

# The International Academy for Systems and Cybernetic Sciences



NOTE: THIS IS A FILE OF THREE DOCUMENTS:

- EXPLANATION OF BACKGROUND
- DRAFT STATUTES/BY LAW
- DRAFT CRITERIA FOR MEMBERSHIP

**Documents passed at the IFSR Board session in April 2010.**

## **EXPLANATION OF BACKGROUND**

### **1 Introduction**

The International Academy for Systems and Cybernetic Sciences (IASCYS) is supposed to be **a body of activity of the International Federation for Systems Research (IFSR)**.

IASCYS fills in the gap resulting from the failure of national and international academies of sciences and arts or learned societies (as British name this kind of organizations) **to include systems and cybernetic sciences** in their list of sciences and arts supposed to have their outstanding professionals included in academy membership. This situation makes systems and cybernetic sciences second class, although their contributions are enormous and backing many achievements in other sciences and **real life practices**.

IASCYS is aimed to honor and activate outstanding **members of IFSR member-associations**. While the traditional disciplines of science focus on their selected parts of the given reality of life and consider them from their more or less narrowly selected viewpoint/s, the **systems and cybernetics theories and practices deal with a world-view of holism**.<sup>1</sup> Thus we tend to help humans to use requisite holism and attain the requisite wholeness and thus to cover the left-aside empty spaces between the spaces covered by individual (and not co-operating) traditional sciences.

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1 Systems science ... is predominantly **a development in engineering sciences** in the broad sense, necessitated by the complexity of “systems” in modern technology .... Systems theory, in this sense, is **pre-eminently a mathematical field**, offering partly novel and highly sophisticated techniques ... and essentially determined by the requirement to cope with a new sort of problem that has been appearing.

What may be obscured in these developments – important as they are – is the fact that systems theory is a broad view which far transcends technological problems and demands, a reorientation that has become necessary in science in general and in the gamut of disciplines ... It ... heralds a new world view of considerable impact. **The student** in “systems science“ receives a technical training which makes systems theory – **originally intended to overcome current over-specialization** (exposure of these words by bolding is ours, M. Mulej) into another of the hundreds of academic specialities. ... (**von Bertalanffy, 1979, p. VII**).

It presents a novel “paradigm“ in scientific thinking ... the concept of system can be defined and developed in different ways as required by the objective of research, and as reflecting different aspects of the central notion.“ (Ibid., p. XVII).

“General systems theory“, then, is scientific explorations of “wholes“ and “wholeness“ which, not so long ago, were considered to be metaphysical notions **transcending the boundaries of science**. (Ibid., p. XX)...

“System“ problems are problems of interrelations of a great number of “variables”. (Ibid., p. XX).

“... models, conceptualizations and principles – as, for example, the concept of information, feedback, control, stability, circuit theory, etc. – by far transcend specialist boundaries, were **of an interdisciplinary nature...**” (Ibid., p. XX).

We know that **Norbert WIENER** and his co-workers have been working on an interdisciplinary basis before **Ludwig Von BERTALANFFY** wrote these crucial statements, as articles from **1943** prove.

Systems theories and cybernetics, in both theory and application, attain this mostly, although not in all applications of systemic and cybernetic principles, by enabling interdisciplinary creative Cooperation leading to insight into synergies and mastering of the processes and attributes of the given reality of life that the traditional sciences fail to cover. Thus, the otherwise resulting oversights tend to be replaced by new insights. This effort and its success tend to help humans as individuals, their organizations of any kind, and the entire humankind to attain more or even requisite holism of behavior, made of monitoring, perception, thinking, emotional and spiritual life, decision making, communication, and action, and therefore to attain more success and well being.<sup>2</sup>

Added to this document – statutes – are also the official criteria for membership in IASCYS.

**Nobody can run for membership in IASCYS as an individual, but only as a member in good standing of a member association of IFSR**, and everybody can be suggested by his or her member association of IFSR in an official letter (by traditional or e-mail) with all official data on the candidate's scientific and professional achievement that match criteria.

Data about IASCYS members shall be published on the IFSR web-site.

## 2 Basic Reasons for Establishment of IASCYS

We found several major reasons to establish IASCYS, including the following ones:

- To build a new **bridge among the IFSR member association** (that are 37 in Feb. 2010);
- To know the pool of the most qualified **scientists and practitioners** in the field covered by IFSR and its member associations, e.g. **in order to invite special speakers to conferences**, and so on;
- To make one more step toward recognition of systems and cybernetics as a science equal to the other sciences;
- To help the most distinguished members of the systems-and-cybernetics community receive recognition in this community and elsewhere, while most national academies of sciences and arts are rather closed to them, because they do not belong to the traditional sciences;
- To make the link between IFSR and its member associations with distinguished scientists and practitioners of systems and cybernetics strong and sustained.

Two IFSR board session, several Executive Committee (EC) sessions (mostly by e-mail, because EC meets face-to-face once a year), and many discussions with many members of IFSR member associations around the world helped us draft the following document in a process of many steps. Finally, at the IFSR Board session on 26 March 2008 in Vienna, Austria, IASCYS establishment was officially decided. Later one, several comments were received that are incorporated here.

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<sup>2</sup> The 2008-crisis and all other crises, including all world wars etc., **result from human failure to use systemic behaviour**, although many traditional sciences have been applied, but one-sidedly, unfortunately. Background of successes, on the other hand, has been (informal) holistic behaviour, although total holism/wholeness reaches beyond human capacity: we cannot cover totally all attributes from totally all perspectives/viewpoints.

# STATUTES of IASCYS



as drafted by the IFSR Executive Committee on 18 July 2009

after several months after submission of the foregoing draft to member associations  
+ a discussion with several outstanding candidates and interim board members in Jan. 2010



## Article 1 – Name and Seat

The International Federation for Systems Research (IFSR) establishes its **international non-profit association** called the International Academy for Systems and Cybernetics Science, hereafter so called the **IASCYS**.

1.1 IASCYS shall be governed by the same law as IFSR.

1.2 IASCYS's seat shall presently be established at the seat of IFSR.

Its seat can be transferred to any other place through a simple decision of the IFSR Board according to the law valid for IFSR.

## Article 2 – Purpose of IASCYS

2.1 Humankind of the current civilization is in serious trouble, because it has ruined its natural and social preconditions of existence. This results from a **too big power of one-sided specialization** with a poor care for the requisite holism of approach and requisite wholeness of outcomes of human actions; especially missing has been the one that could be best attained by **interdisciplinary creative co-operation** of several different specialists. **IASCYS should be a way of working of IFSR member associations**, aimed at helping humankind find a way out of its blind alley.

2.2 The purpose of IASCYS is **to provide a forum** for persons professionally excelling in System and Cybernetics **Research, Education and Practice** (S&C) on a distinguished level.

Criteria for membership admission are attached to these Statutes as a separate document.

2.3 More specifically, IASCYS has the purpose to:

- Honour the most distinguished S&C professionals.
- Promote **Ludwig von Bertalanffy's and Norbert Wiener's concept** that systems thinking is world view of holism of approach and wholeness of outcomes, **and methodology supportive** of this world view trying to build a bridge to holism/wholeness beyond and against the current over-specialization, while cybernetics apply it to control entities, processes and events of any type;
- Provide **an open, international and multi-cultural forum for the advancement of knowledge** about S&C and its application;
- Provide a network for presentations and evaluations of S&C results;
- Provide publication outlets for high quality results of S&C;
- Disseminate information and provide benchmarks for the assessment of S&C;
- Support young researchers** in the field of S&C and **promote international networks for post-graduate education** on S&C;
- Foster a broad variety of methodological approaches and research issues in S&C, and encourage cross-fertilization between approaches and research traditions;
- Develop **an agenda of innovative research topics** and promote the establishment of **collaborative research networks** in S&C and by application of S&C;
- And similar purposes if so decided by IASCYS bodies.

2.4 In order to realize its objectives, IASCYS shall be entitled to collect funds, receive donations and be sponsored, organize congresses in co-operation with IFSR member associations, create a web-site as a part of the IFSR web-site, publish a newsletter and all others documents concerning its purpose. IASCYS will take all initiatives permitting and **inviting members and other persons and legal entities** to contribute to realization of its purpose.

### **Article 3 – Membership of IASCYS**

3.1 Members are elected by IFSR Board among the most outstanding personalities in S&C world-wide on the basis of criteria mentioned in 2.2.

#### **Suggestions for membership come from IFSR member associations only.**

3.2 Every member in good standing in terms the membership fees (article 5) is allowed to participate at the IASCYS's General Assembly's voting, to receive all IASCYS's reports and communications since their issue, and to participate at all activities of IASCYS.

3.3 Membership can be terminated:

- Through the decision of the member himself or herself (three months after withdrawal has been signalled to the IASCYS's Executive Committee in writing);
- Automatically, if the membership fee remains unpaid, after the reminder, for a year from the beginning of the year to which the reminder refers;
- The IASCYS's Executive Committee can decide to exclude or suspend a member for serious breach. Prior to all decisions of suspension or exclusion the member must be given the opportunity to present his/her arguments. The member excluded by the IASCYS's Executive Committee can lodge an appeal with the IFSR Board.
- Decision and appeal shall be judged by ad-hoc arbitrage nominated by IFSR EC as a neutral body.

3.4 Those members who are no longer part of the IASCYS have no rights on IASCYS's funds.

### **Article 4 – IASCYS's General Assembly**

4.1 IASCYS General Assembly consists of the members of the IASCYS. It shall be convened by its Executive Committee every four years. Special meetings of the members may be called by the Executive Committee when deemed necessary due to the perceived needs of the IASCYS. In both cases, adequate agenda with the notice of at least 30 days shall be given by the Executive Committee. At the request of at least 20 percent of the members' special meetings can also be called.

4.2 The IASCYS's General Assembly holds all powers allowing the realization of the IASCYS's objectives. Especially the following are its concern:

- Approval of the accounts;
- Election and the removal of the chosen members of the Executive Committee;
- Modification of the statutes,
- Dissolution of the IASCYS.

4.3 The quorum of presence at the ordinary and extraordinary IASCYS's General Assemblies shall be composed of the majority of present members at those assemblies.

4.4 The IASCYS's General Assembly only validly confers, if 10% of its members are present. If this quorum is not reached, the next IASCYS's General Assembly will rule on the relevant issues no matter how many members are present, and can confer one hour later.

In the latter case, a voting about conclusions by electronic letters must take place in one week.

This is a duty of the Secretary General of IASCYS.

4.5 Each member is entitled to one vote. Except special majority required in the present statutes, decisions are taken by simple majority of the present votes.

4.6 Every member present at the IASCYS's General Assembly is entitled to vote on all the issues proposed to the IASCYS's General Assembly either by its Executive Committee or by IASCYS's members.

4.7 The IASCYS's General Assembly's decisions are written in a register held at the IASCYS's seat by the IASCYS's Secretary General, who shall keep it at the IFSR members associations' and IASCYS's members disposal.

4.8 The IASCYS's General Assembly convenes every four years, normally during the yearly conference, which an IFSR member association sponsors, or along with the biannual session of the IFSR Board.

4.9 Between two sessions of the IASCYS's General Assembly the work of IASCYS is supervised by the IFSR Executive committee (EC) and IFSR Board.

### **Article 5 – IASCYS's Management**

5.1 IASCYS shall be managed by IFSR Board via its EC in its establishment phase of two years, and later on by **IASCYS's General Assembly**, which elects its **Executive-Committee** of three to five members. Once IASCYS grows enough to introduce classes, deans of classes are members of the Executive Committee *ex officio*.

5.2 The President of the IASCYS's Executive Committee shall be the chief spokesman for IASCYS. She/he shall preside over all IASCYS's General Assemblies and Executive Committee Meetings. She/he shall be responsible for the monitoring of members' needs and co-ordination of the efforts of IASCYS members and officers. She/he is considered an *ex-officio* member of IFSR Executive Committee, if topics concerning IASCYS are on its agenda.

5.3 Up to 2 Vice Presidents can be elected by the IASCYS General Assembly to assist the President in the co-ordination of the IASCYS's activities in specific areas agreed upon by the Executive Committee.

5.4 The IASCYS's Secretary General is elected by the IASCYS's General Assembly upon suggestion of the President. She/he keeps the records and accounts of the IASCYS's and is **responsible for the IASCYS's day-to-day operations**.

**5.5 All IFSR member associations are encouraged to nominate or elect an officer in charge of their co-operation with IASCYS.**

5.6 The IASCYS's Secretary General shall in three months before the regular session of the General Assembly invite members to make nominations for posts falling vacant on the IASCYS's Executive Committee. Nominations for the posts of President shall include a short policy statement by the nominee, to be sent out together with the ballot. If more than one nominations for a post are submitted, an electronic ballot will be held prior to the session.

In the event of two or more candidates in the electronic ballot for any post tying for the first place, the successful candidate will be chosen from the list of these tied candidates by a secret ballot that will be held at the IASCYS's General Assembly. Each member present at the General Assembly is entitled to vote on all issues presented to the IASCYS's Assembly either by the IASCYS's Executive Committee or by the IFSR member associations or IFSR Board or IASCYS members.

5.7 Except the case of proxies, all IASCYS's actions shall be signed by the President and another member of the IASCYS's Executive Committee, who do not have to justify the powers endowed towards third parties.

5.8 The IASCYS's Executive Committee represented by its President or another member assigned follows up legal action as plaintiff as well as in the role of defendant.

5.9 The Executive Committee of IASCYS is responsible to the IASCYS's General Assembly for the day-to-day affairs of IASCYS including those to be handled through the Secretary General. It shall keep the IASCYS members and IFSR EC, Board and member associations informed on all main matters.

5.10 IFSR Board acts as the supervisory board of IASCYS.

### **Article 6 – Finance**

6.1 Members pay an annual membership fee, which is set and reviewed by the IASCYS's General Assembly.

6.2 Members whose dues are unpaid in the current year shall be dropped from the membership roll. Members who have retired from their jobs pay no fee.

6.3 IASCYS's Secretary General covers finances. Annual accounts shall be submitted to the members by the Executive Committee of IASCYS during the IASCYS's General Assembly.

6.4 Everybody is entitled to donate or endow to IASCYS and may demand no favors against their donations or endowments.

### **Article 7 – Amendments of the Statutes**

7.1 Amendments to these statutes are to be proposed by the IASCYS's Executive Committee or IFSR EC, Board, or member associations, and shall be operative, once approved by the majority of the members in vote during an IASCYS's General Assembly. Amendments can also be proposed at the request of at least 20%

of the members.

7.2 The IASCYS Executive Committee must submit the proposal for modification as it was formulated, to the members at least three months before the date of the IASCYS's General Assembly convention to rule on this modification.

7.3 The proposal or any modification thereof can only be adopted, if attaining two thirds of the votes of the members present or represented. These modifications will only become effective, if not opposing the law valid for IFSR.

#### **Article 8 – Dissolution of IASCYS**

8.1 The IASCYS's General Assembly can decide to dissolve IASCYS in accordance with the rules laid down for the modifications of the statutes. If dissolution is agreed, the IASCYS's General Assembly appoints an official liquidator, determines his or her powers and indicates the destination of possible profits from liquidation, implying that the beneficiary-(ies) should pursue objectives similar to those of IASCYS. If the General Assembly is not able to convene, the IASCYS's Executive Committee can take this decision. The first beneficiary is IFSR.

8.2 All that is not foreseen in the present statutes shall be governed by the law valid for IFSR.

## **Criteria for Membership in the International Academy for Systems and Cybernetics Sciences**



Candidates should fulfil SEVENTY SCORES from the following TEN CRITERIA for membership in the IASCYS. Then, **the IFSR member association should be entitled to submit application of its member with proving documents to the IFSR Board**. The decision on new membership should be up to the IFSR Board.

Criteria shall be quite precise and demanding to be appreciated by and appealing to the best scientists in the world in the area of systemics and cybernetics (S&C), theories and applications, and closely related fields in which IFSR member associations are active.

**Criteria are drafted as a system (= network of interdependent components)** and include:

1. Author of a **renown theory** in systems thinking and cybernetics, or sciences with clear historic roots in them, such as the ones in the International Encyclopaediaa of Systems and Cybernetics (Charles François, editor; Munich, Saur, 2004), or other renownencyclopaediass related to cybernetics and systems theory, such as UNESCO-EOLSS Encyclopaediaa of Life Support Systems), etc. An author's first renown theory may get 10 scores, the second 5 scores; the total scores in this criterion may be no more than 15.

2. a) Author or coauthor of **twenty scientific journal articles** in the ISCI/ISSCI cited journals on systems thinking and cybernetics, or sciences with clear historic roots in them, such as Systems Research (and Behavioral Science), Cybernetics and Systems, Kybernetes, Systems Practice and Action Research, etc. Journals on the official list cover topics such as in Encyclopaedia in criterion one. Every article may get 0.5 scores, the total scores in this criterion may be no more than 20.

b) A scientific article in 2.a) journals, but no more than ten, can be replaced with two **articles published in other journals**, or two **chapters in books** in topics of 2.a), while each article can get 0.25 scores, or with three **scientific conference papers**, which can get 0.10 scores each, if accepted after a usual blind review process of international conferences (co-)sponsored by IFSR member associations with international scientific boards and contributions, or other similar conferences and published in conference proceedings. The total score in this criterion may be no more than 5.

3. Author enjoying twenty **citations in journals** such as the ones mentioned in criterion two, according to official international statistics of citations. Each citation in 2.a) journals may get 0.2 scores. Each citation in group 2.b) publications may get 0.1 score. The total score for these items may be *no more than 15*.

4. Having a second or more doctorates is considered equivalent to *5* scores. Honorary doctorates do not count, unless awarded for extra-ordinary achievement in S&C and/or their application.

5. Organizer – **chair or co-chair** of ten **international conferences** with a usual blind review process and international scientific boards and contributions, that are (co-)sponsored by one or more IFSR member association/s. For each conference the chair can get 1.0 score, the co-chair may get 0.8 scores, the total scores in this criterion may be *no more than 15*.

6. **Editor or co-editor** of an **international journal**, such as the ones mentioned in criterion two and cited by ISCI and possibly (co-)published by one or more IFSR member association/s, serving for at least five years. Each year gives 2.0 scores. Other international journals related to cybernetics and systems research give 1.5 score for each year. The total score in this criterion may be *no more than 15*.

7. **Teaching** systems theory and cybernetics and/or their application/s, or sciences with clear historic roots in them, **abroad** or other renown universities for five semesters / terms.

**Consulting** on such a basis to organizations **abroad** on five appointments is considered equivalent. One semester or consulting appointment abroad may get 1.0 score, in the same country 0.5 score, the total scores in this criterion may be *no more than 15*.

8. Practical **application** of systems theory and cybernetics, or sciences with clear historic roots in them, in several countries with clear benefits to its users, such as innovation<sup>3</sup>. Five cases must be proven, at least. Each case may get 2.0 scores; the total scores in this criterion may be *no more than 16*.

9. Membership in a national or international **Academy of Sciences** (and Arts / Humanities), sometimes called Learned Societies, for five years. One membership per year may get 2.0 scores; the total scores in this criterion may be *no more than 14*.

10. Author or leading co-author of an **internationally translated/published or well-selling book** on systems theory and cybernetics or sciences with clear historic roots in them, such as the ones mentioned in criterion one. For one such published book one may get 10.0 scores, for the national publication 5.0 scores; the total score in this criterion may be *no more than 15*.

11. Active member of a IFSR member association or IFSR **board or Executive Committee** for five years, which means active service and/or active participation in its activities, such as conferences, journal editorial board, managing board, etc. For each of these activities one may get 2.0 scores per year; the total score in this criterion may be *no more than 16*.

12. If there are candidates for membership in IASCYS, who do not fulfil the above criteria, but have very special merits for development of the scientific and applied aspects of the systems and cybernetics sciences, the IFSR Board may nominate them honorary members of IASCYS. Criteria in point 13 must apply.

13. Criteria for honorary membership of IASCYS may be added or replace criteria in points 1 to 10 above. They include:

13.1 Establishment and/or more than twenty years of office in an IFSR member association and/or IFSR.

13.2 Authorship of unique contributions such as The International Encyclopaedia of Systems and Cybernetics, establishment and/or running a S&C related journal for 10 years at least, etc.

14. Procedure is the same as for all other member nominations, summarized in point 15.

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<sup>3</sup> By official international agreement (Frascati Manual 1971), **innovation** is every novelty causing a proven new benefit to its users and therefore also to its owners/authors (which cannot be attained on basis of a one-sided rather than requisitely holistic thinking, research, development, decision-making, marketing, production, etc., and practical application).

15. Data proving the candidate's achievements must be official, e.g. in university evidence, and certified by the IFSR member association that suggests its member to become IASCYS member. Data must be attached to the official application submitted to IFSR board.

**Ideas to complete both the IASCYS statutes and criteria for membership are welcome.**

Several ideas were created at the Fuschl conversation 2008. They are published separately and will be submitted for final decision to IFSR Board at its next session in 2010. They tackle more the work program than the IASCYS's statutes.

**First concrete activities of IASCYS**

Two shared interests and needs of IFSR member association were given priority in recent discussions:

1. Co-ordination of IFSR member associations **to create a basis of an internationally accepted frame-work curriculum** in systems and cybernetics;
2. Co-ordination of IFSR member associations to create an auditing process aimed at **validation and promotion of education** in systems and cybernetics.

Matjaz MULEJ  
President of IFSR  
26 February 2010

Link:

<http://ifsr.ocg.at/world/node/68>

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