating transcripts. A lack of synchronization between financial clearance and visa issuance often leads to delays or rejections.

## 3. System Architecture

The system is built on an **EcoSystem** architecture, organized hierarchically:

- **EcoSystem:** The root container managing all networks.

- **Network:** Represents a region (e.g., "Boston Network").

- **Enterprise:** Top-level entities (e.g., Northeastern University, US Government).

- **Organization:** Functional departments within an enterprise.

- **User Account/Role:** Individual actors with specific permissions and work areas.

## 3.1 Enterprise & Organization Structure

To ensure robust separation of duties and meet enterprise complexity requirements, every Enterprise contains at least two distinct Organizations:

| Enterprise Type | Organization 1 | Organization 2 | Additional Organizations |
|---|---|---|---|
| Home University | Application Processing (Mobility Officer) | Student Affairs (Student) | Financial Aid (Auditor), Registrar (Home Registrar) |
| Host University | International Admissions (Admissions Officer) | Registrar (Host Registrar) | – |
| Government | Operations (Visa Specialist) | Legal Compliance (Legal Verifier) | – |

| Corporate | Talent Acquisition | Site Supervision | – |
| | (Recruiter) | (Site Supervisor) | |

# 4. Key Workflows

## 4.1 Study Abroad Application & Financial Clearance

1. **Submission:** Student applies for a specific program.
2. **Review:** Mobility Officer reviews eligibility.
3. **Parallel Trigger:** Upon approval, the system simultaneously:
   - Sends a NominationRequest to the **Host University**.
   - Sends a FinancialCalculationRequest to **Financial Aid**.
4. **Offer Package:** The Student receives an Admission Offer only after the Host admits them AND Financial Aid calculates their grant.
5. **Acceptance:** Student accepts the package, triggering the release of "Proof of Financial Support."

## 4.2 Visa Processing (Dependent Workflow)

- **Constraint:** The Visa workflow cannot begin until the Student accepts the offer and funds are released.
- **Processing:**
  1. Student submits a VisaSupportRequest.
  2. **Legal Verifier** validates background and financial proof.
  3. **Visa Specialist** issues the visa.

## 4.3 Post-Program Credit Transfer

1. **Host Verification:** The **Host Registrar** issues an official digital transcript for completed courses.
2. **Home Transfer:** The **Home Registrar** receives the verified transcript and converts credits to the local grading scale.

# 5. Stakeholders & Roles

- **Student:** Initiates requests, views status, accepts offers.
- **Mobility Officer:** Gatekeeper for applications; manages nominations.
- **Admissions Officer (Host):** Reviews external nominations.
- **Financial Auditor:** Calculates and approves funding.
- **Legal Verifier:** Performs background/financial compliance checks.
- **Visa Specialist:** Issues travel documents.
- **Registrars (Home & Host):** Manage academic records and credit transfer.
- **Corporate Recruiter:** Matches students with internships.
- **Site Supervisor:** Manages intern performance.