

WGs within Conference Themes 1, 2, 3, 4, and 5:

1. What are the major hypotheses and unanswered questions in your topic? Describe the global relevance of those questions.
2. Why is new drilling needed to address these objectives?
3. Which of these represent the highest research priorities that can realistically be achieved in the next decade?
4. How are your science goals relevant to society?
5. What drilling, sampling, experimental and site characterization strategies are required to achieve your goals?
6. What are your platform and technological needs?
7. What mix of long-term projects and single expeditions will best answer these questions?
8. How can the future drilling program interact with other science programs and with industry to achieve your goals?
9. What hot topics can be highlighted to be used for outreach and raising the public's interest?

WG6.1: Observatories

Chairs: Earl Davis and Pete Girguis

1. What are the major hypotheses and unanswered questions that may be answered through the construction of seafloor laboratories and experiments?
2. How are these questions distinct from those that can be answered through traditional drill-core recovery techniques? Which of these represent the highest research priorities that can realistically be achieved in the next decade? What is their global relevance?
3. What drilling, sampling, experimental and site characterization strategies are required to achieve your goals? What can be uniquely be learned through cabled observatories that is not possible via other experimental means?
4. What are your platform and technological needs? What can be done with autonomous instrumentation and what needs the power, bandwidth, and time accuracy that is possible only with a cable connection?
5. What infrastructural developments are required for the construction of next-generation observatory systems?
6. How can the future drilling program interact with other science programs and with industry to achieve your goals?
7. What hot topics can be highlighted to be used for outreach and raising the public's interest?
8. How are your science goals relevant to society?

WG6.2: Subseafloor laboratories and experiments
Chairs: Liz Screaton and Beth Orcutt

1. What are the major hypotheses and unanswered questions that may be answered through the construction of subseafloor laboratories and experiments?
2. How are these questions distinct from those that can be answered through traditional drill-core recovery techniques? Which of these represent the highest research priorities that can realistically be achieved in the next decade? What is their global relevance?
3. What experimental conditions and time durations are necessary to meet objectives? What experiments require a dedicated borehole and what type of objectives can be paired (in time/space)?
4. What drilling, sampling, experimental and site characterization strategies are required to achieve your goals? What are your platform needs?
5. What methodological, technological, and tool development is required for the construction of next-generation sub-seafloor laboratories and experiments? What lessons have been learned from recent experiments that can inform future plans?
6. How can the future drilling program interact with other science programs and with industry to achieve your goals?
7. What hot topics can be highlighted to be used for outreach and raising the public's interest?
8. How are your science goals relevant to society?

WG6.3: Platform, drilling and logging tools: needs and opportunities
Chairs: Hiroshi Asanuma and Peter Flemings

1. What specific platform needs are required to support science goals discussed over the last 2 days?
2. How important are multiple platform capabilities to achieving the science goals outlined at this conference?
3. How do additional platform opportunities such as an Arctic drilling vessel or additional member country-built drilling vessels help us to achieve our science goals?
4. What standard or recently deployed drilling technologies are critical to achieve science goals set out for the new program?
5. What logging tools are critical to achieve these science goals?
6. What new technology in drilling, logging, or platform capability do we need to have to achieve science goals outlined at this conference? Of these technology goals, which of them are capable of being accomplished in a 5-year time frame?
7. Define 5 modest technology developments (i.e. not profoundly expensive) that will markedly improve our ability to address our science goals.
8. Define 5 difficult technology developments that would significantly improve our ability to address our science goals.

**WG6.4: Site characterization and integration with the borehole
Chairs: Nobukazu Seama and Gail Christeson**

1. How closely tied should planning, funding, acquiring, processing, and interpreting site surveys be to the new drilling program?
2. What evaluation mechanisms for the adequacy of site characterization data and drill site selection would best serve the program and ensure optimum science?
3. Are the existing site characterization requirements by the Site Survey Panel and Environmental Protection and Safety Panel sufficient, too stringent, or too lax?
4. How can core-log-seismic integration be improved in the new program?
5. What critical tools exist that should be made use of in the new program to better integrate borehole studies, with core-based studies with regional geophysical studies?
6. How can site-survey and safety/environmental protection panels work better with proponents to: 1) define and then conduct optimal geophysical surveys in support of drilling, and 2) help proponents evaluate drilling results within site-specific and regional geophysical contexts?

WG6.5: Analytical needs and development
Chairs: Clive Neal and Yuki Morono

1. What are the essential shipboard analytical requirements for safety, core description, decision-making with respect to science goals, and sample archiving/preservation?
2. Should only the STP Minimum Measurements be carried out on the cores prior to shorebased studies?
3. What priority should be given to duplicating analytical capabilities across platforms?
4. Are there new analytical capabilities that should be installed on platforms in the new program? If so, what are they?
5. How should these be tested? Who should be responsible for their development?
6. What analytical facilities are needed at the core repositories?

WG6.6: Balancing long-term projects and single expeditions
Chairs: Keir Becker and Kiyoshi Suyehiro

Historically, the great majority of ODP and IODP expeditions have been two month, stand-alone projects designed to answer specific science questions.

These projects originated from individual proposals that were submitted by small groups of proponents and vetted by the Science Advisory Structure (SAS). This system has produced groundbreaking discoveries, however on the other hand, some may argue that it achieves the science plan in a piecemeal fashion.

- 1) In the new drilling program, should we deliberately emphasize more ambitious, larger, multi-leg projects that may require long-term planning?
- 2) If so, how do we achieve a healthy mix of large projects and smaller proposal-driven projects in the new program? For example, how might ship scheduling be adapted to achieving both small and large projects that might require drilling in many locations?
- 3) Should the new science plan prioritize a specific set of large, long-term projects?
- 4) If so, how do we, as a community, identify and select these larger, long-term projects? And, how do we plan and organize them?
- 5) How would the Science Advisory Structure review and nurture a whole range of different types of projects (e.g., long-term multi-leg projects that require lots of lead time, drilling projects that require expensive or new technologies and a lot of lead time, traditional 2-month expeditions, shorter projects)?
- 6) How should expeditions that are entirely or partially funded by outside sources (e.g., industry, foundations, etc) be planned and handled in the reviewing process and ship scheduling process?

WG6.7: Program management options to optimize integration
Chairs: Ulrich Harms and Masaru Kono

1. What program management architecture works best for planning and implementing an international science plan? More specifically:
2. What activities can best be executed by centralized management?
3. What activities can best be executed by national or IO management?
4. What broad guiding principles should be followed when designing a new science advisory structure (SAS) that can best support the execution of the scientific plan of the new drilling program? Please take into account the role SAS could and should play given the possibility that the new program could have:
 - a. multi-leg projects that will require long-term development, planning and execution, mixed with single expedition projects.
 - b. more available platforms and technologies.
 - c. the need to interact more effectively with industry and other science programs.
 - d. an even stronger need to broaden and diversify the community of scientists that the program serves.

WG6.8: Develop broad vision for outreach, branding and education
Chairs: Tats Sakamoto and Kathy Ellins

Overarching targets:

1. What is our main message?
2. How do we raise the profile of the new programme?
3. Which **new** elements to our outreach strategy should be defined?

Tools:

4. How do we communicate our messages/profile with specific target audiences?
(establishing a dialogue)
5. What role should **new** (“social”) tools/media play?
6. How does this change traditional outreach approaches?
7. What role does outreach play vs. education?
How can differences in communication cultures between the partners best be handled and smooth internal/external science communication be achieved?