Communications and Outreach for Science Laboratories and Facilities
Best Practice Advice for Directors, CEOs and Communications Managers
Introduction

This document distills the findings of international peer reviews of the communications and outreach functions of large-scale multi-disciplinary laboratories around the world.

The reviews were commissioned by Laboratory senior management and examined reputational risk, strategic planning, organizational structure and funding, and user and stakeholder relations, as well as the traditional communications functions of media liaison, outreach, digital and web, and internal and safety communications.

For consistency, our references to “Laboratory” should be read as referring to the relevant science organization (lab, facility, institute or similar). The “Director” refers to the most senior executive decision-maker (eg, CEO, Chair, Director-General or similar), while the “Communications Lead” refers to the most senior communications professional (Director/Head of Comms, PR Manager or similar).

About Us

The Interactions Collaboration was established in 2003 to coordinate international communications for the science of particle physics and to foster peaceful collaboration across all borders. Interactions Collaboration membership comprises the world’s major particle physics laboratories in Europe, North America and Asia, and reflects the global nature of funding and support for the discipline, as well as the differing cultural norms in scientific workplaces around the world.

Since the Collaboration’s inception, Interactions Collaboration laboratories have continued to expand their operations beyond particle physics, and many now operate large-scale research infrastructures for a broad range of science: from theoretical physics to materials science, engineering, astrophysics, biological and life sciences, computational science, and associated data, theoretical, statistical and mathematical functions.
The Peer Reviews

In 2008, in response to requests from the senior management of member laboratories, the Collaboration launched an initiative to conduct peer reviews of communications, outreach and associated functions at scientific institutions worldwide.

The purpose of the peer reviews is to evaluate the effectiveness of the organization’s communications, and recommend improvements. Each review must be commissioned by the Director of the Laboratory in question. The scope and structure of the review are negotiated between the Director and the Interactions Collaboration to ensure independence, usefulness and relevance.

The reviews use the Lehman Review format developed by the US Department of Energy’s Office of Science for large-scale projects, which is designed to ensure that the review findings and recommendations are evidence-based and reflective of a consensus opinion of the committee. Each expert panel is composed of relevant regional and international experts specifically selected for each review.

Panelists are made available for the review by their employing organization and do not charge for their participation. The only costs to the Laboratory are travel, accommodation and subsistence costs during the review meeting itself. As with the review format, this approach seeks to safeguard the independence of the review process.

In the spirit of open and transparent collaboration, the panel presents its findings, comments and recommendations to Laboratory management at the end of the review, submits a final written report to Laboratory management, and is required to publish the executive summary of the report on the public InterActions.org website. Most reviewed laboratories have published the full report online.

Further information on the reviews, and the reports of recent reviews, are available online.

The recommendations in this document are based on the reviews and on Collaboration members’ direct experiences across many disciplines and cultures and are therefore applicable to a science facility in any discipline and to any science lab in any country.
Scope
The definition of communications and outreach is deliberately broad, and covers all aspects of a Laboratory’s engagement with its external stakeholders, the public, and internal users and staff. In many organizations not all of these functions are the responsibility of the “Communications” group.

However, all of the functions addressed in this document affect an organization’s ability to deliver consistent, coherent and transparent information, and thus to execute its mission while enhancing and protecting its reputation.

Reputation matters. It enables funding, attracts the best staff and users, and determines an organization’s ability to grab the attention of media and maintain the support of the public and stakeholders.

This document includes best practice views on:
• traditional media (newspaper and magazines, TV, radio)
• graphic design, photography and video
• digital, social media and web
• internal communications including distribution of HR information for staff
• external recruitment
• safety-related information for staff, visitors and users
• communication with scientific visitors and Facility users
• information, visits and collateral services for guests, tour groups and VIPs
• events, including Open Days, VIP functions, science conferences
• science education for primary and/or secondary students and teachers
• communication with industry
• communication with decision-makers and funders
• local community engagement, including with pressure groups and lobbyists
Key finding 1: Articulate and publish your Laboratory's vision and mission

Directors and senior managers are expected to develop a vision and mission for their Laboratory. They are often encouraged to set extremely ambitious scientific and organizational goals. The best-performing organizations ensure that the Communications Lead – no matter their seniority – is fully briefed on the Lab’s vision, mission and objectives, and is involved in reviews and updates of these to ensure consideration of the potential impact upon the Lab’s external reputation.

Merely understanding what the Director wants is not sufficient – communications must ensure the organization’s vision, mission and objectives are clearly articulated to external stakeholders and to staff. This approach is embedded in popular culture with the tale of the NASA janitor in the 1960s who told visitors he was helping put a man on the moon.

The best performing organizations ensure the vision and mission underpin all Laboratory communications, and are subtly embedded in all communications outputs.

**Best Practice Recommendation 1.1:**
The Director should ensure the Communications Lead is fully briefed on organizational vision, mission and objectives.

**Best Practice Recommendation 1.2:**
The Communications Lead should develop a compelling strategic narrative that clearly and simply articulates the organization’s vision, mission and objectives, and should ensure this narrative is fully embedded in all communications outputs.
Key finding 2: Ensure a comprehensive Strategic Communications Plan

The importance of a Strategic Communications Plan to the success of an organization cannot be overstated. Strategic Communications Plans directly support an organization’s mission by: ensuring the organization’s brand and strategic narrative are realistic and compelling; setting communication priorities and audiences; and identifying measures of success.

In the best-performing organizations, accountability for this plan rests with the Laboratory’s Director. The actual development and implementation of an effective Strategic Plan should be a joint responsibility of the Director and the Communications Lead, regardless of the actual line management structure governing communications.

Best Practice Recommendation 2.1:
Laboratories must have a Strategic Communications Plan, linked directly to organizational strategy, mission and objectives. The Strategic Plan should be administered by the Communications Lead but must be “owned”, endorsed and personally approved by the Director and their most senior management body. The Director and board should receive regular reports on progress, and conduct at least annual assessments of the Plan.

Best Practice Recommendation 2.2:
The Strategic Communications Plan should identify a prioritized set of clear objectives, each of which must directly contribute to the organization’s wider strategic goals. Each objective must be measurable and have achievable timescales. Each objective should have a clear metric, and the Plan must include appropriate evaluation processes.

Credit: Mike Baker, Fermilab Photowalk
Best Practice Recommendation 2.3:
In setting objectives, communications teams should ensure the business rationale for an activity is fully understood – ask ‘why?’ until a direct linkage to an organizational goal is fully understood. Don’t set an objective that’s easy, and don’t be afraid to acknowledge errors or missed targets.

Best Practice Recommendation 2.4:
Review your Strategy every three to four years to ensure ongoing relevance – or more regularly in the event of major organizational or funding changes. Circumstances change. Your strategy should, too.
Key finding 3: Consistency and honesty of message

Laboratories should not confuse a strategic message with a tagline. The latter is no more than a (preferably) catchy advertising slogan. They can often be meaningless phrases, such as “Prioritizing Excellence,” or generic ones, such as “Promoting Science.”

By contrast the strategic message will communicate who you are and what you are trying to achieve, and thus must be organically linked to your organization’s mission and vision. It should be aspirational, believable, factual, clear and preferably compressed into a short sentence.

An effective – and honest - strategic message is the best sales pitch of all, because it will be genuine. It will provide the core around which to build your case studies, success stories and science highlights.

Best Practice Recommendation 3.1

Laboratories should develop a clear and compelling strategic message directly linked to their mission and vision. This message must underpin all communications activities.

Best Practice Recommendation 3.2

While the delivery and tone of communications should be tailored to meet the needs and expectations of specific audiences so as to maximize understanding, the strategic message must be consistent throughout to avoid confusion and reputational damage.

Best Practice Recommendation 3.3

Be honest and transparent in organizational communication. Honesty and transparency are at the heart of peer review in science. They are equally at the heart of effective communication in science – with your scientists and users, your local communities, funders and decision-makers, and the media.
Key finding 4: Close connection between management and communications

Organizations do not exist in a vacuum. Their actions – positive or negative - are constantly interpreted by internal and external observers, including existing or potential employees, funders, collaborators or competitors. Each of these observers will view the Lab through the prism of their own experiences, and in today’s world of instant communication, their opinions can quickly affect a Lab’s reputation – sometimes with drastic consequences.

The best communications teams are able to intervene quickly to help protect the Lab’s reputation by providing facts, refuting untruths and helping establish a common understanding of events by employees, partners, collaborators etc. They are able to do so because they are fully briefed on the Lab’s activities – flattering and unflattering.

Throughout our reviews we benefited from the candor of management and communications staff in acknowledging when mistakes had been made in the past – and an unfortunate common error was to seek to “hide” failings. Involving the Communications Lead in the Lab’s management structure helps reduce this risk.
Best Practice Recommendation 4.1:
Line management for the Communications Lead should be as close as possible to the Director. When direct line management is not considered practicable for cultural or organizational factors, the Director should ensure frequent personal interaction with their Communications Lead to ensure clarity of messaging and purpose.

Best Practice Recommendation 4.2:
The Communications Lead should regularly attend the Laboratory’s executive board or equivalent senior management body. In larger organizations the lead may be a full participant, while in others they would attend as an observer.

Best Practice Recommendation 4.3:
The Communications Lead is best able to function when placed in a position of trust within the organization. Laboratories should consider this aspect in their recruitment of these roles.

Best Practice Recommendation 4.4:
The seniority and required experience level of the Communications Lead should reflect the complexity and scope of the Laboratory’s mission and operations and its reputational risks.
Key finding 5: Budgets and structures must reflect organizational objectives

The key to optimum deployment of a Laboratory’s communications resources is a ruthless prioritization against the objectives and future challenges identified in the Strategic Communications Plan. As a Lab grows – or shrinks – the resources required to effectively communicate its vision, mission, objectives and successes will also vary.

Our reviews also found a consistent correlation between the quality and effectiveness of communications outputs and the “professionalism” of the communications team. Just as in any profession, training and experience matter.

Best Practice Recommendation 5.1:
The Director should assess the historic level of resource commitment to the communications function against current and forecast organizational strategic goals as outlined in the Strategic Communications Plan and adjust accordingly.

Best Practice Recommendation 5.2:
It should be assessed whether all existing or proposed communications activity across the Laboratory contributes to the attainment of a specific objective identified in the Strategic Communications Plan. Activities delivering the best impact should be prioritized for resources, and those delivering marginal impact should be wound down or ceased. We acknowledge this may be a painful process, but is essential to demonstrating efficiency and effectiveness to senior management and to funders. However, while recognizing the potential for unnecessary delay, communications groups must ensure sufficient time to explain proposed changes to those internal and external stakeholders affected by the change, which will allow the Lab to fully scope and mitigate any adverse consequences of change.

Best Practice Recommendation 5.3:
Laboratories should ensure communications staff hold professional communications qualifications and undertake continuous professional development.
Key finding 6: Understand and prioritize your audiences

Laboratories should ensure a rigorous prioritization of audiences and stakeholders to ensure the allocation of oft-scarce communications resources is optimized. This must include a clear distinction between “staff” and “facility users,” and must include “decision-makers,” which can include elected officials or government officials.

Best Practice Recommendation 6.1
Laboratories should prioritize stakeholders and stakeholder groups by their ability to positively influence attainment of the Lab’s organizational objectives, and should ensure communications activities are targeted according to this prioritization.

Best Practice Recommendation 6.2
Laboratories should provide a clear and transparent definition of the difference between “staff” and “users” to ensure that internal and external communications can be effectively targeted. The fact that some employees (staff) may be scientists who also use the laboratory’s facilities is, in this instance, irrelevant.

Best Practice Recommendation 6.3
Capitalize upon your friendships – a Laboratory’s “license to operate” requires more than the provision of excellent science. Whether it be residents around the Lab, local elected officials, trusted business suppliers or senior users, every Laboratory will have influential 3rd parties willing to help achieve your goals.
Key finding 7: Challenge assumptions on internal communications

An objective of any Laboratory should be employees who are active advocates for the organization, just as it is for a commercial company. There is a clear correlation across industry sectors between the level of employee engagement and safety, productivity and reputation – and for this reason there is an extensive range of academic and professional literature on effective employee engagement.

At the core of this literature, and in observed behavior during our reviews, is the requirement for “management” to actively and honestly engage with their staff – at all levels of the Lab. Directors and senior staff who openly discuss emerging issues and current pressures with staff are respected, valued by stakeholders and better equipped to deal with future problems than those who do not.

An unfortunate assumption, however, is that a failure of management-employee interaction can be fixed by improving the Lab’s “Internal Communications” channels – such as establishing an intranet or a Director’s blog. These channels are one-way information processes. Effective communication is two-way.

However, there are some assumptions inherent in published literature that our reviews have found do not necessarily apply to large Laboratories. For example, electronic messaging systems such as email are less effective tools to engage with staff such as engineers or workshop technicians than with “screen-based” employees in administrative roles.

Best Practice Recommendation 7.1
Accept the distinction between the function of Internal Communications and the responsibility of management to ensure effective two-way dialogue with staff.
Best Practice Recommendation 7.2
Do not assume that management communicates effectively up or down the line. Senior management, in concert with the communications team, must take responsibility for effective dissemination and engagement within the organization.

Best Practice Recommendation 7.3
Develop and strengthen clear communications channels based on an intranet as a core information repository.