

PIPSC Public Science in Canada 2010

The Framework for S&T Advice: A 10th Anniversary Retrospective



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* The views expressed are the presenter's and not necessarily those of the Government of Canada.

Two cultures



SCIENCE

POLICY

often very long	Time horizon	often very short
seeks precision	Language	seeks flexibility
scientific jargon	Lexicon	policy jargon
tolerant	Uncertainty	discomfort
peers	Audience	public
horizontal	Accountability	vertical
specialists	Culture	generalists
usually open	Transparency	often closed
in the regions	Location	in "Ottawa"

Context for the S&T Advice Framework



- 1990s public policy controversies linked to science
- 1997 UK Chief Science Advisor issues *The Use of Scientific Advice in Policy*
- 1998 Creation of Council of Science & Technology Advisors (CSTA)
- 1999 CSTA issues *Science Advice for Government Effectiveness (SAGE)*
- 2000 GOC issues *A Framework for Science and Technology Advice*

SAGE Principles



- Early Issue Identification
- Inclusiveness
- Sound Science and Science Advice
- Uncertainty and Risk
- Transparency and Openness
- Review

Principle 1: Early Issue Identification



- *“The government needs to anticipate, as early as possible, those issues for which science advice will be required, in order to facilitate timely and informed decision-making”*
- Recognize when science advice is required
- Actively seek science advice to identify issues on a timely basis
- Cast a wide net – internally, externally and internationally

Principle 2: Inclusiveness



- *“Advice should be drawn from a variety of scientific sources and from experts in relevant disciplines, in order to capture the full diversity of scientific schools of thought and opinion.”*
- Recognize that the market for science advice is global
- Get conflicting viewpoints on the table
- Rotate board members to counter biases
- Be open to solicited and unsolicited advice

Principle 3: Sound Science and Science Advice



- *“The government should employ measures to ensure the quality, integrity and objectivity of the science and science advice it uses, and ensure that science advice is considered in decision making.”*
- Ensure due diligence by peer review and publication
- Integrate advisory function with management function
- Build effective decision-maker/advisor relationships
- Ensure in-house capacity to assess external advice

Principle 4: Uncertainty and Risk



- *“Science in public policy always contains uncertainty that must be assessed, communicated and managed. Government should develop a risk management framework...”*
- Explicitly identify uncertainty in scientific results
- Communicate in plain language
- *A Framework for the Application of Precaution in Science-Based Decision Making about Risk (2003)*

Principle 5: Transparency and Openness



- *“The government is expected to employ decision-making processes that are open, as well as transparent, to stakeholders and the public.”*
- Balance need for timeliness with need for public consultation; transparency always imperative
- Allow advisors to present advice in open fora
- Ensure transparent conflict resolution processes

Principle 6: Review



- *“Subsequent review of science-based decisions is required to determine whether recent advances in scientific knowledge have an impact on the science advice used to reach the decision.”*
- Establish a “best before” date for science advice
- Document government responses to advice
- Ensure advisors have access to previous studies

Implementation



- Departmental gaps analyses and capacity checks
- Science Advice Champions accountable to DMs
- Annual reporting in the Federal S&T Report
- ADMCST Sub-committee on S&T Advice
 - Awareness Building – promotion, best practices
 - Training – piloted a training course and materials
 - Accountability – science advice “checklist” for MCs, etc.
 - Evaluation – formal evaluation by March 2003

Impact Going Forward



- No longer policy
 - Referenced on many SBDA websites; informs practices
- Science advisory landscape has changed
 - CSTA abolished and Departmental SABs less prevalent
 - STIC and Council of Canadian Academies created
 - New fora for science policy dialogue including PIPSC, CSPC
- Integration of science and policy remains key concern
 - SAGE Principles and Guidelines still relevant

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