

## The McLeod Institute of Simulation Sciences (MISS) SCS Policy and Procedures (PaP)

### PART 1 Structure, Vision, Mission, and Activities

#### 1. Introduction

The McLeod Institute of Simulation Sciences (MISS) is an initiative of the Society for Modeling and Simulation International (SCS).

The Institute is named after Mr. John McLeod, the founder of the Society and the first editor of its journal, "Simulation."

The MISS consists of co-operating Centers active in professionalism, research, education, and knowledge dissemination in the modeling and simulation (M&S) domain.

Modeling and simulation (M&S) is an enabling technology for:

- *decision making* in system design, development, optimization, control, and acquisition, as well as for sensitivity analysis, planning, and prototyping,
- *understanding*,
- *education* and *training* to enhance decision making and/or motor skills,
- entertainment, as well as
- *supporting* real system operations or
- *enriching* real system operations.

#### 2. Structure

The MISS has a *Director* appointed by the Senior Vice-President of the SCS. It's two co-Vice-Directors are appointed by the Director of the MISS. It has an *Executive Committee* formed by the directors of the Centers of the MISS (not including the Directors of the Satellite Centers). The Executive Committee creates conditions in which the obligations of the member organizations can be fulfilled and the mission of the MISS is realized. See also Part 3, items 10.

#### 3. Vision

The MISS aims to provide an organizational structure that will serve to integrate and enrich, within its Centers, the activities of modeling and simulation expertise throughout the world.

#### 4. Mission

1. The mission of the MISS is to foster:

- The professionalism in modeling and simulation,
- The advancement of the art and science of M&S,
- The usage of M&S in all domains of applicability,
- The education, and
- The dissemination of M&S-related knowledge.

2. The mechanisms to achieve this mission include:

- Contributions to both the development of the profession and to its recognition within the scientific/technical community at large.
- Development and exchange of educational materials (e.g., model curricula, and lecture material) and teaching resources (e.g., software).
- Dissemination of M&S knowledge through publications and in conferences and seminars.
- Research projects carried out cooperatively by multiple organizations within the MISS.

## 5. Activities

The MISS provides a framework within which Centers interested in modeling and simulation can interact, share expertise, and work on problems of common interest.

Some noteworthy features of the MISS are as follows:

### 1. Professionalism:

- 1.1 The MISS endorses and promotes *professionalism* in M&S and cooperates with other professional organizations in activities promoting/enhancing professionalism in M&S.
- 1.2 The MISS supports *professional ethics* in M&S and cooperates with other professional organizations with same concern.

### 2. Education:

- 2.1 It provides a *forum* for the exchange of new ideas and approaches in modeling and simulation education and training.
- 2.2 It is concerned with the development of model *curriculum* for M&S education. Development of such a curriculum is also to ease exchange of students and faculty members at national and international level.
- 2.3 The *needs of modeling and simulation professionals* are likewise being addressed at some organizations with the creation of appropriate study materials.
- 2.4 *Student exchanges*, which enrich the learning experience, are encouraged.
- 2.5 The Centers of the MISS are encouraged to co-operate in producing *course material* for education and training in the modeling and simulation domain.

2.6 Theses work at Ph.D. and Masters level are encouraged on M&S.

### **3. Research:**

3.1 The MISS provides an excellent platform for networking for externally funded research. When preparing proposals for external funding, participating researchers have access to other researchers in the Centers of the MISS. Researchers in these Centers also benefit from increased opportunities to be included in other proposals.

3.2 Opportunities frequently exist for the exchange of faculty members and research staff between MISS Centers. The goal is to promote and facilitate co-operation and the formulation of collaborative projects among organizations at regional, national, and international levels.

3.3 The Centers of the MISS regularly exchange modeling and simulation software or serve as alpha and/or beta test sites for newly developed software. Organizations provide assistance to each other when problems arise in software development.

### **4. Dissemination of Knowledge:**

4.1 The Centers of the MISS organize and/or support SCS sponsored M&S conferences throughout the World.

4.2 The results of research projects in modeling and simulation carried out within the member organizations are regularly presented at conferences and published in Journals and SCS publications.

4.3 The MISS provides a platform for professional seminar speakers on M&S.

**PART 2****Benefits, Obligations, and Annual Report****6. Benefits**

1. Each Center is a preferred partner in the activities of the MISS as described in Part I, Section 5. Access to strong and complementary expertise in professionalism, education, research, and knowledge dissemination can be a major factor in the success of a Center of the MISS.
2. Each Center receives privileges equivalent to a Premier individual member which includes one copy each of the archival journal and the magazine of the SCS as well as access to the Publications Archive of the SCS.
3. Each Center can register at most two members of its executive (e.g., Director and co-Director) to any SCS-sponsored conference at the reduced active volunteer rate.
4. The members of each Center are included in the list of expertise updated annually on the Web site of the MISS.

**7. Obligations**

A member Center has certain obligations to the MISS, to the SCS and to the simulation profession.

**Minimal Requirements are:**

1. *Operating* in accordance to the terms of the SCS bylaws as specified by this PaP.
2. Supporting the code of professional *ethics* for simulationists of the SCS.
3. Maintaining a *Web site* to announce its activities and disseminate knowledge about them.
4. Preparing an *annual report* of its significant activities and authorizing its linking to the Web site of the MISS.
5. Submitting electronically a *list of its members and their expertise areas* at the same time as the annual report. (See: [example](#))
6. Sending a representative to the MISS *Annual Meeting*, which is held in conjunction with the Summer Simulation MultiConference.
7. Whenever legally possible, making all M&S related *publications* and research reports available on its Web site or sending soft or hard copies to other MISS Centers.

The members of a Center of the MISS are expected to have some **additional professional activities** such as:

1. Acceptance of *leadership responsibilities* in the SCS through election or appointment.
2. *Active participation* in SCS committees.
3. Fostering *closer collaboration* among the colleagues of MISS Centers and thereby strengthening the cohesion of the MISS.
4. *Exchanging experiences*, ideas and materials with other Centers of the MISS (e.g., publications, course material, research reports, software, and participation in MISS meetings).
5. *Actively supporting/organizing* SCS sponsored conferences and/or tracks/sessions within them.

## **8. Annual Report**

The Director of each MISS Center submits to the Director of the MISS, the last week of June of each year, an annual report in electronic format.

The annual report will then be a public document on the Web site of the MISS.

**PART 3****Membership in MISS****9. Current Centers**

At the time of the revision of the PaP (June 2003), the existing Centers, their Directors, and Associate Directors are the follows:

Belgium:

- Belgium Center, Prof. Ghislain Vansteenkiste, Ph.D.

Canada:

- Calgary Center, Prof Brian Unger, Ph.D.  
Prof. Ralph C. Huntsinger, Ph.D
- Ottawa Center,  
Prof. Tuncer Ören, Ph.D., Prof. Gabriel Wainer, Ph.D.  
Prof. Jean-Michel Thizy, Ph.D.
- Sudbury Center, Prof. Osman Abou Rabia, Ph.D.

China:

- Chinese BUAA Center, Prof. Chuanyuan Wen  
Prof. Xinreng Wang

France:

- Rouen INSA Center, Prof. Mhamed Itmi  
Prof. Jean-Pierre Pecuchet, Ph.D.
- Marseille LSIS Center, Prof. Norbert Giambaisi, Ph.D.  
Prof. Claudia Frydman, Ph.D.

Germany:

- Hamburg Center, Prof. Dietmar P.F. Moeller, Ph.D.  
Prof. Felix Breitenecker

Hungary:

- Hungarian Center, Prof. Andras Javor, Ph.D.

Italy:

- Genoa Center, Prof. Agostino G. Bruzzone  
Prof. Pietro Giribone
- Napoli Center, Mr. Mario Savastano

Latvia:

- Latvian Center, Prof. Yuri Merkuriev, Dr.habil. eng.  
Prof. Galina Merkueyeva, Dr.eng.

Mexico:

- Mexico Center, Prof. Stanislaw Raczynski  
Prof. Mario Acevedo, Ph.D

Poland:

- Polish Center, Prof Roman Bogacz, Ph.D.  
Prof Bobrowski Leon

UK:

- Edinburgh Center, Rob Pooly, Ph.D.
- DeMontfort Center, Prof Jonathon Blackledge, Ph.D.  
Prof Marwan Al-Akaidi, Ph.D.

USA:

- Chico Center, Prof. Roy E. Crosbie, Ph.D.  
Prof. Ralph C. Huntsinger, Ph.D
- Old Dominion Center, Prof. Ralph Rogers, Ph.D.  
Prof. Bowin Loftin

**10. Application****Who may apply?**

An organization already active in some or all types of activities specified in Part 1, item 5 may apply to become a Center of the

MISS.

### **How to Apply?**

An organization can apply to become a Center by sending a letter of application to the director of the MISS. The letter should identify the relevant areas in which it is active, list of its members and their expertise areas, and the URL of its Web site.

#### **11. Assessment**

The assessment of the application is done by the members of the Executive Committee of the MISS. Majority vote is required for the approval. The Director does not vote except in case of a tie. The decision is passed to the applicant organization by the Director of the MISS (with copy to the Senior Vice-President of the SCS). The approval of a membership is for two years.

#### **12. Renewal**

Membership is renewable biannually provided that the Center fulfills its obligations as specified in Part 2, item 7.

#### **13. Transition**

The MISS Centers established before the July 2003 Annual Meeting of the MISS will undergo a review process for possible extension of their status as MISS Center for two years. They are expected to fulfill their obligations, as specified in Part 2, items 7 and 8, for such an extension.

To expedite the review process e-mail can be used by the Director of the MISS. According to well established silence procedure, a Director who does not answer e-mail vote will be considered as fully supporting the proposition of the Director of the MISS.

The Centers which fulfill their obligations will be granted a two year status as MISS Center.

The Centers which do not fulfill their obligations and which do not provide an Annual Report that shows viability would be dropped from the list of the MISS Centers. A Center or its parent institution may also send a resignation designation to the Director of MISS network.

Termination of inactive MISS Centers is not the aim; rather a mechanism to keep high standards within the MISS.