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Summary -- Issue Statements

1. How should the OSTP use and direct policy analysis in support of its roles and assigned functions? What institutions and mechanisms would best serve these needs?

2. What should be the mechanism for OSTP involvement in military R&D issues?

3. Should the OSTP evaluate the relative technological postures of the US vs USSR with respect to military R&D?

4. How should OSTP involve itself in R&D budget process? What questions need to be asked about Federal R&D support? What systematic methods should be considered by OSTP to aid in R&D budget review?

5. How can problems be identified and scientific analysis be begun before they become matters for general societal concern.

6. How can OSTP play an active role in innovative "problem identification" in order to improve our ability to cope with these problems?

7. Should the concept of "Science Indicators" be fostered and developed as an input to OSTP evaluation of the science enterprise?

8. What are the options for allowing mutually beneficial and constructive cooperation between industry and government on new energy technologies?

9. How can we ensure support for fundamental research adequate to underly critical energy processes before large scale hardware & facility developments are launched?

10. What is the state of knowledge about critical segments of the nuclear fuel cycle, where does this need to be improved, and what can be determined from what we already know to aid in policy recommendations?

11. What can and should the Science Adviser do to stimulate more effective application of S&T to energy needs?

12. How should we go about constructing the S&T base needed for expanded attention to conservation?

13. How can the OSTP contribute to the resolution of the controversy over need for nuclear energy and concerns about its potential environmental and safety impacts?

14. What are the appropriate strategies to improve the knowledge base underlying needed advances in food production, distribution and use?

15. What should the OSTP role be in developing an expanded climate modeling and prediction effort oriented so that the results are easily applicable to agriculture?

16. How can the Federal government's role in stimulating and supporting population and fertility control research be expanded and the results be made available so that they will be attractive to potential users both domestically and internationally?

17. Should nutrition research be given greater visibility and be managed centrally?

18. How can we anticipate and take positive steps to alleviate possible raw materials shortages?

19. Can we identify a systematic program for exploring potential new resource areas--particularly the continental margins at water depths greater than 1000 meters?

20. Should the U.S. begin a program to seek an operational earthquake prediction capability within about 10 years?

21. Should we initiate a major reassessment of the improved use of advanced technology for alleviation of the threats of natural hazards?

22. Should ocean science and technology programs be reviewed and coordinated at a higher level in the government?

23. How can the priorities for increased support for ships and other platforms, research equipments, research projects and ocean engineering be sorted out and developed for possible budgetary action?

24. Should we pursue a more vigorous program of ocean "utilization"--including use as an energy, raw materials and food resource?

25. Are there major new opportunities for gaining a better understanding of the weather, climate change and the meteorology of the upper and lower atmosphere?

26. What better mechanisms are there for reaching more balanced decisions where there is conflict between energy or economic development and preserving or improving environmental quality?

27. Is there a better way to approach the use of space platforms for applications (earth observations, weather, communications, navigation, space processing, etc.) that can improve transition from experimental to operational status?

28. How should we utilize the capabilities of the NASA laboratories at times when their major space hardware developmental role has decreased? How large an establishment and of what character (e.g. in-house vs. contractor oriented) do we need?

29. What should be the pace of the space science program and how should it be thought of in terms of ground-based science support?

30. What government actions may be needed to enable the aeronautical industry to remain a strong contributor to our economic strength?

31. Is technology being used to the fullest to curb inflation? If not, what can be done?

32. Should there be a new set of initiatives involving government in stimulating technology for industrial application through R&D support?

33. How can potential barriers to innovation be identified and reduced or eliminated, and what mechanisms are appropriate to accomplish these objectives on a continuing basis?

34. What should be the OSTP role with respect to patent policy?

35. How can new technology business ventures be encouraged?

36. How can we develop a better understanding of the implications of various policies regarding international technology transfer and possibly modify these policies to improve our long-term economic posture?

37. The basic Congressional mandate of regulatory legislation for health and safety is "protection of human subjects." Is this philosophy too narrow in that it precludes other desirable considerations?

38. The regulatory agencies admit that the prime consideration in proposing a regulation is often, "Can we win in court?" How can this be changed to a more balanced consideration of issues and to a forum which relieves the dependencies on the judicial process?

39. Research in the drug and pesticide areas is unique in that it is heavily influenced and to some extent regulated by EPA and FDA. Is this government intervention killing research, and what should be done about it?

40. Is the fund of information of the regulatory agencies adequate, and how can it be improved?

41. EPA and OSHA claim to be considering economic impact in their decision-making processes. Is the consideration adequate? Should FDA do the same, and how?

42. How can an increased concern over improving the timeliness of regulatory decisions be instilled in all regulatory agencies?

43. How can the"predictability and stability" of regulations be improved despite the often dynamic and unpredictable character of the science which drives the regulations?

44. Can we improve and extend our assessments of the implications of new "breakthroughs" in biological sciences (e.g. cloning, recombinant DNA)?

45. What should be the continuing role of the OSTP vis-a-vis biomedical R&D? Should one of the senior management of OSTP be appointed from the life sciences?

46. What should be the OSTP follow-up to the "Murphy" Commission report?

47. How should the OSTP address the problem of escalating health delivery costs including the contributions of capital-intensive technological inputs?

48. How can support of basic research be explicitly recognized and incorporated into mission agency programs, and how should such support be managed?

49. How can the OSTP best present a balanced (i.e. non-advocacy) position regarding the scope and amount of Federal support of basic research?

50. What role should OSTP take with respect to science and engineering manpower and an assessment of the continuing viability and appropriateness of the science and engineering education system?

51. Is there a government mechanism that can aid in renewing attention to advances in the more traditional concepts of engineering (both in education and research) and in the role such engineering advances can play as a contributor to technological health of the nation?

52. How should the OSTP deal with the potential for more efficient science and technology information transfer?

53. How should OSTP identify and promote incentives for accelerated application of new information handling technology in both government and private sector?

54. Are there telecommunications initiatives that should be pursued by the OSTP? What should be the relative roles of OSTP and OTP in these areas?

55. What are the opportunities for applying and developing new technological opportunities in the field of urban transportation?

56. What are the opportunities in the field of housing?

57. What should be the involvement of the OSTP in and with the social/behavioral sciences?

58. Can some clarity be provided with respect to the question of the proper roles of government and private sector in pursuing use of S&T in achieving national goals?

59. Is it possible and desirable to set national priorities for the achievement of specific technological goals, as is the case in Japan?

60. Can a new procedural approach be developed to achieve more rapid and credible resolution of scientific controversy on public policy issues? What is the assessment of the "Science Court" experiment in this regard?

61. Is the U.S. becoming less innovative and if so, what are the implications?

62. What are the implications of the current rate of increase of productivity in manufacturing and service sectors?

63. How can the science and technology ingredients of foreign policy questions be more explicitly and systematically considered and factored into State Department processes?

64. Can the OSTP identify new opportunities for the application of science and technology to the problems of law enforcement and improving public safety?

65. What are the implications of increasing centralization and complexity of major societal support systems, what vulnerabilities are a consequence, and what applications for science and technology are possible?