

2. Pilot Season Plan

2.1 Overview

A full time network will take several years to develop. The question now is, how do we begin. We believe that in order to make any judgements about the interest of potential viewers, advertisers and cable carriers the network must provide a broad sample of the type of programming it intends to broadcast. Further, it must involve the professional societies of scientists and engineers in the selection and production of these first programs.

During the first year SETN intends to broadcast about 140 hours of programming from a wide range of disciplines. The bulk of this will be produced in conjunction with one or more of the scientific and engineering societies participating in our endeavor. Much of this programming will consist of lectures delivered at recent meetings or interviews/panel discussions conducted with the leading figures in a given field. If funds permit, some programs will incorporate documentary segments, live reports, laboratory visits and other "high production value" components.

The American Physical Society has already produced one program, the John Bardeen Memorial Symposium, which was broadcast for SETN through the network of the State University of New York. They have also taped the MIT Laboratory for Nuclear Science 46th Anniversary Symposium entitled "On the Matter of Particles" - 22 talks about the frontiers of physics by leading figures in the field, including 5 Nobel Laureates. SETN plans to broadcast this in the fall of '92.

The Association for Computing Machinery, the American Institute of Biological Sciences, the Society for Industrial and Applied Mathematics, the Institute for Electronic and Electrical Engineers and other societies are developing plans for the creation of programs. We are actively encouraging societies to obtain sponsors for their own productions and to think of their involvement with SETN as an extension of their publishing activity. SETN will provide production related guidance, but not play a role in determining program content.

The primary function of the network, during the first year, will be to arrange for the distribution of programming supplied by the societies, set the schedule and provide oversight of production, public relations and evaluation. If funds are obtained, the network will also produce programs of interest to the whole science and engineering community such as congressional hearings, a regular news program and other programs of general interest or beyond the resources of any single society.

2.2 Programming

2.2.1 The Editorial Function

Decisions about what programs are to be provided to SETN in any given discipline will be made by the the professional society of that discipline. SETN will form an Editorial Advisory Board that will endeavor to make air time available to all disciplines as fairly as possible and provide viewers with a broad mix of news and research much like the publications *Science* and *Nature*. In addition, SETN will attempt to survey social and political issues related to all science and engineering fields and cover significant events, including meetings, hearings and press conferences.

2.2.2 Program Formats

The primary means of mass communication within the professional communities are the meeting, the colloquium, the book, the news magazine, the journal and the computer bulletin board. Each could have its counterpart on SETN.

The scientific meeting

Meetings can be huge and ungainly these days but keynote speeches, roundtable discussions, and particular panel presentations should be provided to people who couldn't attend. SETN could cover these meetings with selective taping and with commentary from attendees. It would be interesting to follow a Nobelist at such a gathering and see how he or she views the state of their particular field.

The colloquium

Here the translation to television is most direct. At all the major centers for science and technology, on a regular basis an hour or two is devoted to having a professional brief an audience on his or her work. An example is the weekly colloquium at the Applied Physics Laboratory at Johns Hopkins. A session on the problems of doping C60 molecules with rare earth metals was followed the next week by a presentation on the physics of dance. These are often taped by the Universities and laboratories for distribution within their organizations. Cleaning those up for air and adding graphics to replace the overhead projector transparencies would turn talks into enlightening television programming.

The book

The television equivalent is the documentary or the in-depth interview. Television is uniquely capable of showing experiences and introducing personalities. It can, for example, go into the field with researchers or be at the site of an experiment to capture the excitement of a particular moment. Equivalently, the workings of major institutions like the NIH and NSF could be detailed in annual reports that would include long interviews with their Directors.

The news magazine

This broadcast would be a timely overview concentrating on material of particular interest to the target audience and tailored to their way of looking at the world. All the disciplines discussed here require mathematical skills rare in the outside world. These areas concentrate on observation rather than explication, verbs rather than adjectives. A report on cosmic background radiation geared toward a scientist or engineer should be considerably more complex than an account on PBS's McNeill-Lehrer Newshour.

The journal

The television equivalent would be a timely broadcast on a topics of interest to a particular discipline. This might be an all-chemistry or all mathematics block with three or four current topics each explored for 20 to 30 minutes.

The Computer Bulletin Board

The natural analog of the the computer bulletin board is the television call-in show that features an able moderator and, perhaps, a noteworthy guest. Electronic mail would be an attractive alternative to the telephone for asking questions. Viewers would be able to actually see the speaker and have their questions answered with the use of graphics, sounds and moving pictures.

In addition, some traditional television formats would be useful for scientific communication. Such as,

The Interview

A scientist or engineer in the news will be brought in--in person or by satellite--to a regular SETN forum where the program moderator will conduct an interview. Sometimes viewers will be invited to participate by telephone or send their questions via electronic mail.

The Panel Discussion

Panels of distinguished scientists will be gathered together on a regular basis for discussions of topics of interest to their colleagues and the wider scientific audience. These programs will be originated from various locations around the country and moderated by knowledgeable facilitators selected by SETN.

2.2.3 The Pilot Programs

Some of the pilot programs being planned in conjunction with professional societies are:

Programs Produced by a Society's Editorial Staff:

The scientific societies are being invited to co-produce with SETN at least one pilot program for their own members. The IEEE, has suggested that it would like to create a program on the topic of Virtual Reality. The American Society of Mechanical Engineers has suggested a program on MEMS, MicroElectroMechanical Systems. The Association for Computing Machinery is developing a series that would parallel its publication *Communications of the ACM* and involve interview and feature story components. Societies are also encouraged to participate in the creation of interdisciplinary programs on topics like Chaos that could involve scientists and engineers from several fields.

Scientific Society Event Broadcasts

SETN will take its audience to several major science and engineering events during the course of the pilot season. Some events occurring this fall that we list below are representative of the kinds of events we would cover.

- * The American Physical Society Fields and Particles meeting at Fermi Lab in November.
- * Plant Genome I, the USDA sponsored conference on genetic engineering in agriculture in San Diego in November. This could be produced in conjunction with the American Institute of Biological Sciences
- * Siggraph, the Association for Computing Machinery sponsored meeting for its computer graphics special interest group.
- * The Annual Meeting of the American Association for the Advancement of Science.

2.4.4 Estimated Budget for Promotion

Based upon a total budget of \$149,000 the following is an estimated breakdown of costs for the promotion and public relations program for the initial twelve month period.

Logo & Materials Development

Logo/corporate identity/design 10,000
(includes printing of kit covers stationary, etc.)

Writing:

Presentation 7,500
Backgrounder 5,000
Fact Sheet 2,500

Production:

Video 10,000
flip chart 2,500
slides 3,000
overheads 500

41,000

2. On-going Promotion Activities

Academic & Media Relations 2,000/mo.

(Includes science, cable/satellite and ad trades)

Institutional Relations 2,000/mo.

Regional product exposure 2,000/mo

Monthly PR Expenses 6,000 mo.

\$6,000/mo. x 12 months 72,000

3. Paid Advertising 32,000

4. Contingencies 4,000

Total 149,000

2.4.5 The Contractor:

SETN has retained the New York firm of Ruder Finn to assist in the development of the Public Relations portion of this proposal. They also helped create the accompanying video.

2.7 Financial

2.7.1 Budget

On the following page is our first year budget for network administration, promotion and distribution. These expenses will be approximately \$1 million in the first year and increase to \$1.5 and \$2 million in the second and third years.

Programming for the pilot season will cost about \$2.5 million. A breakdown of the individual program costs was given in the Programming Section. Programming in the second and third years will increase to 220 and 350 hours and cost \$4 and \$6 million, respectively.

Funds for programming will be raised by the network and the participating societies. Individual programs can be sponsored by corporations or foundations with a particular interest in the subject matter.

SETN will produce a weekly news program, *Science and Engineering Week in Review* as well as a variety of public affairs and interdisciplinary programs. Proposals for these programs will expand upon the information provided in the Programming section of the Appendix.

SETN 1st Year Budget

	1st mn	2nd mn	3rd mn	4th mn	5th mn	6th mn	7th mn	8th mn	9th mn	10th mn	11th mn	12th mn	Total
Staff & Operations													
Salaries													
Pres @ 5K/yr	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	75,000
Project Dir @ 72K/yr	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	72,000
Admin Assl @ 30K/yr	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	30,000
Fringe Ben @ 20% of s	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	35,400
Salaries Subtotal	17,700	17,700	17,700	17,700	17,700	17,700	17,700	17,700	17,700	17,700	17,700	17,700	212,400
Administration													
Office Rent @ 3500/mn	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	42,000
Telephone/fax	300	600	600	600	600	600	600	600	600	600	600	600	6,900
Travel & Related Exp	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	48,000
Postage, copying, etc	600	600	600	600	600	600	600	600	2,000	2,000	2,000	2,000	12,800
Insurance	25,000												25,000
Accounting Services	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	24,000
Legal Services	45,000												45,000
Contingencies	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	24,000
Administration	82,400	12,700	12,700	12,700	12,700	12,700	12,700	12,700	14,100	14,100	14,100	14,100	227,700
Staff & Operations	100,100	30,400	30,400	30,400	30,400	30,400	30,400	30,400	31,800	31,800	31,800	31,800	440,100
Promo & Evaluation													
Logo & Materials	41,000												41,000
On-going Activities	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	72,000
Paid Advertising	2,000				2,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	32,000
Evaluation	20,000												20,000
Contingencies													4,000
Promo & Eval Subtotal	69,000	6,000	6,000	6,000	8,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	189,000
Broadcasting													
C Band 600hr @ 500/hr			20,000	20,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	40,000	300,000
MEU 64hrs @ 300/hr					2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	19,200
NTU					12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	96,000
Brdcsng Subtotal			20,000	20,000	44,400	44,400	44,400	44,400	44,400	44,400	44,400	54,400	415,200
TOTAL	169,100	36,400	56,400	56,400	82,800	84,800	84,800	84,800	86,200	86,200	96,200	120,200	1,044,300

2.7.2 The Cost of Continuing Operation

In the ongoing operation we envision, SETN will be comparable in quality and scope to C-SPAN. While there will be differences in detail, there will be similarities in style, e.g. congressional hearings, scientific meetings, interviews with viewer participation via telephone, panel discussion and special talks and seminars presented at local universities and the several academies of science and engineering.

In the second year, we expect that SETN will be in a position to broadcast a mix of 4 or 5 hours/week or a total of 220 hours of original programming. In the third year, SETN would increase its schedule to about 7 hours/week or a total 350 original hours.

SETN expects to achieve an audience of 250,000 viewers for at least one program per month in its first year, 500,000 per month in the second year and 800,000 per month in the third year. When the total audience for SETN programming reaches one million viewers per month, it will seek to create its own cable channel. This separate channel would be supported by advertising. The cost of full time operation, including; sales, marketing, production, distribution and promotion expenses, would be \$25 million in 1996.

2.7.3 Sources of Support

During the test period, SETN will have worked directly with a number of professional societies in producing programs. It will also have developed contacts in the industrial and government sectors. We will seek funding for the next period from four main sources.

The Professional Scientific and Engineering Societies

Out of the nearly 50 major professional societies, approximately 25 would join SETN in the production of programming. Larger societies, like the American Physical Society would contribute 15 - 20 hours of finished programming. Smaller societies, like the 7,000 member Society for Industrial and Applied Mathematics, would contribute two or three hours. We estimate that, in the first year, societies will be able to about 100 hours of programming valued at about \$1,000,000. They will produce these with funds from their own treasuries or from sponsors that they themselves obtain or from contributions made by their own members.

The societies actively participating in the development of programming include the: American Institute of Physics, American Physical Society, American Chemical Society, Institute for Electronic and Electrical Engineers, American Society of Mechanical Engineers, Association for Computing Machinery, American Mathematical Society, American Institute of Biological Sciences, Sigma Xi, Society of Industrial and Applied Mathematics, American Association of Engineering Societies and the Society of Quantitative Analysts.

In addition to these, we are actively recruiting the New York Academy of Sciences, the National Science Foundation (as a program source), the National Academies of Science and Engineering, the Institute of Medicine, the American Association for the Advancement of Science and other societies and institutions.