

***SimSummit* – Shaping the Future of Modeling and Simulation**

Part 1 – Establishing the *SimSummit* Forum

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I. Introduction

SimSummit is a forum, comprised of many of the world's most prestigious modeling and simulation organizations, whose shared intention is no less than to *significantly advance the evolution of the modeling and simulation discipline, profession, industry, and market*. Established by consensus in 2002, the *SimSummit* forum has continued to meet opportunistically and to act systematically to influence modeling and simulation's topical agenda for the collective good of the modeling and simulation (M&S) community-of-practice (COP).^{1, 2}

¹ "Communities-of-practice are group of people who share a concern, a set of problems, or a passion about a topic and who deepen their knowledge and expertise in this area by interacting on an ongoing basis." A community of practice is a unique combination of three fundamental elements: a *domain* of knowledge which defines the set of issues, a *community* of people who care about this domain, and the shared *practice* that they are developing to be effective in their domain. M&S overall, or the sub-domains of M&S Technology, M&S Workforce Development, M&S Industrial Development or M&S Business Practice may be considered as domains for broad-based, collaborative communities of practice

² Cultivating Communities of Practice – A Guide to Managing Knowledge, Wenger, Etienne, Richard McDermott, and William M. Snyder, Harvard Business School Press, Boston, 2002.

In unpacking these aspirations, we employ the broadest possible M&S field-of-regard, over such dimensions as:

1. 'referent domains' (e.g., hard sciences, soft sciences, engineering, arts, representational schemas, etc.);
2. 'representational schemas' (e.g., mathematical schemas such as algebraic, differential and/or partial differential equations, boundary value problems; structural schemas such as network, and physical analogues; virtual schemas such as artifact-in-the-loop, etc.);
3. 'kinds of implementations' (e.g., discrete-event, continuous systems, boundary-value problems, finite element analysis, networks, etc. ... manifest in computer, electronics, gaming environments, etc.); and
4. 'model and simulation uses' (e.g., systems analysis, systems synthesis, training, operations, maintenance, education, entertainment, etc.)

In the account which follows, constituting Part 1 of a two-part series, we address:

- the circumstances, perceived need, opportunity and intention relevant to the inception of *SimSummit*;
- the qualifications and protocol whereby *SimSummit* has grown from its original 29 members to the

current 45 member organizations;
and

- the concept-of-operations governing *SimSummit* deliberations, determinations, and actions.

In Part II, we will address:

- an account of a few of the ways in which *SimSummit* has significantly influenced the modeling and simulation community-of-practice.

II. *SimSummit* Creation and Organization

The creation and organization of the *SimSummit* forum followed naturally from the circumstances of the M&S industry and the motivations of a few individuals to ameliorate some of the more obvious impediments to the prompt an efficient evolution of modeling and simulation to a state of maturity commensurate with similar technical information-industries. Following is a brief account of the inception, initialization, and organization of *SimSummit* in response to these circumstantial and motivational factors.

A. *SimSummit* Inception

In late winter of 2001-02, it seemed clear that Modeling and Simulation technology was coherent and comprehensive as a discipline, ubiquitous in its presence in widely disparate application domains, and powerful in its influence for a wide variety of uses. At the same time, modeling and simulation was not generally recognized as a full-fledged academic discipline, profession, industry, or economic market segment. In addition, the painfully apparent balkanization of M&S across its domains of application and employment (e.g. across industries, and sectors of government

departments, etc.) and the continued persistence of a variety of professional societies operating without effective collaboration, exacerbated the inhibition of modeling and simulation to emerge as a recognized discipline, profession, information-industry and market, consisting of well known products and services, exchanged efficiently among buyers and sellers.

Motivated by the frustrating, perennial, and inefficient posture of M&S, Dr. Bruce Fairchild – former President of the Society for Modeling and Simulation International [SCS] - encouraged fellow practitioners to engender some form of organization or activity from where the holistic, ecumenical, comprehensive, and widely efficacious nature of M&S could be seen, appreciated, and leveraged. In consequence of this motivation, the first *SimSummit* event was conducted on the 18th and 19th of July 2002, in association with the Summer Computer Simulation Conference (SCSC) in San Diego, CA (see Figure 1). The particular benefit of this first transaction was expected – and consequently was proved – 1) to educe the very considerable degree of common interest that exists even among relatively disparate organizations from Government, Industry, Professional Societies and Academia, involved in M&S of many styles for a wide variety of purposes in apparently exclusive application domains, and 2) to solidify to resolve to derive there-from the greatest possible collective benefit for the international M&S community-of-practice.³

³ Proceedings of that meeting are available on the *SimSummit* website at: http://www.sim-summit.org/Sim_Summit/Events2002.htm

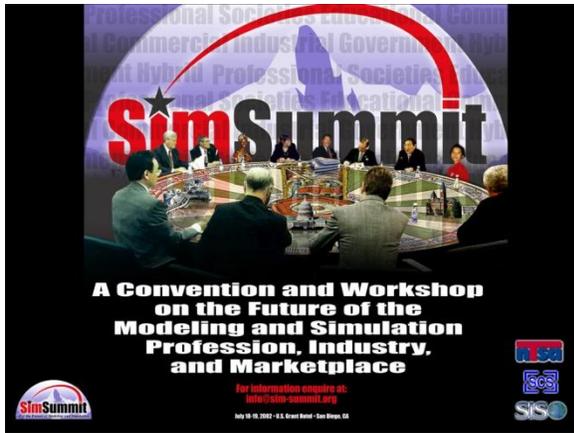


Figure 1 Announcement for the initial *SimSummit* event

B. *SimSummit* Organization

In view of the myriad simulation organizations already extant and the considerable duplication of membership of individuals in those organizations; it seemed imprudent to presume to create a new M&S organization, particularly one with meta-scope and influence. On the other hand, the convention of single individuals seemed unlikely to be influential in the long run; and it would, it seemed, foreclose any eventual emergence of persistent collaboration among existing organizations. Therefore, it was resolved by the event coordinators, to invite named individuals to represent their particular organization-of-affiliation in a consensus-based exploration of matters of interest to all and of significance to the common good.

In retrospect, while the similarity of form of the first *SimSummit* convocation to that of the American Constitutional Conventions is not unrecognizable, the intention that *SimSummit* have a marked international character was self-consciously explicit. In any event, this organizational precept has served for future *SimSummit* events and transactions remarkably well; especially

when combined with the precept of ‘necessary consensus’ discussed in relation to operational concepts below.

C. *SimSummit* Membership

In order to effectively solicit participation of member organizations, the protocol for participation of organizations as *SimSummit* members was formalized regarding: a) scope of organizational membership, b) roles of organizational member representatives, c) criteria for institutional membership, and d) process of application for institutional membership.

Membership is initiated by an official expression of interest by the applicant organization, indicating its role in the M&S community-of-practice and its interest in participating in the *SimSummit* forum. The contents of the membership application is forwarded to the *SimSummit* Executive Committee for disclosure to the Forum and prompt consideration and decision. Acceptance of the organization as a member of the forum is by consensus of existing member organizations as determined by the Executive Committee.

Organizational membership includes Academic, Government, and Professional Commercial organizations. Current organizational member-participants in *SimSummit* include:

EDUCATIONAL ORGANIZATIONS

- Arizona Center for Integrative Modeling and Simulation (ACIMS)
- Auburn Modeling & Simulation Group (AMSG)
- Georgia Tech – Modeling and Simulation Research & Education Center (MSREC)

- John Hopkins University – Applied Physics Laboratory (JHU/APL)
- McLeod Institute of Simulation Sciences (MISS)
- Old Dominion – Virginia Modeling, Analysis and Simulation Center (VMASC)
- University of Alabama in Huntsville – Center for Modeling, Simulation and Analysis (UAH CMSA)
- University of Central Florida – Institute for Simulation and Training (IST)

GOVERNMENT ORGANIZATIONS

- DND Future Forces Synthetic Environment (FFSE)
- DND Synthetic Environment Coordination Office (SECO)
- Defence & Science Technology Laboratories Synthetic Environment Efforts
- National Aeronautics & Space Administration (NASA)
- NATO Modelling & Simulation Group (NATO-MSG)
- National Institute of Standards & Technology (NIST)
- UK Directorate of Analysis, Experimentation and Simulation (DAES)
- U.S. Air Force Agency for Modeling and Simulation (AFAMS)
- U.S. Army / Battle Command, Simulation & Experimentation Directorate
- U.S. DoD / Defense Modeling and Simulation Office (DMSO)
- U.S. Marine Corps Technology Division

- U.S. Navy / Navy Modeling and Simulation Office (NMSO)

PROFESSIONAL/INDUSTRIAL SOCIETIES

- ACM Special Interest Group on Simulation (SIGSIM)
- Alabama Modeling and Simulation Council (AMSC)
- McLeod Modeling and Simulation Network (M&SNet)
- National Center for Simulation (NCS)
- National Modeling Analysis Simulation and Training Coalition (NMASTC)
- National Training Systems Association (NTSA)
- Simulation Interoperability Standards Organization (SISO)
- The Society for Modeling and Simulation International (SCS)

COMMERCIAL FIRMS

- AEGIS Technologies Group, Inc.
- The Boeing Company – Phantom Works
- CACI, Inc.
- CAE Professional Services
- Computer Sciences Corporation (CSC)
- Northrop Grumman
- RAM Laboratories, Inc.
- Raytheon Company
- Science Applications International Corporation (SAIC)
- Teledyne Brown Engineering
- UK SeBA Forum

The role of the *SimSummit* organization member representative is to speak with

authority on behalf of their participating organization respecting organizational needs, interests, initiative, and accomplishments in the evolution of the M&S community of practice.

Members organizations are expected to conform to established membership criteria. Criteria for institutional membership in *SimSummit* include consideration of: representativeness, stature, and commitment.

Representativeness related the degree to which candidate organizations are typical of the M&S community-of-practice. Stature relates to the degree to which the candidate organization is recognized as an influential member of the M&S COP. Commitment relates to the degree to which the candidate organization is willing to engage in the *SimSummit* agenda and support its activities and event transactions. For more detail on the subject criteria, see *SimSummit* web page⁴

The *SimSummit* forum has emerged according to the needs to collaborate effectively enough to precipitate environmental change while respecting the effective, disparate constraints for participation of wide variety existing institutions in substantive collaboration. Deliberate, persistent and self-conscious investment in cultivating the M&S community-of-practice is considered necessary and desirable in order to facilitate the emergence of M&S as a profession, industry, and market predicated on M&S technology in all its disparate manifestations

⁴ http://www.sim-summit.org/Sim_Summit/Content/4-Participation/1-Membership/2%20-%20Participating%20Organization%20Criteria.doc

SimSummit today is an occasional forum⁵ – kept relatively informal by mutual agreement - of organizations with broad interest in M&S technology, professional development, industry, and market.

D. *SimSummit* Mission and Goals

The overarching mission of *SimSummit* was expressed in the Introduction as “to significantly advance the evolution of the modeling and simulation discipline, profession, industry, and market.” This missionary purpose is presumed to be more readily achievable by implementation of the *SimSummit* collaborative forum, whereby the interests and efforts of broadly diverse and influential organizations may be brought to bear on problem-issues agreed by consensus to deserve attention and be likely efficacious.

Particular goals⁶ of *SimSummit* are:

1. to establish a comprehensive international forum of the most significant organizations in Modeling and Simulation;
2. to identify and maintain for the world-wide M&S community-of-practice a common ‘canonical’ topical agenda upon which cooperative effort may be focused;

⁵ Note that *SimSummit* has no legal standing as of a corporation, foundation, consortium, partnership, political body, or any other binding legal form such as a re commonly identified as a pseudo person and which can of itself accept enforceable responsibility or execute influential authority.

⁶ **Goals** - Target, intermediate, future states by which progress toward the purpose of the organization and achievement of its ultimate mission objective is progressively realized. Establishment of goals provides motivation and guidance of behavior toward a realizable and concrete objective.

3. to facilitate effective and constructive collaboration among member organizations and beyond, by means of participative events, publications, collaborative workspaces, and shared information assets; and
4. to realize a truly intervisible, comprehensive, self-conscious, and effective modeling and simulation community-of-practice.

E. *SimSummit* Concept-of-Operations

The concept-of-operations of the *SimSummit* enterprise consists of the fundamental precepts of the forum, its composite and participating entities, their behaviors, and such mechanisms for collaborative coordination and control as seem necessary to establish and maintain focus of purpose and accomplishment of particular goals and overarching mission.

Participation in the *SimSummit* enterprise by its organizational membership includes contributions to designated events and pursuant activities by Government, Commercial, Academic and Professional organizations.

F. *SimSummit* Leadership

Leadership^{7, 8} coordination is provided by an Executive Committee, populated by the senior executives of the three original sponsoring organizations, plus one *ad hoc* member. Original members of the *SimSummit* Executive Committee were:

- RADM Fred Lewis (USN Ret.) – Director, National Training Systems Association (NTSA) flewis@ndia.org
- Warren Katz – Chairman, Executive Committee of the Simulation interoperability Standards Organization (SISO) katz@mak.com
- Dr. François Cellier, President, the Society for Modeling and Simulation International (SCS) cellier@ece.arizona.edu, and
- Bill Waite, President, The AEGIS Technologies Group, Inc. BWaite@AEGISTG.com

Recent changes of administration of the sponsoring organizations have resulted in assumption of positions on the *SimSummit* Executive Committee by Dr. Katherine Morse (Katherine.Morse@jhuapl.edu) of Johns Hopkins University on behalf of SISO, and by Dr. Mohammad Obaidat (obaidat@monmouth.edu) of Monmouth University on behalf of the SCS.

G. *SimSummit* Management

Management decisions and direction are performed by the organizational membership at large operating as a Committee-of-the-Whole, assuming a protocol of one-organization-one vote, and striving whenever possible for unanimous consensus. General and administrative (G&A) operations are performed by the Executive Committee. Direct operations are routinely performed by the *SimSummit* member organizations structured as a Committee-of-the-Whole, or as organized into topical teams or committees as circumstances warrant. Occasional services are provided to the *SimSummit* collective by

⁷ Leadership – state of effecting influence.

⁸ Lead - conceive, motivate guide, conduct, and demonstrate by exemplary behavior *SimSummit* communications, effort, activity, and work product generation.

one or more of the participating member organizations on an “as-needed” basis.

Product generation results from the efforts of the Executive Committee in executing one or another general and administrative function; by the Committee-of-the-Whole in participating in events; or by one or another member organization in executing particular activities. Products and other useful information-assets are posted to the web site⁹ as appropriate.

H. *SimSummit* Brand Identity

Institutional designation of the *SimSummit* organization, its work-products, and its official correspondence is brand-designated by the logo of Figure 2, and by the phrase: “For the Future of Modeling and Simulation”.



Figure 2 – *SimSummit* Logo

III. *SimSummit* Activity

A. *SimSummit* Inaugural Event

The first *SimSummit* event was a structured workshop intended to identify shared concerns of simulators and to precipitate consideration of ways and means whereby organizations normally disparate and loosely coupled might collaborate more

⁹ www.Sim-Summit.org

systematically and efficiently for the common good. While a few concrete proposals were proffered at that event – and a few were subsequently pursued (including efforts to de-conflict the burgeoning number of simulation conferences sponsored by one or another organization); the first event was assumed to be the last of a ‘one-of’ experience. Requests from participating organizations, however, resulted in the conduct of more than twenty subsequent modest and opportunistic transactions, based on the tactic of overloading event proceedings of the sponsoring organizations with smaller, *SimSummit* meetings-of-convenience, culminating with the most recent on December 3, 2009 at the International / Inter-Service Training and Simulation Conference (I/ITSEC) sponsored by NTSA in Orlando. Proceedings of these events are available on the *SimSummit* website¹⁰. Analysis of participation indicates that as many as 174 individuals have participated in such events so far, and that the threaded discussion that ensued was highly correlated in time and has continued to be significantly focused on issues of import to the sample of organizations participating.

B. Realizing the Power of a Topical Agenda

One interesting consequence of this distributed process, was the emergence, in progressively finer detail of a baseline or ‘canonical’ agenda¹¹ to which *SimSummit* member organizations subscribed interest according to their wants, needs, and sensitivities. That topical agenda is

¹⁰ www.Sim-Summit.org/Sim_Summit/Events.htm

¹¹ http://www.sim-summit.org/Sim_Summit/TopicalAgenda.htm

suggested in Figure 3. The rows indicate topics classified as Technology, Workforce Development, Industrial Development, and Business Practice, represented succinctly and comprehensively the domain of concerns of the set of participating organizations (indicated in the matrix columns). No topics were ‘orphaned’; topics were found by survey to be important to an average of 15.5 organizations; and each organization indicated in the same survey its interest in an average of 14 topics.

Consequently, the topic-to-organization interest crosswalk matrix is about 45 % occupied, indicating high correlation and degree of common interest in consensus topical agenda.

The degree to which establishment / pursuit of a persistent topical agenda, appeared as an emergent property of the *SimSummit* forum with several beneficial qualities, namely:

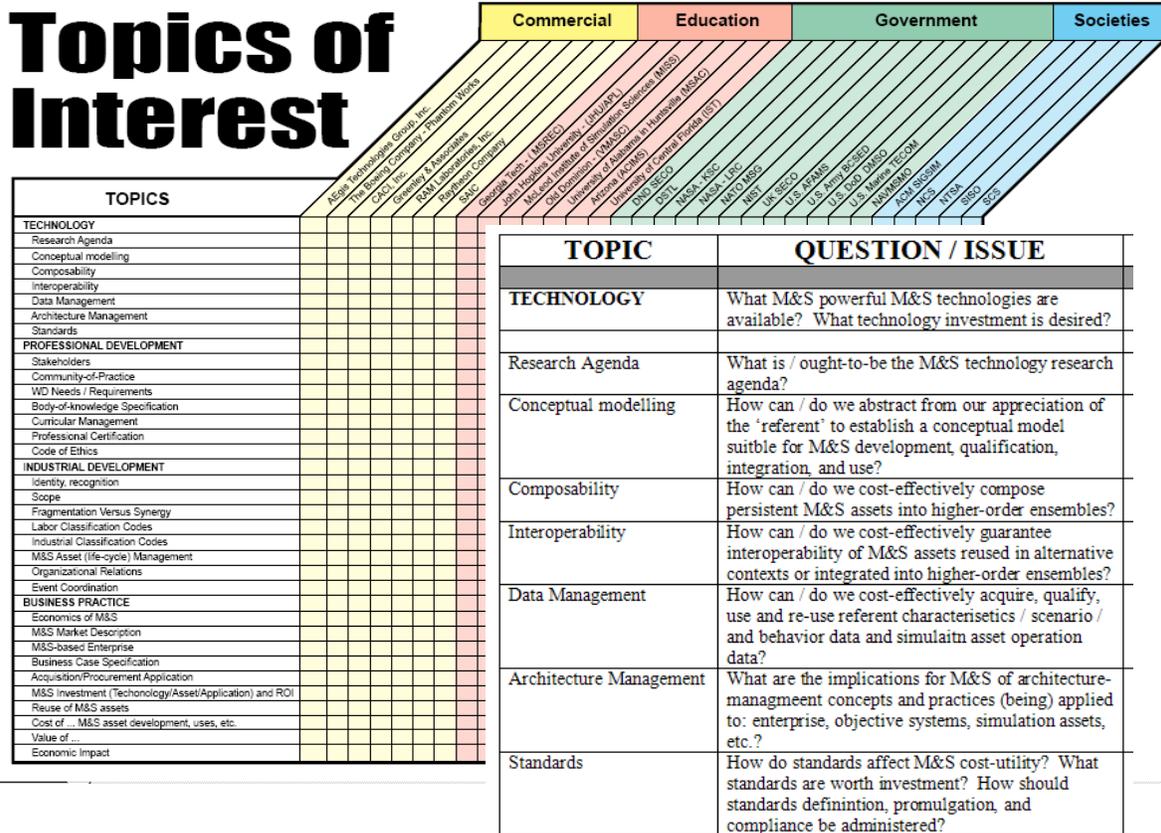


Figure 3 – *SimSummit* Topical Agenda

1. The agenda sensitized disparate *SimSummit* communities to significant shared issues and opportunities;

2. The agenda served to frame the domain of debate, decision, and action for subsequent *SimSummit* meeting events;
3. The agenda provided ‘hooks’ to which organizations and constituencies could

(and did) subscribe (common) interest; and most significantly;

4. The Agenda provided loci for programmatic commitment and coordination of cooperative effort.

One critical function of the agenda was to designate topical emphasis areas as necessary for establishment of M&S as discipline, profession, and industry. This served to operationalize the pursuit of the *SimSummit* mission. For instance, professional standing in medicine, law, engineering, and accounting has:

- A commitment to norms of conduct often prescribed in a code of ethics
- Professional education in a curriculum validated by a society through accreditation
- Registration of fitness to practice via voluntary certification or mandatory licensing
- Specialized skill development and continuing education
- Communal support via a professional society

It was no surprise that these topics (together with topics related to the peculiarities of the M&S technology and market) dominated discussion and collective activity.

It is important to note that in all cases of topical pursuit, the role of *SimSummit* has been (and is expected to be) that of facilitator and mediator among the active leadership and participation¹² of its member organizations. In some cases, topical initiatives were originated in context of

¹² **Participate** – to take an active part in, to share, contribute to *SimSummit* communications, effort, activity, and work product generation

member organizations, were subsequently adopted by *SimSummit* forum, and were thereafter subscribed to by *SimSummit* organizations in leader, participant, or observer¹³ roles. In other cases, topics may have been initiated by organizations formally outside the *SimSummit* forum, but considered so significant to *SimSummit* member organizations that the adoption of the topic into the *SimSummit* agenda seemed prudent. Alternatively, topics may have been originated within the *SimSummit* forum and deployed for action to interested stakeholder organizations and constituencies. In all cases, it is fair to consider that *SimSummit* has no exclusive proprietary or custodial role with respect to any topic in its agenda, nor any super-ordinate influence in the pursuit of such topics beyond that which manifest in the voluntary decision and action of its member organizations and others in the M&S community-of-practice.

Due deference is certainly intended to be accorded to individuals and organizations associated with agenda topics; nevertheless, in this paper, we are concerned primarily with the constructive meditative effect of the adoption of topics within the *SimSummit* topical agenda, and in Part II to follow with the concrete consequences of the pursuit of topical issues in that context.

In the sections that will be pursued in Part II of this series, efforts pursuant to identification of critical topics are described as indicative of *SimSummit* collaboration related to:

¹³ **Observe** – to view passively with opportunity to participate in *SimSummit* communications, effort, activity, and work product generation.

- 1) Promulgation of an M&S practitioner Code-of-Ethics;
- 2) Establishment of an M&S BOK Index,
- 3) Evolution of M&S curricular management;
- 4) Establishment of M&S professional certification;
- 5) Establishment of M&S industrial classification cods;
- 6) Conduct of M&S business practice; and
- 7) Influence on US Congressional Caucus “Leadership Summit” Meeting

For each of the illustrative effort areas, we indicate briefly:

- the nature of the topical issue or opportunity;
- the generative source of concern for the topic;
- the state of affairs regarding the topic to-date;
- *SimSummit*-specific activity specifically targeted to the topic, and
- materiel consequences of *SimSummit* attention to the topic.

IV. Conclusions

Conclusions pursuant to the preceding discussion of the establishment of *SimSummit* and the evocation of its canonical topical agenda contain both positive inferences and negative or cautionary ones. In the text following, we try to identify these lessons-learned in order to provide a basis for operation of *SimSummit* in the future, and to prepare the M&S community of practice for the likely evolution of the role of *SimSummit* as organizational relations continue to mature.

A. The ‘Good News’

From a positive perspective, the *SimSummit* experience has *de facto* corroborated the operational viability and progress validate the need and provisional CONOPS (concept-of-operations) of the organization. Practically, seven years of continual, constructive, and effective operation confirms the forum’s operational viability; while topical progress, however contingent on available or resources and continuity of effort of a volunteer population, has validated both the need and provisional CONOPS of *SimSummit*.

An existence proof of *SimSummit* consists in the successful establishment and promulgation of brand across a substantial segment of the M&S community-of-practice – corroborated by a considerable body of publications and public communications. Plausible viability is further confirmed by progressive growth, consistent with participating-member individuation and operational integrity, and freedom of discretionary posture on the part of organizations formally affiliated in the *SimSummit* round table enterprise.

Effective cooperation over diversity of organization types, national origin, application domain, simulation techniques, etc. confirms the *SimSummit* precept assumption of common intersection of interest in semantically significant topics despite particularity of participating organizations and individual representatives.

Paramount among the (not-unexpected) findings of the *SimSummit* experience is “The Power of a Topical Agenda”. No consequence of *SimSummit* activity has been at once so confirmatory of the enterprise’s presumptive precepts and so valuable as a

means of influence of cooperation across extremely diverse stakeholder constituencies as has been the identification, debate, and reification of specialized interests as the formulation, preservation, and promulgation of the *SimSummit* topical agenda.

B. Concerns and Issues

Notwithstanding the ‘good news’ cited above, there are clearly some significant concerns and issues with *SimSummit* as-is to serve a mechanism for influencing future evolution of the M&S discipline, profession, industry, and marketplace.

One concern relates to the diversity of scope of application domains (e.g. industrial sectors) represented among *SimSummit* member organizations. The accident of familiarity and readiness has resulted in an obvious and evidently pathological imbalance of commercial organizations with roots in defense and aerospace; as compared to broader representation including transportation, energy, medicine, education, commerce and finance, etc., - which is desired. While the content of the topical agenda has not, we believe, been biased to a similar degree; it is clear that a more ecumenical representation would serve both to guarantee a balanced meta-agenda, and to cultivate a more robust, diversity of members of the community-of-practice for the sake of continually improving sector involvement.

Another matter-of-fact that influences, as a root cause, the efficiency and efficacy of *SimSummit* participatory solicitation is the variable cohesion of M&S COP member organizations. Even with a given application domain or business sector, some organizations exhibit (or perceive) radically different degrees of self-conscious identity

and integrity of modeling and simulation cadre’s within their formal and informal organization. To the degree that such self-awareness is not present, establishing individual agents to serve as organizational representatives is substantially more difficult.

In a similar vein of perception of self-identity and operational cohesion, general national and language-specific societies and amalgams thereof (e.g. EUROSIM) are difficult to engage. This results partly from the perception that *SimSummit* is biased toward US interests despite its avowed international posture, and partly from the perception of defense emphasis on the part of potential international participants which may educe geo-political aversion fundamentally irrelevant to the objectives of the *SimSummit* enterprise. Such successes as have been achieved in international participation have been through personal familiarity and bonds of trust already established between individuals or inherited through the international adjuncts of professional societies or multinational firms.

Beyond participation inhibition, management and operational constraints, while necessary consequences of the precepts of *SimSummit*, nevertheless create difficulties for administration efficiency and efficacy. For instance, the unanimous consensus rule of *SimSummit*, necessary in order to conciliate participation of organizations which are not able to be bound by any other authority than their own acquiescence, implies softer findings, and requires extraordinary general and administrative overhead. This constraint, however, seems a small price to pay to allow organizational participation that might be otherwise foreclosed.

Finally, the lack of legal posture and consequent want of operating capital is inhibitive of aspirations, events, and activities by the *SimSummit* round table. This constraint too is a manifestation of the looseness of affiliation necessary to satisfy inhibitions to participation, and is, under the present circumstances and desire for ecumenical participation of commercial, government, academic and professional societies, a necessary condition.

C. Net Assessment

In short form, *SimSummit* works. It provides a diverse, persistent, stable, reputable, efficient, and productive forum for collaboration among existing organizations in the modeling and simulation community of practice.

On the other hand, in order to exist at all in its present form, *SimSummit* is peculiar with respect to membership solicitation mechanisms, bias in its membership application domains, necessity of consensus-building, and dependence on ‘contributions from the willing’ in a fundamentally volunteer organizational milieu. These peculiarities fundamentally proscribe concepts-of-operations and expectations for accomplishment of concrete influence agendas.

Finally, and while not strictly a pejorative outcome, the *SimSummit* experience to-date does invite consideration of questions about optimal suites of organizations within the modeling and simulation community-of-practice. *SimSummit* itself takes advantage of some of these types of organizations (e.g. regional industrial development organizations, academic and consortium research establishments, government legislative and executive organizations, etc.)

SimSummit also operates in context of national and multinational (e.g. EU and Asian) simulation societies. As a minimum, consideration of the desirability of the formation of an umbrella United States National Modeling and Simulation ‘covering organization (perhaps a charitable foundation)’ might not be worthwhile.

Author Biography

As Co-founder, Chairman, and Chief Technology Officer (CTO) of The AEgis Technologies Group, Bill Waite directs its staff in delivering a wide variety of modeling and simulation products and services. Mr. Waite has more than 35 years of professional hands-on experience in all phases of the M&S life cycle, and is currently active in the evolution of the M&S profession, industry, and marketplace. He serves on the Board of Directors of the Society for Modeling and Simulation International (SCS) and, he serves on the Advisory Council of the Modeling and Simulation Professional Certification Commission (M&SPCC), NTSA’s Standards Committee, and its Congressional Caucus Advisory Committee. Mr. Waite is currently the Chairman of the Board of the Alabama Modeling and Simulation Council (AMSC). He can be reached at: BWaite@AEgisTG.com.