International Council on Nanotechnology

Governance Structure and Operational Plan

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ICON’s Mission and Charter

The International Council on Nanotechnology (ICON) is an organization whose mission is to assess, communicate and reduce the environmental and health risks of nanotechnology while maximizing its societal value. It envisions a future where nanotechnology emerges as a responsible and valued industry with an effective and proactive approach to risk management. ICON is a technically driven organization whose activities are broadly supported by industry, non-profit foundations, and governments. Its multi-stakeholder partnerships and governance, with members that span the globe, make it uniquely positioned to ensure global coordination and cooperation in nanotechnology risk management.

Based at Rice University, ICON was started within the affiliates program of the federally funded Center for Biological and Environmental Nanotechnology (CBEN). In its current form, however, ICON operations and activities extend well beyond CBEN to include other national and international centers with an interest in its mission.

The management of ICON involves all stakeholders in the nanotechnology community in a flexible and transparent structure designed to respond to rapidly changing issues in the area. Decisions about ICON’s positions and priorities are made with balanced inputs from four stakeholder communities: government, academia, industry and non-governmental organizations. ICON sponsored activities are organized around projects in four areas of emphasis: forums and events to explore health and environmental risk issues in nanotechnology, an electronic knowledge base for accessing peer-reviewed publications in nanotechnology, high-quality technical information relevant to decision makers in nanotechnology and a proactive communications platform that translates complex scientific data into material easily understood by many stakeholders.

What follows is a discussion of the governance structure and operational plan for ICON.
1. Organizational Strategy

ICON’s organizational plan (see Figure 1) reflects its members’ conviction that risk management must be based on agreements among different stakeholders. For this reason, ICON relies on two governance committees, rather than individuals, to allocate resources, define ICON positions, prioritize ICON activities and plan ICON’s strategy. These decision-making and planning functions are divided between the larger Advisory Board and a smaller executive committee. The Advisory Board membership is carefully balanced to reflect the interests of all stakeholders in nanotechnology. A more detailed discussion about planning and resource allocation can be found in section 2.

The organizational chart also defines how ICON operates and addresses the challenges of keeping overhead and staff for the organization lean and effective. Crucial to ICON’s success is its ability to engage its members broadly in activities; their contribution of time, perspective and talent is the linchpin of ICON operations. ICON working groups are the place where such volunteer work happens. Though this volunteerism reinforces ICON’s core values by ensuring that activities are not defined by any one stakeholder, it presents operational challenges for coordination and communication amongst ICON members. Thus the staff of ICON, primarily the ICON Director and Operations Manager, are tasked with serving the working groups and governance committees to maximize the impact of ICON’s volunteers. A discussion of ICON operations and the duties of the various positions can be found in section 3.
2. ICON Governance Structure

Figure 1. ICON Organizational Chart

ICON strongly values the perspectives of diverse stakeholders and seeks input into its operations via an Advisory Board composed of individuals from different sectors and geographic locations. Figure 1 highlights the key elements of ICON’s governance and decision-making process; in keeping with our core emphasis on multi-stakeholder interactions, most decisions about project direction are made after consultation with this board. The smaller Executive Committee is primarily concerned with resource allocation; this group approves all ICON project funding requests and ongoing operational expenses. It also monitors the membership of the Advisory Board and has the capacity to stand up new committees as required.

The ICON Director is the chair of the Advisory Board and is an important bridge between the operational and governance processes in ICON. The Director manages and directs ICON to achieve the strategic objectives identified by its members. As Advisory Board Chair the Director is tasked with convening and running Advisory Board meetings, supporting Working Group activities and developing ICON’s financial resources. The Director is also part of the Executive Committee.

The ICON Executive Director is the chair of the Executive Committee and is the direct report for the Director. This position is focused on the long-term strategies of ICON and can be called on to represent ICON externally. The Executive Director evaluates the tactical plans laid out by the operational staff and monitors the staff’s progress against these plans on a bi-monthly basis. Additionally, Rice University houses ICON’s operations and this agreement requires the Executive Director to report annually all ICON activities to the university’s Vice Provost of Research.
The *Working Groups* of ICON play an important role in defining scope and objectives and evaluating outcomes for specific projects. The operational plan details the role of the *Working Groups* in the processes for both communications review and project funding.

The following sub-sections describe the activities of each of these entities in more detail. Note that all charters and descriptions are in effect as of 10/01/2009 until superseded by documents approved by the executive committee.
2A. Executive Committee Charter

*Purpose:* The Executive Committee (EC) serves as the authoritative body for the final approval of policy and financial decisions for ICON. Specific functions include authorization of sensitive communications, operational priorities and project budgets.

*Responsibilities*

1. Reviews periodically (at least monthly) the ICON budget and projected expenses.
2. Approves funding for ICON project proposals recommended by the Advisory Board.
3. Creates Working Groups as necessary to fulfill the mission of ICON.
4. Alters and revises the governance and operational plan as needed.

*Operations:* The EC is chaired by the Executive Director and will meet at least quarterly (face-to-face or via telephone) to consider project directions, governance and operational issues.

*Membership:* The EC will consist of the Director and Executive Director.
2B. Advisory Board Charter

**Purpose:** The Advisory Board (AB) serves as the advisory body for ICON strategic planning and participates in all Working Group activities. Specific functions include ongoing refinement of the project plans, the creation and review of working groups and recommendations to the EC for project proposal funding.

**Responsibilities**
1. Creates and removes Working Groups as necessary to fulfill the mission of ICON.
2. Oversees Working Groups and coordinates their activities.
3. Recommends projects for funding to the Executive Committee.

**Operations:** The AB will meet at least quarterly to discuss progress toward project objectives, provide advice on future directions and share news and information about events external to ICON. The Director will ensure that monthly-to-quarterly meetings are scheduled, poll members for agenda items, and provide meeting materials to all members three days prior to the meetings. The Director also will work with the Operations Manager to ensure that the meeting minutes are circulated soon after the meeting. The AB may agree to meet more frequently as the need arises. The Advisory Board will be chaired by the Director.

**Membership:** Membership in the AB requires individuals to declare their interest and be approved by the EC; individuals, or their designated representatives, must attend at least half of the annual AB meetings in order to stay active on the AB. Additionally, during some closed ICON face to face meetings throughout the year the Advisory Board may convene a session. During that period all individuals present will be official members of the Advisory Board and may be asked to vote and provide recommendations on selected projects.
2C. Director

Purpose: The organization requires several key individuals to maintain an effective external presence and manage internal coordination. The Director of ICON serves in both capacities. The Director chairs the Advisory Board, oversees the operational staff, and is responsible for delivering on the objectives outlined in the Strategic Plan. Additionally, the Director must grow and maintain ICON’s financial and volunteer resources. The Director coordinates recruiting of all stakeholder groups, and along with Executive Director serves as a contact for interested parties. The Director also identifies partners and collaborations for ICON projects and engages in government and foundation grant-writing to leverage ICON’s corporate funds.

Responsibilities:
1. Reports on ICON operations (budget, staff time, project status) to the Executive Director
2. Directs the Operations Manager and ensures effective operational systems.
3. Recruits and retains ICON partners (with the Executive Director).
4. Develops ICON’s action plans for meeting its objectives with input from the AB and Executive Director.
5. Develops ICON’s promotional campaign and marketing materials
6. Represents ICON activities to partners and key stakeholders (with the Executive Director)
7. Manages all contract discussions and membership agreements through Rice.
8. Develops ICON’s resources from governments and foundations (grant-writing)
9. Identifies new ICON activities to the Working Groups and Advisory Board
10. Provides timely and informative written capsules for web (and print) publications of ICON updates, events and general news.

Scope of position: The Director is funded through ICON and the extent of funding is tied to the expansion of ICON’s financial base through enhanced recruitment and fundraising activities. The Director will convene ICON operational meetings and will travel frequently to promote ICON activities. The Director must have a technical background that can support grant writing activities in nanotechnology and EH&S issues and also possess the interpersonal and communications skills necessary for new member recruiting in all stakeholder groups. Additionally, the Director must have excellent managerial and organizational skills.

Review and management: The Director reports to the Executive Director on a bimonthly basis for a review of progress on specific activities such as grant-writing, trips for ICON visibility, partnership development and membership recruiting. Ultimately, the Executive Director will evaluate annually the Director’s job performance.

Clarification of job duties: The Director is critical to both the external and internal culture of ICON. Internally, the Director oversees operational issues and monitors the ICON budget on a weekly basis; in this capacity the Director has substantial staff help, through the Operations Manager, as well as on occasion CBEN staff. The Director, along with the Executive Director, is the public face of ICON and in this role is pivotal to member recruiting in all categories.
2D. ICON Executive Director

Purpose: The Executive Director has a key strategic role within ICON and has the ultimate responsibility for ICON’s budget and operations. This person, who is not paid by ICON, represents the organization externally and to the administration of Rice University. The Executive Director also approves all operational plans put forward by the Director, and evaluates the Director’s performance on an annual basis.

Responsibilities:
1. Works with the Director and AB members to develop the overarching objectives for ICON
2. Edits and approves the Director’s action plans for meeting ICON’s strategic objectives
3. Chairs Executive Committee meetings
4. Oversees the Director’s role and monitors the operational effectiveness of ICON systems
5. Approves Working Group requests for ‘in-house’ staff time for project preparation
6. Recruits and retains ICON partners (with the Director)

Scope of position: The Executive Director is not a funded ICON position and as such carries little responsibility for implementation of ICON plans. The Executive Director is responsible for approving the operational and tactical plans which drive the Director and operational staff.

Review and appointment: Given the history of ICON, the ICON Executive Director and the CBEN Director are necessarily the same individual. Such an arrangement has historically permitted ICON to access substantial amounts of volunteer time for key activities (e.g. recruiting) as well as locate its operations on a university campus in a neutral setting with cost-effective infrastructure. Because of this arrangement, all of ICON’s activities are subject to review by the Vice Provost of Graduate Research at Rice University. The Vice Provost ensures all activities are compliant with the Rice mission and federal guidelines. When necessary, or at the request of members of the EC, the Vice Provost may convene an External Advisory Board to evaluate the operation of ICON.
3. Operations for ICON: Overview

The Director is tasked with ensuring that ICON operations are effective and meet the needs of its members. The Director also shapes and refines the external message and positions of ICON and provides an external face for the organization. The Director is also responsible for recruitment activities and relationships between ICON stakeholders. This Director serves the organization by constantly expanding ICON’s volunteer base and financial resources through fundraising, grant-writing and partnership development. The Working Groups may produce and review documents, generate positions and develop knowledge in harmony with the strategic plan for ICON. Thus ICON members play a pivotal role in ICON operations as well as governance. Such a culture of volunteerism requires a strong organizational leader to ensure effective member communications and follow-through. This is the role of the ICON Operations Manager. Day to day questions and ICON implementation are all coordinated by this essential ICON staff person. In some cases Working Groups may provide external funds to contractors or grantees for producing specific items. Monthly follow-ups with these individuals are the responsibility of the Operations Manager. Specific job descriptions and duties for the Director and ICON Operations Manager are provided in the following sections.

It is not currently anticipated that new projects will be developed within ICON. Nonetheless, this document outlines a process for doing so in the event that the situation calls for and resources permit its commencement. Detailed operational plans for important and ongoing activities have been developed. These are described in Section 4 to this document. Section 4A provides guidance on how to initiate a new project idea for ICON to consider; Section 4B describes the process by which ICON projects are funded; Section 4C covers special procedures for approving project funding for external grantees, as well as procedures for resolving conflict of interest issues in granting of funds for internal or external proposals.
3A. ICON Operations Manager

*Purpose:* Much of ICON’s outputs occur through the uncompensated efforts of its members. Such a culture of volunteerism requires a strong organizational leader to ensure effective member communications and follow-through. This is the role of the ICON Operations Manager (OM). Day to day questions and implementation of ICON projects and events are all coordinated by this essential staff person. In some instances, this individual may hold sole responsibility for completing ICON activities and may be tasked by the Working Groups for that purpose. The Operations Manager is primarily a behind the scenes position. The job requires technical expertise in chemistry or environmental sciences, along with superb organizational experience.

*Responsibilities:*

1. Runs the day-to-day affairs of ICON
2. Implements the action plan to deliver on the strategic elements of ICON
3. Supports actions suggested by the Working Groups, subject to the approval of the ICON Executive Director.
4. Develops budget systems to monitor and report out ICON expenses and revenues
5. Updates and improves ICON’s web page, including technical editing
6. Disseminates information to, and communication with, ICON members
7. Organizes meetings of the general membership, and where requested the Steering and Executive Committees
8. Identifies and collects topics for ICON to address, and to organize discussion forums
9. Interacts in a timely manner with members and the public.

*Clarification of job duties:* The Operations Manager is the internal presence for ICON. This position reports to the Director, and serves the Working Groups and Advisory Board. The Operations Manager’s goal is to ensure that the work of ICON’s members has high impact across the globe. The position requires a high level of responsiveness and ability to work effectively with many stakeholders.

*Review and management:* The OM reports on a weekly basis to the Director, who directs the OM’s time and energies to various ICON functions as needed. Direct polling of ICON members may be used to provide concrete feedback for this critical position, as will formal and informal performance review by the Director and Executive Committee. The Executive Committee has hiring authority for this position and may revise this job description as the need arises.
3B. ICON Working Groups

**Purpose:** ICON Working Groups permit volunteer members to direct their time and resources towards achieving the strategic objectives of ICON. These groups set specific action items and tasks in each Strategic Plan, and measure their progress against these plans on a monthly-to-quarterly basis. ICON Working Groups are also charged with developing project plans for consideration by the Advisory Board.

**Responsibilities:** Each Working Group will have unique responsibilities as defined by the primary objectives laid out in the Strategic Plan. Currently, the objectives of each Working Group parallel the objectives of the Strategic Plan. They will engage in teleconferences, at least monthly-to-quarterly, to review progress and develop project plans. Each Working Group will designate two individuals as primary contacts, not in ICON’s operational staff, and will provide a brief description of their activities for the ICON web page.

**Review:** Working Groups will set new objectives and actions during ICON face to face strategy meetings; these items will set the agenda and directions for each group on a quarterly basis. Representatives from each Working Group will report out to the Advisory Board so as to coordinate with all ICON activities. Working Groups that have infrequent meetings, or are not progressing, will be evaluated carefully by the Advisory Board.

**Relationship between the ICON Working Groups and ICON operational staff:** The Director and Operations Manager serve the Working Groups in a variety of ways. The OM, for example, may be asked by the Working Group coordinators to organize Working Group calls, take and circulate meeting minutes, and generally assist the members in their activities. The Director may on occasion suggest new activities for the Working Groups as well as task the groups to assist in meeting those organizational goals which are both operational and strategic. In particular, if during recruitment an interested party suggests an activity of interest to them, the Director may take that idea to the Working Group to develop it as a project proposal.

**Initiating Working Groups:** Should ICON members feel a particular project or direction warrants attention in its own Working Group, the proposed title, scope and objectives (with timeline) should be brought to the Executive Committee. The Executive Committee will decide whether or not to approve the new Working Group addition and objectives.
3C. ICON Grantees

*Purpose:* ICON projects will be executed by ICON grantees from a wide variety of sectors. For some projects, ICON members, staff and/or Rice University researchers will be awarded funds directly by a *Working Group* for the purposes of executing project objectives. However, in some cases *Working Groups* may feel that the work is best done outside of ICON operational staff, volunteer members and Rice University researchers. In those cases, the ICON *Working Group* will initiate a worldwide call for interested parties to propose to take on the effort. ICON funds cannot be directed towards particular external parties without first having a deliberative external request for proposals (RFPs). Whether a project is directed internally, or subject to an external call for proposals, it is first recommended by the *Working Group* sponsors of the project and ultimately approved by the *Executive Committee*. If a project is awarded to an external institution (academic or otherwise), those individuals become ICON grantees for the period of the grant.

*Award competition:* If a *Working Group* designates a project for external competition, and the *Executive Committee* approves, then ICON will issue a RFP for the proposed work. *Working Groups* have significant latitude in defining the RFP and evaluation metrics; however, all aspects of the proposal process are subject to review and approval of the *Director*. Significant conflict of interest issues that arise during the proposal evaluation process will be identified to the *Director*, who will oversee the process and report on its outcome to the *Executive Committee*. Ultimately, the ICON *Executive Committee* must approve the award of ICON funds to external institutions; such approval will be dependent on the adequate resolution of conflict of interest issues, evidence that the proposal process was fair and effective, and written justification for the selection of the winning proposal.

*Responsibilities:* The specific responsibilities for ICON grantees will depend on the nature of the activity. All proposals will include a specific set of deliverables and a timeline for their progress; the ICON *Operations Manager* is tasked with monitoring ICON grantees during their activities, and ultimately the sponsor of the project will determine whether the work product meets the expectations agreed upon. ICON grantees will be required to attend at least one ICON meeting to present their results and discuss future plans.
4. Operational Plans for Specific Activities

4A. Project Scoping
Anyone can bring a possible project forward for ICON’s consideration. Note: If the Director is involved with the project development, then the Executive Director oversees this approval process. All project scoping documents submitted to the Director will receive a written response within two weeks.

Figure 2. Process for starting a new project in ICON
4B. ICON Project Funding Approval: Internal Funding

Step 1: Working Groups are chartered and organized by the ICON membership.
Step 2: After discussion, Working Groups generate project proposals for ICON funding.
Step 3: If projects are not to go out for external RFP, a justification must be provided.
Step 4: Working Groups approve project proposal documents (3/4 majority).
Step 5: The Advisory Board evaluates project proposals and forwards best proposals to EC.
Step 6: The EC considers project proposals on an at least quarterly basis and decides whether to fund, not fund, or fund a reduced scope effort.
Step 7: For external activities involving grantees, see Section 4C, which also provides information for resolving potential conflict of interest issues.

Figure 3. Process for funding ICON projects
4C. ICON Project Funding Approval: External RFP and Resolving Conflicts of Interest

Step 1: Working Groups are chartered and organized by the ICON membership.
Step 2: After discussion, Working Groups generate project proposals for ICON funding
Step 3: Working groups deliberate whether activity is best supported using in-house expertise (e.g. ICON member organizations, CBEN, …) or warrants work by an external project grant
Step 4: If external project grant is justified, Working Group prepares Request for Proposal RFP, seeks and reviews submitted proposals and approve best project proposal documents (3/4 majority)
Step 5: The Advisory Board evaluates project proposals and forwards best proposals to EC.
Step 6: The EC considers project proposals on a quarterly basis and decides whether to fund, not fund, or fund a reduced scope effort
Step 7: For external activities involving grantees, deliverables and timeline are monitored monthly by the Operations Manager and quarterly by the Working Group
Step 8: Project reports, outlining the work product and its impacts are gathered by the Operations Manager within three months after a project’s close.

Figure 4. Process for dealing with potential conflicts of interest in internal and external proposals
Addendum 1: ICON Project Implementation

The operational staff is responsible for ICON operations and to some extent ICON projects (e.g. database) and ICON’s existing engaged membership offers deep capabilities in many areas relevant to ICON. However, as a working group considers projects and their implementation a common question arises, namely “Who will do the work?” The purpose of this addendum is to educate the Working Groups that they must identify conflicts of interest in dealing with project implementation.

Since working groups are the closest to the activity, they are the best people to decide how the work should be completed. Therefore, when project proposals go forward for consideration by the steering committee each WG will also provide a recommendation about how the project goals should be executed. There will be three options available to the WG: they could elect to request an external RFP; identify an ICON member or operational staff person to do the work; or declare themselves ambivalent and allow the Advisory Board and Executive Committee to have input into the choice.

As such, discussions begin in the WG. An ICON member involved with the Working Group who could be a candidate for implementing a project must declare the conflict of interest to all other WG participants. While people can participate and debate various plans, any individual with a potential conflict of interest must abstain from voting on recommendations for how working group activities should be implemented.

Each working group is urged to consider first whether ICON’s members could be responsible for the deliverables – there are many organizational advantages for this route. ICON has no motivation or responsibility to always seek external parties for project execution. By directing ICON’s funds “in-house” ICON assures the work will be well integrated with the organization and will benefit engaged members; external contracts, on the other hand, may be necessary to obtain a unique set of skills or expertise. They too may expand the membership of ICON in important ways.

In the event that an external RFP is chosen, then the Working Groups should provide a written justification in their request for approval of the project. This choice would normally make ineligible any academic associated with Rice University, or any other individuals associated with academic institutions that have representatives in leadership positions in ICON. Under special circumstances, academics from Rice University or any other potential “conflict of interest” institution could be considered for the external RFP, but this consideration would have to be worked out ahead of time with precautions built in to ensure fair practices in awarding the grant and with full disclosure to others competing for the grant. Additionally, the executive committee would retain the responsibility for final approval for any request for external calls for proposals. ICON’s proposal calls are a form of communication and increase its visibility in the community at large; it is vital that these processes be unbiased and fair to all potential contractors. Such proposals also commit ICON to some level of financial commitment.