Attachment A

National Assessment Governing Board

Work Statement

for the

Development of a Recommended

Framework and Specifications in

Technological Literacy

for the

National Assessment of Educational Progress

June 2008

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Statement of Work
NAEP Technological Literacy Framework and Specifications Development

1. Introduction

The purpose of this procurement is to develop recommendations for a framework and specifications for the first ever National Assessment of Educational Progress (NAEP) in technological literacy for the 2012 assessment, and future technological literacy assessments. Technological literacy may be defined as having the knowledge, ways of thinking and acting, and capabilities to understand the important tools of a society.

Specifically, the requirement is to develop recommendations for review, modification, and action by the National Assessment Governing Board, on the framework and specifications for the NAEP technological literacy probe assessment. This NAEP assessment in 2012 will be a national level probe, using a smaller sample size than that normally used for national NAEP assessments. The purpose of the probe is to assess the feasibility of conducting a full-scale technological literacy assessment in future years. The probe will be administered at the national level, in one of the grades tested by NAEP (4, 8, or 12). The delivery mode for the entire assessment will be computer based.

1.1 Overview of the Procurement

The National Assessment Governing Board, the policy-making body for NAEP, requires the following services:

- Conduct a comprehensive framework development process to generate recommendations for a framework (goals and objectives) for a NAEP computer-based technological literacy probe;
- Develop recommendations to define the content of the test; and propose specifications for test and item developers;
- The framework development process shall be open to all points of view and the final recommendations to the Governing Board shall represent a balanced approach to conducting a technological literacy probe;
- Identify and recommend background variables likely to be associated with student achievement in technological literacy.

To ensure the effectiveness of the framework development process, the contractor shall, under the technical direction of the Contracting Office (CO) and the Contracting Officer's Representative (COR), acting on the advice of the Board's Assessment Development Committee and the entire Board:

- Engage a broad spectrum of various communities concerned with learning, teaching, research, achievement, and assessment of technological literacy so as to draw upon state and local curricula and assessments, widely accepted professional standards, international assessments, research and other exemplary studies in the literature, and also the expectations of the wider community regarding student achievement in technological literacy;

- Carry out procedures that will facilitate broad-based deliberation and clarification of positions and views of qualified experts, professional practitioners, lay policymakers, parents, and the various communities with respect to: a) student achievement in technological literacy and how to assess students' skills and strategies in this domain; and b) background information to be collected from students, teachers, and schools;

- Comply with all provisions of the Board's Framework Development Policy (see Appendix A). Of particular importance is the requirement that the framework shall not endorse or advocate a particular pedagogical approach to the subject area being assessed, but shall focus on important, measurable indicators of student achievement.

2. Background

2.1 Overview of the National Assessment of Educational Progress (NAEP)

For almost 40 years, NAEP has provided information on the academic achievement of students in the United States. For the majority of those assessments, a nationally-representative sample of students, drawn from grades 4, 8, and 12 has taken tests in various subject areas. Since 1990, NAEP has conducted state-level assessments in grades 4 and 8 in certain subjects, in addition to the national samples. The resulting data on student knowledge and performance have been accompanied by descriptive information allowing analyses of a variety of student demographic and instructional factors related to achievement. The assessments have been designed to allow comparisons of student performance over time and among subgroups of students according to region, gender, race/ethnicity and other demographic variables.

Beginning in 2002, NAEP initiated the Trial Urban District Assessment (TUDA), which provides student achievement results for urban districts that volunteer to participate. More recently, Congress authorized funding for NAEP to expand the TUDA program in 2009 by adding 7 urban districts to the existing pool of 11 TUDAs. Congress also provided funding for 2009 pilot assessments involving the first-ever 12th grade state level reading and mathematics assessments. Eleven states have volunteered to participate in this 2009 pilot assessment.

NAEP has been called "The Nation's Report Card," and is indeed the most comprehensive and only continuing source of information on what U.S. students know and can do in certain academic subjects. NAEP provides results on how student performance has changed over time. (See Appendix B for the NAEP Assessment Schedule.)

2.2 Role of the National Assessment Governing Board

The National Assessment Governing Board is an independent, bipartisan board that sets policy for the National Assessment of Educational Progress (NAEP), commonly known as The Nation's Report Card. Created by Congress in 1988, the Governing Board is made up of 26 members, including governors, state legislators, local state school officials, classroom teachers and principals, researchers, business representatives, and members of the general public. In overseeing The Nation's Report Card, the Governing Board identifies subjects to be tested, determines the content and achievement levels for each assessment, approves all test questions, and takes steps to improve the reporting of NAEP results. The Board also works to inform the public about The Nation's Report Card by communicating its results to a wide range of Americans.

The Board's role in this technological literacy contract is further detailed in various sections of the statement of work.

2.3 Enabling Legislation for NAEP

Under provisions of the No Child Left Behind Act, P.L. 107-110 as amended by P.L. 107-279 (see Appendix C), Congress has authorized the Governing Board to continue its mandate for determining the content and format of NAEP assessments by requiring that:

- "the purpose [of NAEP] is to provide…a fair and accurate measurement of student academic achievement"
- "[NAEP shall]…use widely accepted professional testing standards, objectively measure academic achievement, knowledge, and skills, and ensure that any academic assessment authorized….be tests that do not evaluate or assess personal or family beliefs and attitudes or publicly disclose personally identifiable information;"
- "[NAEP shall]…only collect information that is directly related to the appraisal of academic achievement, and to the fair and accurate presentation of such information;"
- "the Board shall develop assessment objectives consistent with the requirements of this section and test specifications that produce an assessment that is valid and reliable, and are based on relevant widely accepted professional standards;"
- "the Board shall have final authority on the appropriateness of all assessment items;"

- "the Board shall take steps to ensure that all items selected for use in the National Assessment are free from racial, cultural, gender, or regional bias and are secular, neutral, and non-ideological;" and
- "the Board shall develop a process for review of the assessment which includes the active participation of teachers, curriculum specialists, local school administrators, parents, and concerned members of the public."

2.4 NAEP Science Assessments

NAEP has a long history of conducting science assessments, from 1970 through 2009, however NAEP has never assessed technological literacy. As reference documents in terms of format, content, and level of detail, potential bidders on the Technological Literacy Framework procurement may wish to review the NAEP 2009 Science Framework and Specifications at www.nagb.org under Frameworks.

For the 2012 NAEP technological literacy probe assessment, the Governing Board is seeking a contractor to conduct a full-scale framework development process to enable the beginning of a trend line for 2012 and beyond. Recent research in the teaching and learning of technological literacy, state and international standards and assessments, and widely accepted professional standards shall play a major role in informing the development of this new NAEP framework.

2.5 Need for a Comprehensive Framework Development Process

The development of a framework in technological literacy will enable a broad spectrum of individuals and organizations to deliberate how best to measure student technological literacy achievement at the national level in grades 4, 8, and 12. Technological literacy curriculum documents, technological literacy assessments, research, and other sources of input should contribute significantly to the process of developing the NAEP technological literacy assessment framework.

One of the critical activities involved in developing any assessment is to identify skills to be probed within a given subject area; that is, to determine a set of assessment objectives and specifications for the test and test items so that a given assessment will adequately represent the subject matter domain and intended student learning.

The framework development process for technological literacy shall be used to generate recommendations for the Governing Board on:

- An assessment framework to define the content and format of a NAEP technological literacy assessment at grades 4, 8, and 12; while the 2012 probe will be conducted at only one grade level, the framework and specifications shall cover grades 4, 8, and 12 in anticipation of a full-scale technological literacy assessment;

- Specifications for test and item development to ensure that the identified assessment framework, goals, objectives are reliably and validly measured (see Appendix D for the Board's Item Development and Review Policy); and

- Background variables related to technological literacy achievement that should be collected from students, teachers, and schools (see Appendix E for the Board's Background Information Framework).

Five major deliverables are required for this contract:

1) Planning Document: a detailed plan for carrying out the framework development project;
2) Assessment Framework: recommendations for the content to be assessed and design of the assessment, written for a broad audience;
3) Test and Item Specifications: recommendations that provide details for the National Center for Education Statistics (NCES) and the NAEP contractor to use in developing items and constructing the assessment;
4) Background Variables Document: recommendations on variables to be collected along with the NAEP technological literacy achievement data; and
5) Final Report: a document describing the framework development process carried out by the contractor.

2.6 Technical Direction of the Contract

The National Assessment Governing Board has assigned the Assessment Development Committee the responsibility of monitoring and overseeing all steps in the framework development process to define the content and format of the new NAEP technological literacy assessment. The performance of work requested in this Request for Proposals (RFP) shall be subject to the technical direction of the Contracting Officer (CO) and the Contracting Officer's Representative (COR), working under the guidance of the Board's Assessment Development Committee and the Board. Such technical direction shall consist of:

- Review and approval by the Assessment Development Committee and the Governing Board, through the COR, and the CO of work-in-progress at regularly scheduled intervals throughout the contract period (see schedule on page 12);

- Providing direction to the contractor to assure compliance with appropriate Board policies and specifications as contained in the contract, the NAEP statute, and Federal Acquisition Regulations (FAR);

- Directing the contractor regarding necessary details, policy emphases, and pursuit of particular perspectives and issues to facilitate work performance.

The CO and the COR shall work closely with the contractor's project manager to ensure that all contractual requirements are met, and that the process is managed in an efficient and cost-effective manner. The schedule for Board review and approval of each deliverable required in the contract is presented in Section 3.2.5.

3. Scope of Work

3.1 Purpose of the Procurement

The purpose of this procurement is to develop recommendations for a technological literacy Framework and Specifications for the National Assessment Governing Board. This new Framework and Specifications shall be developed for the national level 2012 NAEP assessment of technological literacy at grades 4, 8, and 12. For the 2012 probe, only one of these grades will be assessed.

The contractor, through a comprehensive framework development process, shall prepare for the Board's thorough review, deliberation, and action:

- A recommended Framework containing objectives for the NAEP technological literacy assessment at grades 4, 8, and 12 and recommendations for defining the content and format of the assessment to be used, as well as inferences about student performance that shall be made from the assessment data. The Framework document shall be written for a broad audience and be submitted for Board review through the Assessment Development Committee.

- Recommended Test and Item Specifications consisting of a detailed blueprint for constructing the assessment, which provides appropriate content, overall specifications for developing the item pool, and details for writing each type of assessment question, including sample questions and scoring guides. The test specifications must provide guidance on developing the assessment items for administration via computer to all students selected for the NAEP sample. The primary audience for this document shall be the National Center for Education Statistics (NCES) and the NAEP test development contractor.

- Recommendations on important background variables deemed most likely to be associated with student achievement in technological literacy.

In considering how to develop recommendations for the Board on the goals and content of the technological literacy assessment, the contractor shall keep in mind the following:

- Governing Board Policy on Framework Development containing a set of guiding principles and detailed policies and procedures for conducting the framework development process; (see Appendix A)

- Board Policy on Item Development and Review that outlines the development process and expectations for NAEP items (see Appendix D);

- The Board's Background Information Framework for NAEP that provides policy guidance and procedures on background variables to be collected by NAEP (see Appendix E);

- The Board is committed to a technically sound, computer based, efficient assessment design, i.e., an assessment which measures in a reliable and valid manner, what students know and can do in technological literacy using an appropriate mix of items, technology applications, and other state-of-the-art measurement practices.

- Technological literacy goals and objectives shall be based on the nation's and individuals' future needs and desirable levels of technological literacy achievement, insofar as these can be determined. The Board is interested in having the technological literacy assessment informed by technological literacy achievement likely to be expected of students in the first half of the 21st century.

- For the 2012 NAEP technological literacy assessment, the contractor shall address the use of technology in the assessment. This shall include, but shall not be limited to, administration of the assessment using computer-based technology. The contractor is encouraged to study and recommend technology applications for the technological literacy assessment that are feasible, cost-effective, grade-appropriate, and that will result in valid measures of student technological literacy achievement.

- The National Assessment Governing Board is committed to fulfilling its statutory responsibilities by setting appropriate achievement levels in the subjects and grades tested by the National Assessment. The results of the NAEP technological literacy assessment shall be reported using performance standards that take into account the achievement level policy requirements appropriate to this assessment.

3.2 Procurement Tasks

3.2.1 Task 1. Define Relationship with the National Assessment Governing Board

The Governing Board's Contracting Officer (CO) shall have the responsibility to undertake all aspects of contract communication with the contractor's designated representative, including all changes that may have potential impact on contract costs and deliverables. The contractor shall work directly with the COR, who will provide technical direction and monitor all facets of the project. Within ten business days following contract award, the CO, COR, and other Board staff shall meet with the contractor in Washington, D.C. to define specifically the relationships that will exist among the parties in accomplishing tasks identified in this scope of work.

Within ten business days following this meeting, the contractor shall prepare and submit an electronic file version (in Microsoft Word 2003) of a written summary of the discussion, including all agreements reached for review and approval by the CO and COR. Comments on this document will be provided by Board staff within five business days following receipt.

3.2.2 Task 2. Develop a Planning Document

The contractor shall prepare and provide to the COR a **Planning Document**, which will outline, both by task as well as chronologically for the 18-month contract period, each activity to be performed under this procurement in a level of detail that allows long-range planning by the Board and staff. The Planning Document shall also serve a monitoring tool to keep the contract on schedule. The Planning Document will not in any way change the scope of work or the contractual agreements, but will elaborate on the detailed subtasks of each activity. A schedule of Governing Board meetings is included in Appendix F.

An electronic file version (in Microsoft Word 2003) and five hard copies of the draft Planning Document shall be submitted to the COR within 15 calendar days of the award of this contract for review and comment by the Board. The CO and COR shall review the Planning Document and return comments to the contractor within five calendar days of its receipt from the contractor. An electronic file version (in Microsoft Word 2003), a CD-ROM version, and five hard copies of the final Planning Document shall be delivered to the Board within 25 calendar days of the contract award.

3.2.3. Task 3. Develop a Recommended Framework and Specifications for a NAEP Technological Literacy Assessment

Task 3 is to conduct a comprehensive, inclusive, and deliberative framework development process to recommend to the Board learning goals and objectives in technological literacy at grades 4, 8, and 12 for the technological literacy assessment. From this set of goals and objectives, the contractor shall develop a recommended framework and specifications to govern the design and content of the NAEP technological literacy assessment. Test and item specifications shall be recommended to ensure that the framework and objectives are appropriately and efficiently measured, and that the resulting item pool is amenable to establishing performance standards for reporting student achievement.

An issues paper prepared for the National Assessment Governing Board, shall serve as a springboard for the framework deliberations. Additionally, state and local standards and assessments, international standards and assessments, widely accepted professional standards, research, and other key indicators shall contribute significantly to this framework development process. A product of this process shall be a proposed

comprehensive assessment framework that articulates knowledge, skills, strategies, and practices that students can be expected to demonstrate in technological literacy at grades 4, 8, and 12. Such a framework will provide a basis for national NAEP technological literacy assessments in 2012 and beyond.

The contractor shall identify specific groups and individuals to be involved in the technological literacy framework process, including but not limited to: classroom teachers from public and private schools; state and local curriculum specialists; technological literacy educators; cognitive psychologists; education policymakers; researchers; administrators; representatives of private schools; scholars; parents; representatives of government, business, and industry; test and measurement specialists; "users and consumers" of technological literacy such as engineers and scientists; and members of the general public. Teachers, curriculum specialists, and administrators will be drawn from schools across the nation, including individuals who work with students from high-poverty and low-performing schools. "Users and consumers" on the framework committee shall include individuals who are actively engaged in technological literacy, science, and engineering in various public and private sectors.

The contractor shall describe, in detail, how the various communities concerned with learning, teaching, and achievement in technological literacy will be engaged so as to take into account research and assessment in technological literacy and also the expectations of the broader community regarding technological literacy achievement. The process shall be consistent with the NAEP law requiring the "active participation of teachers, curriculum specialists, local school administrators, parents, and concerned members of the public."

The contractor shall define the roles of various participants in the framework development process and the relationships that exist among them. The contractor's proposal shall include specific and effective plans for the active involvement of relevant groups and individuals, both project panel members and external reviewers.

The framework project committees will be constituted in such a way as to be representative in terms of gender, race/ethnicity, region of the country, and viewpoints regarding the content of the assessment under development. In addition, many different views will be sought from various segments of the population in the review of materials and in soliciting public input and feedback.

A project oversight or **Steering Committee** shall be established and given responsibility for a number of key aspects of the project. This committee shall receive the project charge directly from the Governing Board, and formulate guidelines for the conduct of the framework process consistent with statutory requirements and Board policy. This oversight committee shall monitor the progress of the developmental work via meetings, teleconferences, and electronic communication. The final recommended documents from the project will be reviewed by the oversight panel for recommendation to the Board upon the completion of the deliberative process. The "user and consumer" group

representatives shall constitute 30 percent of the membership of the policy oversight committee.

Development of the project documents shall be the responsibility of a project **Planning Committee** composed of content experts, educators, curriculum specialists, university professors, testing and measurement specialists, policymakers, users and consumers, business representatives, and members of the general public. High school classroom teachers will be well represented on this committee. Teachers and curriculum specialists will be drawn from schools across the nation, including individuals who work with students from high-poverty and low-performing schools. Both public and private schools will be represented on this committee.

Science and technological literacy curriculum specialists in all state departments of education shall be included in the framework development process through mail and/or electronic reviews of the draft framework, and other forums as appropriate.

The Planning Committee shall carefully consider the charge from the Governing Board and guidelines set forth by the project oversight or Steering Committee in developing the assessment framework. The Planning Committee will carry out its work through meetings, conference calls, and electronic communication, under the direction of project staff. The Planning Committee will be responsible for developing the major deliverables of the project: the framework, specifications, and background variables documents,. Members of the Planning Committee who are testing and measurement experts shall also advise the project on the technical aspects of the assessment framework and specifications documents. Offerors are encouraged to propose technology-based strategies and processes for widespread involvement of diverse NAEP constituent groups during the framework review process.

If the offeror wishes to propose an alternative structure for the framework development process, such a design shall be consistent with the preceding requirements for broad-based membership and representation on the framework project committees.

Membership on the framework project committees shall be stable so that all members, to the extent possible, are involved in all meetings of the groups. Meetings shall be held in Washington, D.C., in order to have maximum participation by all parties, including Board staff, NCES, and NAEP contractors. All framework project committees shall meet in person, and communicate via teleconferences and electronic media as appropriate.

Considering the limited amount of time available to complete the project, the contractor shall adhere to the timelines specified in the Planning Document to develop a set of activities that may include, but not be limited to: meetings, canvassing of various groups and individuals, public hearings, teleconferences, internet and other electronic communication, and additional written or oral communications that represent the contractor's best effort to solicit and engage views of all interested parties to the maximum extent feasible.

The contractor shall be responsible for all logistical arrangements related to implementation of the proposed set of activities. Such arrangements include, but are not limited to:

1) travel arrangements;
2) arranging for suitable meeting space;
3) developing agendas and meeting materials;
4) preparing and making available minutes or reports of all meetings and conferences within 5 business days following the activity;
5) distributing informational materials; and
6) developing electronic communications, forums, and materials.

Timelines for these activities shall be provided well in advance of their occurrence, and should be in accordance with the timelines specified in the Planning Document. The contractor is required to use technology, such as the Internet, to communicate effectively and cost efficiently with the Board, project committees, and the broader community, as necessary.

The contractor shall organize and structure the project to encourage effective participation of various individuals and groups and ensure appropriate timing of activities. Plans to accomplish this and pertinent timelines will be discussed at the initial meeting of the contractor, CO, COR, and other Board staff, and may be subject to further refinement as a consequence of that meeting and follow up project work.

The contractor shall implement procedures to facilitate clarification of positions and views of qualified experts, professional practitioners, lay policymakers, parents, and the various communities with respect to 1) student achievement in technological literacy and how to assess student skills and strategies in this domain and 2) background information to be collected from students, teachers, and schools.

The framework development environment must be open, balanced, and even-handed. All issues and agendas will be considered in a careful, objective, and respectful manner by all project committees and the Board. The contractor shall also develop a strategy to be used during the project deliberations to reconcile differences in points of view, if any, regarding issues relevant to the assessment. This will include procedures for: 1) defining and describing the issues identified; 2) making explicit any differences that cannot be reconciled; and 3) developing alternative assessment options with the pros and cons articulated and priorities suggested accordingly.

It is anticipated that the views of more groups and individuals will be solicited than will be feasible for the contractor to work with directly to guide the framework process and formulate recommendations on the goals and content of the technological literacy assessment. The contractor shall establish a structure for guiding the framework process and formulating recommendations as described in the first paragraph of Section 3.1, Purpose of the Procurement.

3.2.4 Task 4. Development of Recommendations on Student, Teacher, and School Background Variables

In addition to collecting information on student achievement, NAEP also gathers data on important background variables related to student achievement. NAEP's primary mission is to provide a fair and accurate measure of student achievement and on achievement trends over time. Background variables are a vital component of reporting and understanding NAEP results.

The Board-adopted Background Information Framework for NAEP (see Appendix E) shall be used to guide the discussion on developing the background variables. This document provides priorities for collecting and reporting background variables and criteria to help determine key variables of interest. The contractor shall develop recommendations for student, teacher, and school variables based on deliberations of the project committees, review of relevant research, and consultation with outside experts as needed. Based on this work, the contractor's background variables report shall identify key issues and topic areas for data collection, along with a rationale for the recommendations. It is not the intent of the background variables report to provide specific survey questions for the data collection.

3.2.5 Task 5. Project Deliverables

As a result of conducting the framework development process for a NAEP technological literacy assessment, the contractor shall prepare the following major deliverables for the Board's consideration, according to the schedule below. All electronic file versions of the deliverables shall be submitted to the Board (in Microsoft Word 2003).

Schedule of Required Deliverables
The following table provides the due dates from the date of contract award, for each of the project deliverables in draft and final copy.

Deliverables	Draft Copy	Final Copy
Planning Document	15 calendar days	25 calendar days
Assessment Framework	12 months	14 months
Test and Item Specifications	16 months	18 months
Background Variables	16 months	18 months
Final Report	17 months	18 months

Document A – Framework: Based on a comprehensive, inclusive, and deliberative process, the contractor shall recommend a rationale for the assessment structure, with goals, objectives, and test content for a NAEP technological literacy assessment at grades 4, 8, and 12.

The framework will provide information to the public and test developers on three key aspects of the assessment:

a) what should be measured;
b) how that domain of content is most appropriately measured in a large-scale assessment; and
c) how much of the content domain, in terms of knowledge and skills, should students know and be able to do at the basic, proficient, and advanced levels.

More specifically, the framework shall:

a) articulate the purpose and scope of the assessment;
b) define the content and skills to be tested at each grade;
c) define the weighting of the item pool in terms of the content and cognitive dimensions;
d) describe the format requirements of the items and the assessment;
e) include preliminary achievement level descriptions for each grade at the basic, proficient, and advanced levels;
f) contain sample items and scoring criteria for each grade to be tested.

The framework will address the technological literacy knowledge, skills, and strategies to be assessed, the way in which those skills should be measured in NAEP, expectations for how much of those skills students should possess, and inferences to be made about student performance. Recommendations regarding the technological literacy skills to be assessed must represent a coherent set of objectives that address student learning in this subject area. The primary audience for the framework shall be the general public, however the document shall contain sufficient information to inform policymakers, educators, and others about the nature and scope of the technological literacy assessment.

The framework shall not endorse or advocate a particular pedagogical approach to the subject area being assessed, but shall focus on important, measurable indicators of student achievement to inform the nation about what students know and are able to do. While the framework shall not endorse pedagogy, it may facilitate reporting on various types of skills essential to achievement in technological literacy at grades 4, 8, and 12.

Due Dates: An electronic file version (in Microsoft Word 2003) and five draft copies of the Framework shall be delivered to the CO for Board review within 12 months of the award date. The Board, through the CO and COR, will provide comments to the contractor within 10 business days of receipt. An electronic file version, CD-ROM version, and five copies of the final document shall be delivered to the CO for Board review and action within 14 months of the award date.

Document B – Test and Item Specifications: Emerging from the assessment framework, the recommended specifications, or test blueprint, shall provide detailed directions for the assessment design and for writing test items. Under the technical direction of the COR, the contractor shall recommend assessment objectives consistent with the requirements of this section and test specifications that will produce an

assessment that is valid and reliable, and is based on relevant, widely accepted professional standards.

The primary audience for the specifications, or assessment blueprint, shall be NCES and the NAEP contractor(s) responsible for developing the assessment and test questions. The specifications should be written in sufficient detail so that item writers can develop high quality questions based on the framework objectives for grades 4, 8, and 12, where applicable, in the subject area.

The specifications will include, but shall not be limited to:

a) detailed descriptions of the content and cognitive dimensions, including the weighting of those dimensions in the item pool at each grade;
b) types of items;
c) guidelines for stimulus material;
d) types of response formats;
e) scoring procedures and criteria;
f) preliminary achievement level descriptions;
g) specifications for development and administration of this computer based assessment;
h) administration conditions;
i) description of ancillary materials, if any;
j) considerations for students with disabilities and English language learners;
k) sample items with scoring guidelines for each grade level; and
l) unique requirements for the subject area, if any.

The assessment content must be specified in sufficient detail to allow the selection and development of appropriate test items corresponding in content, number, and weighting to the recommended framework and objectives. Specifications also must incorporate recommendations for performance standards in technological literacy to be used for reporting the results. Specifications for all recommended test item types, along with a clear rationale for each item type, shall be included in this document.

Due Date: An electronic file version (in Microsoft Word 2003) and five draft copies of the test and item specifications shall be submitted to the CO for Board review within 16 months of the award date. The Board, through the CO and COR, will then provide comments to the contractor within 10 calendar days of receipt. An electronic file version, CD-ROM version, and five copies of the final document shall be delivered to the CO for Board review and action, within 18 months of the date of contract award.

Document C - Background Variables: The contractor shall develop recommendations on background variables to be collected in conjunction with technological literacy assessment from students, teachers, and schools. Because of limited NAEP resources for collecting such information, and time limits on the length of the background questionnaires as determined by the Board, priorities are to be assigned with the highest priority given to those factors which: 1) are known to be associated consistently with

technological literacy achievement; and 2) are of special significance to the public and policymakers. Intrusive or unduly burdensome background variables shall be avoided.

Due Dates: An electronic file version (in Microsoft Word 2003) and five draft copies shall be submitted to the CO for Board review within 16 months of the contract award date. The Board, through the CO, will then provide comments to the contractor within 10 business days of receipt. An electronic file version, CD-ROM version, and five copies of the final document shall be delivered to the CO for Board review, within 18 months of the date of the award of this contract.

Document D - Report of the Framework Development Process: The contractor shall provide a comprehensive summary report of the framework development process, with recommendations for future work of this type.

Due Date: An electronic file version (in Microsoft Word 2003) and five copies of the draft summary report final document shall be submitted to the CO for delivery to the Board within 17 months of the award of this contract. The Board, through the CO, will then provide comments to the contractor within 10 business days of receipt. An electronic file version, CD-ROM version, and five copies of the final document shall be delivered to the CO for Board review, within 18 months of the date of the award of this contract.

All final reports submitted by the contractor shall include a listing of Governing Board members, project staff, and names of project committee members and consultants, as appropriate.

4. Contract Requirements

4.1 Project Reports

The contractor shall work closely with the COR and communicate at least once per week to report on the project status. The COR will closely monitor the contractor's work to ensure performance of activities as specified in the contract and to guarantee technical quality, policy relevance, and objectivity.

The contractor shall submit **monthly progress reports,** summarizing contractual activities and financial expenditures to the Board for the duration of the project. Monthly progress reports shall describe **contractual activities**, including major tasks and accomplishments, problems and suggested solutions, significant activities and events, any decisions that may be needed from the Board, and plans for the next reporting period. These progress reports shall be submitted by the tenth day of each month (or on a specified date agreed upon by the CO and the contractor for the preceding month. The CO, through the COR, shall respond within five calendar days to each monthly progress report with any technical direction or re-direction that may be warranted in order to carry out Board policy and/or guidance.

In addition to monthly progress reports, the contractor shall provide monthly reports on **financial expenditures** through invoice submissions. Each invoice shall include the following information:

a) A summary of the overall project costs broken down by the five task areas described in Section 3.2 Procurement Tasks. This will include task/contract funding; tasks costs by current reporting period; cumulative costs for each task; and a balance of funds for the overall contract.

b) Following this summary, the contractor shall provide, by task, a breakdown of labor and other direct costs. Labor hours will be depicted by individual staff and/or consultant tallied by approved labor rates and labor costs for staff. Detail for other direct costs shall be summarized by line item description and cost. Budgeted versus actual costs for each line item will be provided. Sufficient detail for each cost, such as lodging and per diem, supplies, etc. shall be provided to substantiate billed costs.

A sample of the required invoice information is provided in Appendix G.

4.2 Management System

For a successful outcome, this project will require an effective management system that enables the contractor to complete tasks on schedule and within budget. The system shall include procedures for coordinating and controlling project personnel and tasks; ensuring adherence to schedules and deadlines; ensuring high quality products and outcomes; identifying potential problems early; maintaining close communication with the COR; and controlling project expenditures. The proposal shall include a detailed discussion, with diagrams and graphics as appropriate, of all elements of the management system. Discussion of the chain of command, interrelationships, and project duties of all staff, including subcontractors and consultants, if any, must be well documented.

4.3 Board Review and Approval Process

The contractor shall consult the CO and COR before making any major decision concerning project deliverables. Such decisions shall include, but not be limited to changes in the direction, scope, or focus of the document, issues relating to Board policies, and requests for alternative due dates for deliverables. The CO and/or the COR, as appropriate, will provide a written decision on the issue based on the advice of the Assessment Development Committee and, where appropriate, the full Board. To facilitate this action, the Board expects the contractor to use the most efficient methods of expediting communication.

5. Instructions to Offerors

5.1 Organization and Content of the Technical Proposal

The tasks and suggestions presented in this procurement are intended to guide prospective offerors. The successful contractor is expected to be innovative in the approach recommended, and should delineate in the proposal the role and function of all groups involved, including their interrelationships. The overall schedule, however, is not flexible. The project must be completed 18 months from the date of contract award because of the schedule of subsequent activities necessary to prepare for and carry out the planned technological literacy assessment. The information presented is not intended to restrict an offeror's proposal or to stifle creativity. What is desired of offerors is their perspective on the approach and activities, within the given schedule and level of effort, that can best accomplish the purpose of the framework development process in technological literacy. It is on this assumption that the offeror should submit a response to the RFP in accordance with the guidance below.

Offerors are required to follow the proposal format and content requirements detailed in this section. Each offer shall consist of three separately packaged proposals: a technical proposal, a cost proposal, and a past performance report prepared in accordance with the directions provided below. All information necessary to judge the technical soundness and management capabilities of the offeror will be contained in the technical proposal.

The technical proposal shall be limited to 100 pages, including all appendices. The technical proposal shall be submitted in a format using double spaced, 12-point type on 8.5 x 11 inch paper. This technical proposal must not contain reference to specific costs; but resource information may be included so that the offeror's understanding of the scope of the work may be evaluated. The technical proposal shall be organized as follows: Table of Contents, Introduction, General Approach, Technical Work Plan, Management Plan, Related Experience of Proposed Staff, and References. Past performance will be provided in a separate volume. Authors of each section shall be clearly identified in the proposal's Table of Contents. Specific requirements for each section are noted below.

Table of Contents
The Table of Contents will summarize the content of each section and identify authors of each section of the technical proposal.

Introduction
The Introduction shall present the offeror's concept of the purposes, methodology, and describe the offeror's understanding of the products of the project. This section shall include a short summary of the offeror's qualifications and unique strengths related to project tasks outlined in Section 3 of this Scope of Work.

General Approach
The General Approach section shall provide the rationale for the proposed approach, describe the offeror's overall plan to accomplish the work successfully, and discuss key

issues in technological literacy assessment that would have an impact on development of the technological literacy framework and specifications.

Technical Work Plan
The offeror's technical response to the Statement of Work shall provide a detailed discussion of how tasks outlined in Section 3 of this Scope of Work are to be carried out. It should expand upon each of the tasks and include a discussion of procedural issues related to completing each task. A comprehensive plan for carrying out each task shall identify staff members who will play a major role in its completion. Offerors are encouraged to propose creative and effective approaches to accomplish the Framework and Specifications development process.

Management Plan
The Management Plan section shall detail the offeror's overall management plan, including lines of authority, coordination, and communication within the offeror's organization (or within a consortium, if applicable). The offeror shall describe in this section of the proposal the management control system that will be used internally for planning, scheduling, budgeting, managing, and reporting on all phases of the contract.

All key personnel, including staff, and consultants, shall be identified by name and title. Their position in the project's management structure and be detailed in an organizational chart. This chart shall depict clearly the lines of authority and responsibility for all persons and organizations involved in the conduct of this project.

This section shall also include a chart depicting the timelines for all major tasks and subtasks, including deliverables, meetings, hearings, etc. Included in this chart shall be the start and completion dates for each task, as well as intermediate dates for precursor steps and draft deliverables, as appropriate. Key staff responsible for each task shall also be identified. The availability and time commitment of proposed key staff shall also be depicted.

In all cases where consultants or subcontractors external to the offeror's organization are proposed, vitae, letters of agreement (with proposed individuals) and letters of availability (endorsed by the primary institutions with which they are affiliated) shall be included for all organizations and/or persons bid in the proposal, for the time period of the contract. The proposal shall recommend advisory committee members. However, the offeror is not required to submit letters of availability for individual committee members. Final advisory committee membership shall be determined after contract award.

Related Experience of Proposed Staff
The Related Experience of Contractor's Staff section of the technical proposal shall consist of vitae for all proposed staff members, and identify key staff, as appropriate. Primary areas of expertise should be specified clearly. To plan, conduct, and complete

the work successfully, offerors must provide staff that collectively possess technical expertise, knowledge, and experience in at least the following areas:

- managing or coordinating national or state level assessment development projects on education issues;
- training and experience in science or technological literacy curriculum and instruction, and in developing large-scale assessments;
- developing comprehensive frameworks to guide a large scale assessment of student achievement;
- developing specifications for test and item characteristics to measure specified domains of learning;
- designing survey and assessment methodology;
- using meeting facilitation and negotiation skills, and ensuring that all viewpoints are heard in a large-group setting;
- developing effective and efficient assessment strategies, especially as they apply to assessing learning in science and technological literacy;
- coordinating efforts that involve a range of organizations, interests, and/or disciplines to achieve understandings among varied constituencies; and
- communicating effectively both orally and in writing.

All staff shall have qualifications appropriate for the tasks they are to perform. Vitae of proposed staff shall document all directly related experience, educational background, publications, and roles played in related projects. For two or three projects on which each key staff member has played a major role, indicate the name, current affiliation, and current telephone number of the sponsor's project officer or staff member who is familiar with the key staff member's prior work performance.

The proposed project director and senior staff must have demonstrated ability to meet deadlines, to produce high quality products within budget, and to keep the CO, COR, and/or other responsible officials, informed of and involved in major decisions or events that are likely to affect the project's performance or products. Any changes or substitutions of these key personnel will require written approval, in advance, by the Board's Contracting Officer via a contract modification. A **sample of professional writing** authored by the proposed project director, or co-directors, shall be included in an appendix to the technical proposal.

Related Organizational Experience
This section shall describe the offeror's experience in conducting projects of a similar nature and magnitude. The organization, or consortium of organizations, undertaking this project must have capabilities in the following areas:

- designing and managing a long-term assessment development project;
- developing content specific frameworks used to guide assessment of educational achievement of K-12 students;
- working closely with national education leaders and organizations, state and local school administrators, teachers, assessment specialists, researchers, state and local curriculum specialists, parents, business representatives, and other institutions or organizations with experience in K-12 education;
- coordinating project activities that include, for example, convening meetings of project committees in a thorough and professional manner; and
- implementing cost-effective project management strategies.

In addition, the organization undertaking the work must have performed well on prior contracts by demonstrating:

- low staff turnover;
- high quality control standards;
- adherence to budget constraints;
- responsiveness to the clients; and
- timeliness and acceptability of project deliverables.

Past Performance
The contractor shall also provide a Past Performance Report in the Technical Response to the Statement of Work. This Past Performance Report shall consist of short abstracts of related work, for four previous projects completed during the past three years that identify the contract value, both the names of staff members who were participants and the name, current affiliation, and current telephone number of the sponsor's project officer. These project officers may be asked to report their experience, orally or in writing, on relevant projects [size, problems (if any), cost overruns (if any), responsiveness, flexibility, and project quality].

5.2 Cost Proposal

The Cost Proposal shall be submitted in accordance with the proposal preparation instructions detailed in the Request for Proposals. The cost proposal will contain information on estimated costs associated with each of the project's tasks.

5.3 Use of Subcontractors

Proposals may include plans to subcontract parts of the work, provided evidence is presented that any proposed subcontractor has agreed to participate and is fully capable of performing the assigned tasks and that the offeror will have effective control of the subcontractor's work on the project. Offerors are encouraged to make use of subcontractors for specialized tasks where subcontractor expertise would strengthen the offeror's proposal. Contracts that include subcontractors shall be executed in accordance with the requirements of the prime contract, which is proposed as a Cost Plus Fixed Fee contract. The subcontractors shall submit detailed cost proposals adhering to similar requirements described in Section 5.2 of this Scope of Work. Such proposals may, if the contractor desires, submit the cost proposals separately to the Governing Board. The subcontractor shall adhere to the RFP requirements for proposal submission. Invoice submission by the subcontractors shall also provide similar cost detail as described in Section 4.1 (financial expenditures) of this Scope of Work.

U.S. Department of Education

CONTRACTOR PERFORMANCE INFORMATION

Contractor Name and Address (Identify Division)	1. Contract Number:
	2. Type of Contract:
	3. Contract Value (Current plus any unexercised options): $
(Please correct the above as needed.)	4. Period of Performance (including any option periods):

5. Description of Requirement:

6. **Ratings**. Summarize contractor performance and circle or type in the number below that corresponds to the performance rating for each category. Please see the attachment, which explains the rating scale.

Quality:	0 1 2 3 4	Comments:
Problem Resolution:	0 1 2 3 4	Comments:
Cost Control:	0 1 2 3 4	Comments:
Timeliness:	0 1 2 3 4	Comments:
Business Relations:	0 1 2 3 4	Comments:
Customer Service:	0 1 2 3 4	Comments:

7. Total score:

Evaluated by:

Agency/Organization _____ Date _____

(In accordance with the Federal Acquisition Streamlining Act, the following information will not be released to the contractor.)

Name and Title: _____ Telephone Number: _____

Signature: _____ E-Mail Address: _____

Please return this form to the following address:

U.S. Department of Education
National Assessment Governing Board
800 North Capitol Street, NW
Suite 825
Washington, DC 20002-4233

Or e-mail to:Stephen.Swearingen@ed.gov
Or fax to: 202-357-6945
Attn: Stephen Swearingen
RFP # ED08R0032

SOURCE SELECTION INFORMATION—SEE FAR 3.104
Information entered on this form will be used in source selection decisions and is protected under subsection 3.104 of the Federal Acquisition Regulation. Do not disclose information entered on this form to the contractor or to any other person except as authorized by the Department of Education contracting officer.

Supplementary Questions

To assist the Department of Education contracting officer, we would greatly appreciate your taking the time to answer the following questions, if any, related to the contractor's past performance:

Contractor Performance Evaluation

Instructions for Completing Contractor Performance Information Form

Based on the rating area elements presented below and the rating guidelines on the back of this sheet, please evaluate contractor performance in each of the rating areas. On the "Contractor Performance Information" form, circle (or type in the "Comments:" area) the rating from 0 to 4 that most closely matches your evaluation of the contractor's performance. Please add written comments for each rating. If you wish, you may attach additional comments or information. We would also appreciate your answers to the specific questions, if any, on the back of the form. Please return the form to the address indicated on the back of the form. Thank you for your time and your cooperation.

The Department of Education will use the information from this form to evaluate offerors competing for contract awards. We may release the information from this form to the contractor during negotiations or debriefings. If we release information from this form, we will not release your name to the contractor.

Elements within Each Rating Area

Quality of Product or Service
- Compliance with contract requirements
- Accuracy of reports
- Appropriateness of personnel
- Technical excellence

Problem Resolution
- Anticipates and avoids or mitigates problems
- Satisfactorily overcomes or resolves problems
- Prompt notification of problems
- Pro-active
- Effective contractor-recommended solutions

Cost Control
- Within budget
- Current, accurate and complete billings
- Costs properly allocated
- Unallowable costs not billed
- Relationship of negotiated costs to actual
- Cost efficiencies

Timeliness of Performance
- Meets interim milestones
- Reliable
- Stays on schedule despite problems
- Responsive to technical direction
- Completes work on time, including wrap-up and contract administration
- No liquidated damages assessed

Business Relations
- Effective management
- Use of performance-based management techniques
- Business-like concern for the customer's interests
- Effective management and selection of subcontractors
- Effective small/small disadvantaged business subcontracting program
- Reasonable/cooperative behavior
- Effective use of technology in management and communication
- Flexible
- Minimal staff turnover
- Maintains high employee morale
- Resolves disagreements without being unnecessarily litigious.

Customer Service
- Understands and embraces service and program goals
- Team approach with the customer
- Satisfaction of end users with the contractor's service
- Positive customer feedback
- Prompt responses
- Courteous interactions
- Effective escalations and referrals
- Initiative and proactive improvements
- Creative service strategies

Rating Guidelines

Quality of Product or Service

0 - Unsatisfactory	Nonconformance jeopardizes the achievement of contract goals; default.
1 - Poor	Nonconformance requires major agency intervention to ensure achievement of contract goals; show cause or cure notices.
2 - Fair	Quality meets specifications in most cases, however, some agency intervention required to ensure achievement of contract requirements.
3 - Good	Quality meets specifications in all cases.
4 - Excellent	Quality exceeds specifications in some cases.

Problem Resolution

0 - Unsatisfactory	Inadequately resolved problems jeopardize contract goals.
1 - Poor	Significant agency intervention required to resolve problems jeopardizing contract goals.
2 - Fair	Some agency intervention required to resolve problems jeopardizing contract goals.
3 - Good	Successfully overcomes or resolves all problems and achieves contract goals with minimal agency intervention.
4 - Excellent	Anticipates and avoids most problems and successfully overcomes all unforeseen problems.

Cost Control

0 - Unsatisfactory	Cost increases jeopardize achievement of contract goals; or billings routinely include unallowable costs.
1 - Poor	Significant cost increases; or some inaccurate billings including some with unallowable costs.
2 - Fair	Minor cost increases; or some inaccurate billings, but a minimal (1-2) number with unallowable costs.
3 - Good	Contractor performed within costs; but some late billings, none with unallowable costs.
4 - Excellent	Costs were less than the amount cited in the contract; and billings accurate and timely.

Timeliness of Performance

0 - Unsatisfactory	Delays jeopardize the achievement of contract goals.
1 - Poor	Other significant delays.
2 - Fair	Minor delays.
3 - Good	All deliverables on time.
4 - Excellent	All deliverables on time with some ahead of schedule; or stays on schedule despite unforeseen circumstances.

Business Relations

0 - Unsatisfactory	Unethical or illegal business practices.
1 - Poor	Business practices are not attuned to customer support.
2 - Fair	Business practices are somewhat attuned to customer support.
3 - Good	Business practices focus on customer support.
4 - Excellent	Highly effective, proactive business practices focused on customer support.

Customer Service

0 - Unsatisfactory	Response to service requests is routinely late, ineffective, or rude; customers express frustration or anger about many interactions; complaints are unresolved; contractor seems unaware of service issues.
1 - Poor	Response to service requests is often late, ineffective or rude; some complaints are resolved.
2 -Fair	Response to service requests is uneven in timing or effectiveness; customer interactions are tenuous; contractor is trying hard and understands service issues.
3 - Good	Response to service requests is timely, effective and courteous; customers express positive feedback; delivery of service is smooth and organized; collects customer feedback; customer problems are resolved well.
4 - Excellent	Response to service requests is timely, effective and courteous; the contractor is proactive in building good relations with customers, proposing new service strategies, analyzing and reporting on service loads and collecting and using customer feedback.