

STATE OF MICHIGAN
 DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
 PROCUREMENT
 P.O. BOX 30026, LANSING, MI 48909
 OR
 525 W. ALLEGAN, LANSING, MI 48933

**NOTICE OF
 CONTRACT NO. 071B4300142**
 between
THE STATE OF MICHIGAN
 and

NAME & ADDRESS OF CONTRACTOR:	PRIMARY CONTACT	EMAIL
Data Recognition Corporation 13490 Bass Lake Road Maple Grove, MN 55311	Susan Engeleiter	sengeleiter@datarecognitioncorp.com
	TELEPHONE	CONTRACTOR #, MAIL CODE
	(763) 268-2102	

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR:	Education	Andrew Middlestead	(517) 241-2694	middlesteda@michigan.gov
BUYER:	DTMB	Don Mandernach	(517) 284-7019	mandernachd@michigan.gov

CONTRACT SUMMARY:			
DESCRIPTION:			
Administration, Scoring and Reporting of Online Statewide Assessments – Department of Education, Bureau of Assessment & Accountability			
INITIAL TERM	EFFECTIVE DATE	INITIAL EXPIRATION DATE	AVAILABLE OPTIONS
Two Years	July 14, 2014	July 13, 2016	2, one year options
PAYMENT TERMS	F.O.B	SHIPPED	SHIPPED FROM
Firm-Fixed	N/A	N/A	N/A
ALTERNATE PAYMENT OPTIONS:			AVAILABLE TO Mi-DEAL PARTICIPANTS
<input type="checkbox"/> P-card <input type="checkbox"/> Direct Voucher (DV) <input type="checkbox"/> Other			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
MINIMUM DELIVERY REQUIREMENTS:			
N/A			
MISCELLANEOUS INFORMATION:			
N/A			
ESTIMATED CONTRACT VALUE AT TIME OF EXECUTION:			\$ 24,192,748.00

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THIS IS NOT AN ORDER: This Contract Agreement is awarded on the basis of our inquiry bearing the solicitation #071I3200017. Orders for delivery will be issued directly by the Michigan Department of Education, Division of Accountability Services through the issuance of a Purchase Order Form.

Notice of Contract #: 071B4300142

FOR THE CONTRACTOR:

Data Recognition Corporation

Firm Name

Authorized Agent Signature

Authorized Agent (Print or Type)

Date

FOR THE STATE:

Signature

Name/Title

DTMB Procurement

Enter Name of Agency

Date



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Appendix A: Interfaces

Attachment A: Pricing



Definitions

24x7x365 means 24 hours a day, seven days a week, and 365 days a year (including the 366th day in a leap year).

Additional Service means any Services within the scope of the Contract, but not specifically provided under any Statement of Work.

Audit Period means the seven year period following Contractor's provision of any work under the Contract.

Bidder(s) are those companies that submit a proposal in response to this RFP.

Business Day means any day other than a Saturday, Sunday or State-recognized legal holiday from 8:00am EST through 5:00pm EST unless otherwise stated.

Blanket Purchase Order is an alternate term for Contract and is used in the Plan Sponsors' computer system.

CCI means Contract Compliance Inspector.

Days means calendar days unless otherwise specified.

Deliverable means physical goods and/or services required or identified in a Statement of Work.

DTMB means the Michigan Department of Technology Management and Budget.

Environmentally Preferable Products means a product or service that has a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. Such products or services may include, but are not limited to: those which contain recycled content, minimize waste, conserve energy or water, and reduce the amount of toxics either disposed of or consumed.

Hazardous Material means any material defined as hazardous under the latest version of federal Emergency Planning and Community Right-to-Know Act of 1986 (including revisions adopted during the term of the Contract).

Incident means any interruption in any function performed for the benefit of the State.

Key Personnel means any personnel identified in **Section 1.031** as Key Personnel.

New Work means any Services/Deliverables outside the scope of the Contract and not specifically provided under any Statement of Work, such that once added will result in the need to provide the Contractor with additional consideration. "New Work" does not include Additional Service.

Ozone-depleting Substance means any substance the Environmental Protection Agency designates in 40 CFR part 82 as: (1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or (2) Class II, including, but not limited to, hydrochlorofluorocarbons.

Post-Consumer Waste means any product generated by a business or consumer which has served its intended end use; and which has been separated or diverted from solid waste for the purpose of recycling into a usable commodity or product, and which does not include post-industrial waste.

Post-Industrial Waste means industrial by-products which would otherwise go to disposal and wastes generated after completion of a manufacturing process, but does not include internally generated scrap commonly returned to industrial or manufacturing processes.



Recycling means the series of activities by which materials that are no longer useful to the generator are collected, sorted, processed, and converted into raw materials and used in the production of new products. This definition excludes the use of these materials as a fuel substitute or for energy production.

Reuse means using a product or component of municipal solid waste in its original form more than once.

RFP means a Request for Proposal designed to solicit proposals for services.

Services means any function performed for the benefit of the State.

SLA means Service Level Agreement.

Source Reduction means any practice that reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment prior to recycling, energy recovery, treatment, or disposal.

State Location means any physical location where the State performs work. State Location may include State-owned, leased, or rented space.

Subcontractor means a company selected by the Contractor to perform a portion of the Services, but does not include independent contractors engaged by Contractor solely in a staff augmentation role.

Unauthorized Removal means the Contractor's removal of Key Personnel without the prior written consent of the State.

Waste Prevention means source reduction and reuse, but not recycling.

Pollution Prevention means the practice of minimizing the generation of waste at the source and, when wastes cannot be prevented, utilizing environmentally sound on-site or off-site reuse and recycling. The term includes equipment or technology modifications, process or procedure modifications, product reformulation or redesign, and raw material substitutions. Waste treatment, control, management, and disposal are not considered pollution prevention, per the definitions under Part 143, Waste Minimization, of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended.

Work in Progress means a Deliverable that has been partially prepared, but has not been presented to the State for Approval.

Work Product refers to any data compilations, reports, and other media, materials, or other objects or works of authorship created or produced by the Contractor as a result of an in furtherance of performing the services required by the Contract.



DEFINITIONS—Division of Accountability Services

Accommodation — Accommodations are practices and procedures in the areas of presentation, response, setting, and timing/scheduling that provide equitable access during instruction and assessment for students with disabilities. Educators and administrators design accommodations in order to compensate for or mitigate a disability the student may have, or to address a physical, mental, or emotional need a student exhibits. Accommodations administered both in regular instruction and during assessments are one way that educators ensure that students have access to education in a way that is equal to their peers. Accommodations are intended to reduce or eliminate the effects of a student’s disability; they do not reduce the learning experience.

Activity-based observation item — In Michigan, this is a type of MI-Access Supported Independence or Participation performance-based item (SI/P) that takes into account the degree of assistance provided by the test administrator(s) to a student in completing an individual or group activity. The single digit response rating is A, B, C, or 1, 2, 3.

ADA (Americans with Disabilities Act) — Wide-ranging legislation intended to make American society more accessible to people with disabilities. It extends protection against discrimination to all State and local government services (including public schools) whether or not they receive Federal funds.

AERA (American Educational Research Association) — is the national interdisciplinary research association for scholars who undertake research in education.

Alternate Achievement Standards — Explicit definitions of how students are expected to demonstrate attainment of the knowledge and skills covered in the State’s extended content standards.

Alternate Assessment — An assessment used to measure the learning progress and performance of students with disabilities whose IEP Teams have determined that it is not appropriate for them to participate in general education assessments (i.e., the MEAP or the MME). As allowed by Federal law, these assessments may be based either on grade-level achievement standards or alternate achievement standards.

Answer Booklet — A scannable multi-page document in which students record their responses to an assessment.

Answer Document — A scannable answer sheet in which students record their responses to an assessment.

AI (Artificial Intelligence) Scoring — refers to computer-automated scoring of constructed-response items.

AIF (Assessment Interoperability Framework) – The framework being developed by the joint SIF/IMS working group to define how interoperability standards should be applied for an assessment platform in support of the current State standard assessments.

APA (American Psychological Association) — The largest scientific and professional organization representing psychology in the United States.

API (Application Programming Interface) — A specification intended to be used as an interface by software components to communicate with each other.

APIP (Accessible Portable Item Protocol) Standard — A technical standard that focuses on accessibility in assessment items. APIP is an extension of the QTIv2.1 standard, allowing accessibility information to be included in a digital test item definition so that items can be transferred between APIP compliant item banks.

Assessment — A tool or instrument that measures what a student knows and can do. This measurement is often expressed as a score on a numerical rating scale, as well as a description of a performance level.



Assessment Accommodation — Changes the way a student accesses an assessment without changing the actual standards the student is working toward or the content being assessed. The goal of an assessment accommodation is to minimize the impact of a student's disability on his or her performance on an assessment. Decisions regarding assessment accommodations are to be made on a case-by-case basis and are to be based on relative appropriateness to a disability and the impact it has on the student. Decisions about assessment accommodations should be made well in advance of the actual assessment.

Assessment Coordinator — is the School or District Coordinator for statewide assessment programs. Currently, there are MEAP, MEAP-Access, MI-Access, and MME coordinators for general and alternate assessment programs. MME also has an Accommodations Coordinator for the Day 1: College Readiness Assessment; Day 2: Career Readiness Assessment; and Day 3: Michigan's custom developed components. Multiple assessment programs may be coordinated by a single person.

Assessment Window — is the span of days over which assessments are administered.

MDE Secure Site — this is the entry point, or *Portal**, where end-users access all components (paper-and-pencil and online) of Michigan's assessment and reporting systems. The Secure Site has a multi-tier security structure that controls user rights based on pre-established permissions. It is used for pre-identifying students for online and/or paper-and-pencil assessments by assessment program, grade level, and content area; for ordering materials and tracking order status; for displaying which students have tested; and for identifying possible administration issues.

Benchmarks — While content standards describe what all students should know and be able to do in certain broad subject areas, benchmarks indicate what students should know and be able to do at various developmental levels (i.e., early elementary, later elementary, middle, and high school) within the content standards (Michigan Curriculum Framework, page 8).

CEDS (Common Education Data Standards) – A national collaborative effort to develop voluntary, common data standards for a key set of education data elements to streamline the exchange and comparison of data across institutions and sectors. (<https://ceds.ed.gov>)

CEPI (Center for Educational Performance Information) — Collects and reports data about Michigan's K–12 public schools. Initiatives in data collection and reporting facilitate school districts' compliance with the Federal *No Child Left Behind Act of 2001* and the Michigan Department of Education's accreditation plan, *EducationYes!*

CAT (Computer Adaptive Test)* — A computer adaptive test is one in which the next test question is selected (and typically administered) by a computer algorithm based on the student's performance on previously administered items. In such a way, an assessment can be tailored to the individual student's response, thereby adding precision to the resulting scores since students only see the test questions most appropriate for them.

CCR (Change Control Request) —In Michigan, the process to alter the Specifications or the Statement of Work.

Concurrent Users — are the Users who are logged in and using the Online Test Delivery System at any given time.

Content Area — is a Course or discipline of study, including reading, mathematics, science, social studies, and writing. (Content areas can also include languages, art, music, theater arts, and other disciplines not typically assessed on Statewide assessments.)

Core GLCE — A Grade Level Content Expectation, or GLCE, that measures an essential skill/content area.



Cut Score — A specific point on a score scale, such that scores at or above that point are interpreted or acted upon differently from the scores below that point (Standards for Educational and Psychological Testing, 1999).

Digital Test Item — An electronic item format allowing items to be transported using a standardized exchange file format or standard, such as QTI or APIP.

Disability — The Individuals with Disabilities Education Act (IDEA) has defined a disability as “mental retardation, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance, an orthopedic impairment, autism, traumatic brain injury, another health impairment, a specific learning disability, deaf-blindness, or multiple disabilities.”

DAS (Division of Accountability Services) and was formerly known as the Bureau of Assessment and Accountability (MDE) and before that the Office of Educational Assessment and Accountability (OEAA).

EDT — refers to Eastern Daylight Time.

Economically Disadvantaged — A student from a family with an annual income below a level that is based on low-income thresholds according to family size published by the U.S. Bureau of the Census, adjusted annually for changes in the Consumer Price Index. These students are eligible for free and reduced-price meals.

EEM (Educational Entity Master) — This is the single repository for all Statewide school and district information. It is managed by Center for Educational Performance Information (CEPI), which is part of the Department of Technology Management and Budget. EEM data required for assessments (school, district, Intermediate School District) are transferred to the MDE Secure Site. Contractor access to these data will be provided via web services or direct table read from the MDE Secure Site database.

ELA — English Language Arts, subjects or content areas that include reading, writing, listening, and speaking based on the current State Standards. ELA aims at developing the student’s comprehension and capacity for use of written and oral language.

Electronic Document Management Site (*Master data repository site)** — The electronic repository of materials, processes, data, and services for the Contract. It serves multiple offices, departments, and Contractors and contains such items as schedules, requirements, and print-optimized forms of print-ready materials for Michigan’s assessment and reporting systems.

ELL English Language Learner (also referred to as English learner) — The Michigan definition is a student who has a primary or home language other than English who—because of limited proficiency in speaking, reading, writing, and understanding the English language—requires alternative programs or services to equally access the local educational agency’s total academic curriculum. These students are sometimes referred to as students with limited English proficiency (LEP).

ESEA — refers to Elementary and Secondary Education Act.

EST — refers Eastern Standard Time.

EGLCEs (Extended Grade Level Content Expectations) — GLCEs indicate what elementary and middle school students should know and be able to do in specific grades within the content standards. Extended GLCEs are those that have been “extended” (or reduced in depth, breadth, and complexity) to more appropriately reflect what the student population taking an alternate assessment based on alternate achievement standards should know and be able to do given their cognitive functioning level, curriculum, and instruction.



EHSCEs (Extended High School Content Expectations) — HSCEs indicate what high school students should know and be able to do in high school within the content standards. Extended HSCEs are those that have been “extended” (or reduced in depth, breadth, and complexity) to more appropriately reflect what the student population taking an alternate assessment based on alternate achievement standards should know and be able to do given their cognitive functioning level, curriculum, and instruction.

Extended response — refers to constructed-response items that require AI and/or handscoring. They are used to determine a student’s performance on an assessment task, constructed-response item, or multiple-choice item.

Field Test — A test administration used to check the adequacy of testing procedures, generally including test administration, test responding, test scoring, and item test reporting. A field test is more extensive than a pilot test.

Field-test Item — A test question (often embedded within the operational items) that is inserted to obtain statistical information about its performance and ability to measure its intended content; this item does not count toward the student score; the statistical data are used in item selection for future tests.

Formative Assessment — The formative assessment process used by teachers and students during instruction to provide feedback in order to adjust ongoing teaching and learning and improve students’ achievement of intended instructional outcomes.

GLCE (Grade Level Content Expectation) — What elementary and middle school students should know and be able to do in specific grades within a content standard.

HSCE (High School Content Expectation) — What high school students should know and be able to do within a content standard.

Homeless — A homeless student is one who lacks a fixed, regular, and adequate nighttime residence. This includes students who live in shelters, abandoned buildings, cars, and public spaces, as well as students whose families share housing with other families because of economic hardship or who live in motels, hotels, trailer parks, or campgrounds.

Home-schooled — refers to Students who are home-schooled and take the State assessment in their local school district. Public school districts are required to administer State-level assessments to home-schooled students who wish to be assessed.

IDEA 1997 — refers to the Federal Individuals with Disabilities Education Act, which describes and regulates educational opportunities for individuals with disabilities. It also requires that students with disabilities be included in Statewide assessments. It was reauthorized in 2004.

IEP (Individualized Education Program) — A written Statement for each child with a disability that is developed, reviewed, and revised in a meeting in accordance with the Individuals with Disabilities Education Act regulations.

Interim Assessment — Assessments that provide educators with actionable information about student progress at determined intervals throughout the year.

ISD — Intermediate School District

IT — Information Technology

IBS (Item Bank System) — The state’s Item Bank System is a State-developed web-based application that encompasses all of the following functions within a single framework: the Complete Item Development Life



Cycle, Test Development Processes, and Test Composition Process. Note: All references in this Contract, whether called IBS or Item Bank System, are to the state's or MDE IBS.

LEP (Limited English Proficient) — The terms “limited English proficient” or “English language learner,” when used with respect to an individual, mean someone who

- is aged 3 through 21;
- is enrolled in or preparing to enroll in an elementary school or secondary school;
- (i) was not born in the United States or whose native language is a language other than English; (ii) (I) is a Native American or Alaska Native, or a native resident of the outlying areas; and (II) comes from an environment where a language other than English has had a significant impact on the individual's level of English language proficiency; or (iii) is migratory, whose native language is a language other than English, and who comes from an environment where a language other than English is dominant; and
- whose difficulties in speaking, reading, writing, or understanding the English language may be sufficient to deny the individual (i) the ability to meet the State's proficient level of achievement on State assessments described in section 1111(b)(3); (ii) the ability to successfully achieve in classrooms where the language of instruction is English; or (iii) the opportunity to participate fully in society.

MDE (Michigan Department of Education) — is under the direction of the Superintendent of Public Instruction, this agency carries out the policies of the State Board of Education and implements Federal and State legislative initiatives.

MEAP (Michigan Educational Assessment Program) — One of five components of the Michigan Educational Assessment System, the MEAP is the State's general education assessment for students in grades 3–9 and is used Statewide to assess student performance in specific content areas. The MEAP's content is aligned to the Model Content Standards of the Michigan Curriculum Framework.

MEAP-Access — One of the components of the Michigan Educational Assessment System, it is the State's Alternate Assessment based on Modified Achievement Standards (AA-MAS). It is used to assess students with Individualized Education Programs (IEPs) in grades 3–8 in the content areas of reading, writing, and mathematics. For this RFP, MEAP-Access will be processed and reported as accommodated forms of the MEAP. (In Fall 2013, there are two MEAP-Access forms.)

MEAS (Michigan Educational Assessment System) — The State Board of Education-approved assessment system in Michigan, which is comprised of five assessment programs, including the ELPA, MEAP, MME, MEAP-Access and MI-Access.

MEIS (Michigan Education Information System) — A security system implemented and used with various Michigan Department of Education (MDE) and Center for Educational Performance and Information (CEPI) applications.

MI-Access — Michigan's alternate assessment system, which is composed of three assessment programs (Functional Independence, Supported Independence, and Participation) and is based on Alternate Achievement Standards (AA-AAS). As a component of the MEAS, MI-Access is intended for students for whom the MEAP, the MME, or MEAP-Access, either with or without assessment accommodations, are not appropriate as determined by a student's Individualized Education Program (IEP) Team.

MI-Access Functional Independence (FI) Assessments — The MI-Access Accessing Print (reading), Expressing Ideas (writing), mathematics, and science assessments for students who have, or function as if they have, mild cognitive impairment.

MI-Access Participation (P) Assessments — The MI-Access English language arts, mathematics, and science assessments for students who have, or function as if they have, severe cognitive impairment.



MI-Access Supported Independence (SI) Assessments — The MI-Access English language arts, mathematics, and science assessments for students who have, or function as if they have, moderate cognitive impairment.

Michigan Curriculum Framework (MCF) — A resource for helping Michigan's public and private schools design, implement, and assess their core content-area curricula. The MCF includes three components: content standards, benchmarks, and grade level content expectations, which represent rigorous expectations for student performance and describe the knowledge and abilities needed to be successful in today's society.

MMC – refers to the Michigan Merit Curriculum.

MME (Michigan Merit Examination) — is one of five components of the MEAS. It is the State's general education assessment for students in grade 11 (or eligible students in grade 12) and is used Statewide to assess student performance in specific content areas. The MME's content is designed to measure content standards of the Michigan Merit Curriculum.

Modified Achievement Standards — An expectation of performance that is challenging for eligible students, but may be less difficult than a grade-level achievement standard. Modified achievement standards must be aligned with a State's academic content standards for the grade in which a student is enrolled. Thus, only the achievement standards are modified, not the content standards on which those modified achievement standards are based.

MSDS (Michigan Student Data System) — Data submitted by school districts, including discrete information about individual students, such as age, gender, ethnicity, and program participation. The data collected via the MSDS are used to meet the reporting requirements of the Federal No Child Left Behind Act of 2001, including the determination of Adequate Yearly Progress (AYP).

Multiple Choice — The most common type of selected-response item, consisting of two parts: a stem and various response options.

NCLB (No Child Left Behind Act of 2001) — An act that reauthorizes the Elementary and Secondary Education Act, including Title programs I–IX. It is designed, in part, to (1) increase the accountability of States, districts, and schools; (2) expand choices for parents and students, particularly those attending low-performing schools; (3) provide greater flexibility for States and local educational agencies in the use of Federal dollars; and (4) increase emphasis on reading, especially for young children. In addition, it requires States to implement a single accountability system for all public schools and all students, and increases the number of times students—including those with disabilities and limited English proficiency—must be assessed.

NCME — refers to National Council on Measurement in Education.

Nonstandard Accommodation — Changes the construct being measured by an assessment or assessment item and, thus, results in an invalid test score. This includes any accommodation not deemed "standard" in the Assessment Accommodation Summary Tables approved by the State Board of Education.

Operational item — A test question with statistical information that is selected for use on a test that measures student perform on content ; this item does count toward the student score; the resulting statistical data are used in item selection for future tests.

OSA (Office of Standards and Assessment) – is an office of the Division of Accountability Services under which standards and assessment functions are consolidated.

OSPMR (Office of Systems, Psychometrics, and Measurement Research) — An office of the Division of Accountability Services under which psychometric, accountability, research, and data management functions are consolidated.



Performance Task — is a collection of items and activities that require multiple steps and may include components of other items in the task. These activities are meant to measure capacities such as depth of understanding, writing and research skills, and complex analysis, which cannot be adequately assessed with traditional assessment questions.

Pilot Test — A test administered to a sample of test takers to try out some aspects of the test or test items, such as instructions, time limits, item response format, or item response options.

Pilot Item — is a test question that is newly developed (often used in stand-alone testing) and that do not count toward a student score.

PNP — refers to Personal Needs Profile.

Pre-ID — refers to pre-identification of which students in each school will take which assessments with which accommodations.

Proficient — Sometimes expressed by a numerical “cut score” on a Statewide assessment, a student who is proficient in a content area demonstrates knowledge of that content area appropriate to grade-level expectations. Those expectations may vary based on the student’s grade level and instructional setting. See Grade Level Content Expectation (GLCE), High School Content Expectation (HSCE), English Language Learner (ELL) Standards, Extended Grade Level Content Expectations (EGLCEs), Extended High School Content Expectations (EHSCEs), and Extended Benchmarks (EBs).

Progress — Annual gains made by the student, as evidenced by the acquisition of what the student knows and can do or by an increase in assessment scores or performance levels.

QTI (Question and Test Interoperability) — An information model that describes question (item) and test (assessment) data and their corresponding results reports. The QTI specification enables the exchange of this item, test and results data between authoring tools, item banks, test construction tools, learning systems, and assessment delivery systems.

SBE — State Board of Education.

Scoring Rubric — Descriptive scoring schemes that are developed by teachers or other evaluators to guide the analysis of the products or processes of students’ efforts. Scoring rubrics are typically employed when judgment of quality is required and may be used to evaluate a broad range of subjects and activities (Practical Assessment, Research, & Evaluation, 2000).

SDs or SWDs (Students with Disabilities) — A student who is determined by an Individualized Education Program (IEP) Team or a hearing officer to have one or more of the impairments that necessitates special education or related services, or both, who is not more than 25 years of age as of September 1 of the school year of enrollment, who has not completed a normal course of study, and who has not graduated from high school. A student who reaches the age of 26 years after September 1 is a “student with a disability” and entitled to continue a special education program or service until the end of that school year.

Selected Response — In Michigan, this term is used to describe MI-Access Supported Independence and Participation items that take into account the degree of assistance provided by the test administrator(s) to a student in selecting a response to a picture card stimulus. The single digit response rating is A, B, C, or 1, 2, 3.

SF (Spiral Fixed-Form) — refers to Computer-based test containing multiple forms, or versions, of a test booklet where one or more sections vary from one test taker to another.

Short answer – The student types or writes in a word or phrase. 2-point constructed-response items.



SIS (Student Information System)* — is a software application that is designed for education establishments to manage student data. In Michigan, MSDS system contains student data that are transferred to the MDE Secure Site system for assessment management purposes.

Single Version of the Truth – is a technical concept describing the ideal of having either a single centralized database, or at least a distributed synchronized database, which stores all of an organization's data in a consistent and non-redundant form.

Assessment Consortium— A multi-State arrangement collaborating on a Federally sponsored grant to develop a comprehensive assessment system aligned to the State Standards

Standard Accommodation — An assessment provision given so that the effect of a disability is minimized and the student is provided an opportunity to demonstrate the degree of achievement he or she actually possesses. It does not change the construct being measured; therefore, it yields valid assessment scores.

Summative Assessment — A test that is used to evaluate student competency. A summative assessment is commonly delivered at the end of the school year during a fixed administration window and is commonly aligned with State standards.

Technology Enabled (TN) — Computer-based items that include features, such as reading the item to the test-taker in English or another language, such as Spanish or Arabic.

Technology Enhanced (TE) — Computer-based test items that allow students to reorder text, show evidence and use drop-down menus for responses.

Test Administration* — Management of test windows, proctor assignment, class/group assignment for reporting, and student identification methods are components of the Secure Site. This information is provided to administration Contractors via a direct table read or web services interface.

Test Cycle — Refers to the period of time, usually a range of dates, for administering an assessment. In Michigan, current assessment cycles are either fall or spring, with a specific date range for each. Interim assessments will have pre- and post- test cycles, which are fall and spring for year-long subjects or courses; September and January or February and May for ½ credit courses.

Test Delivery* for Online Assessments — The overall responsibility of this component is to securely deliver the assessment to the student, securely store the student responses, store other information about how the student responded (i.e., time to answer, time to render for the student, etc.), and deliver the test items in the proper accessible format that the student needs. The Test Delivery System must also include two subcomponents:

- **Student Workstations:** This is a software subcomponent used to interact with the student. It is responsible for delivering the items to the student and gathering the responses and response metadata. It also contains the tools needed by the student to take the test (e.g., calculators, tables, accessibility tooling, etc.).
- **Proctor Workstation:** This is a software subcomponent the proctor uses to manage the test delivery. It allows the proctor to start and stop, or suspend and resume the test for the testing group or individual students. It also allows the proctor to monitor student progress, as well as helping students when they are having issues.

Test Event – The administration of an online computer-adaptive test.

Test Packager* for Online Assessments — In year one of the Contract, the Online Contractor will provide the software to convert the IBS test items for use with the online test delivery engine. This software will have the capacity to receive Test Package files via a web service or direct table read interface of the IBS system



and, once properly rendered by the Online Contractor, receive the online version of the item from the Test Delivery System for inclusion in the IBS.

Test Registration* — Michigan students are registered for assessments, including assignment of class/group numbers for test administration/proctors, and the same or different class/group numbers for reporting using the pre-identification component of the MDE Secure Site.

Theta Value — Estimate of the relationship between a test item and the underlying attribute that is being measured. A distinction is made between the values that are actually obtained in a test setting and a hypothesized “true” underlying value.

UIC (Unique Identification Code) — is a State-assigned code that allows the State to track student information without using a student’s name.

WorkKeys® — A job skills assessment system that helps employers select, hire, train, develop, and retain a high-performance workforce.

* Consortium terms for online test components are italicized.



Article 1 – Statement of Work (SOW)

1.010 Project Identification

1.011 Project Request

This Contract must provide deliverables, services and staff, and otherwise do all things necessary for or incidental to the performance of the administration, scoring, and reporting of online Statewide assessment programs (summative and interim) and related projects for the Michigan Department of Education (MDE), Division of Accountability Services.

The awarded Contract must include services for statewide online assessments beginning with the Fall 2014 cycle through and inclusive of Spring 2016 cycle. The assessment programs listed below are part of this Contract.

1. The planned summative assessment programs and projects include the following:
 - a. General assessments for students in Grades 3-8, and 11
 - 1) Consortium assessments (if used)
 - a) English Language Arts (ELA)
 - b) Mathematics
 - 2) Michigan developed assessments
 - a) Science
 - b) Social Studies
 - b. MI-Access (Michigan's alternate assessments for students in Grades 3-8 and 11 based on alternate achievement standards for students with significant cognitive disabilities), including:
 - 1) MI-Access Functional Independence (FI, for students with mild cognitive impairment)
 - a) English Language Arts (ELA)
 - b) Mathematics
 - c) Science
 - d) Social Studies
 - 2) MI-Access Supported Independence (SI, for students with moderate cognitive impairment)
 - a) English Language Arts (ELA)
 - b) Mathematics
 - c) Science
 - 3) MI-Access Participation (P, for students with severe cognitive impairment)

Note: Two items of note for the alternate assessment program:

- 1) The ELA and mathematics alternate assessments may become part of an alternate assessment consortium delivery (out-of-scope) during some or all of this Contract period.
 - 2) The Supported Independence (SI) and Participation (P) online assessments will not be student facing. These programs will only require an online answer document for the test administrators to submit.
2. Interim assessment programs (If requested), could include the following:
 - a. Interim Assessments Grades 3-8, 11
 - 1) English Language Arts (ELA)
 - 2) Mathematics
 - b. Michigan developed
 - 1) Grades K-2
 1. English Language Arts (ELA)
 2. Mathematics
 - 2) Grades 3-HS
 1. Science
 2. Social Studies
 - 3) High School courses
 1. Mathematics
 2. English Language Arts (ELA)



As a result of the award of this Contract, the Contractor must use a coordinated approach with MDE staff and other MDE Contractors to plan and implement all tasks, subtasks, and activities related to this Statement of Work that are to be conducted over the period of the Contract.

1.012 Background

Michigan's educational system consists of 56 Intermediate School Districts with 549 local school districts and 256 public school academies. Altogether, there are 3,536 schools serving over 1.5 million students.

The MDE is responsible for development and administration of multiple K–12 student assessment programs, as well as the high-stakes use of the results of those programs for accountability and evaluation purposes. Therefore, the work performed by the Contractor must be of the highest quality, and must conform to the most recent *Standards for Educational and Psychological Testing* as published by the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education.

Additionally, the MDE may be participating in Assessment Consortium, a state membership organization, in the development of summative and possibly interim assessments designed to measure student proficiency and growth based on current State Standards in mathematics and English Language Arts (ELA) for students in Grades 3-8, and 11. Assessments are designed for online fixed and possibly Computer Adaptive Testing (CAT). For summative assessments, where schools are not ready for online assessments, a printed assessment will be provided (which is not part of this contract requirement).

The MDE assessment administration and reporting efforts will be done in concert with, and parallel to, the assessment activities of any consortium as or if used. The first Statewide online delivery is planned for spring 2015. The Contractor must meet the consortium based assessment system requirements, either by using the Contractor's online assessment system or consortium based open source components, if available. The Contractor must support online administration of Michigan's summative and, if requested, interim tests which includes meeting consortium based system standards and requirements, and interfacing with the MDE Secure Site and Item bank in addition to consortium based Item bank. For a description of the Online Test Delivery System requirements, please reference **Section 1.022 #25**.

The MDE and the Contractor are responsible for ensuring that all tasks and activities that are carried out as part of the Contract comply with all legislation, regulations, and policies surrounding assessment(s). These include, but are not limited to the following, where applicable:

- The Federal reauthorization of the Elementary and Secondary Education Act (ESEA), currently known as the No Child Left Behind Act of 2001, or successor legislation
- The Federal Individuals with Disabilities Education Act (IDEA), or successor act
- The Federal Americans with Disabilities Act (ADA), or successor legislation
- The Federal Family Educational Rights and Privacy Act (FERPA), or successor legislation
- The Federal American Recovery and Reinvestment Act, its various components, or successor legislation
- The ESEA Flexibility Request approved by the U.S. Department of Education (USED), July 2012
- The Federal guidelines and regulations regarding NCLB, IDEA, ADA, or ARRA, including both specifications for assessment programs as well as specifications for accountability using the results from those assessment programs
- The Michigan State School Aid Act, or successor legislation
- The Michigan School Code, or successor legislation
- The Michigan Assessment of Remedial Assistance Programs, or successor legislation
- The Michigan State Board of Education (SBE) policy on learning expectations for Michigan students, or successor policies
- The Michigan SBE policy to include all students in the Michigan Educational Assessment System, or successor policies
- The Michigan SBE policy regarding testing of Limited English Proficient (LEP) students, who are referred to as English Learners, or successor policies



All of the assessment programs developed and administered by MDE are mandated by one or more of the laws and policies listed above. As such, Michigan's assessment systems are subject to Federal and State audit, including all Contracts that are required to implement the programs.

During the term of this Contract, new legislation and/or funding levels may require that a current program be modified and/or other programs added etc. The Contractor must be flexible in accommodating such changes. All proposed changes must be approved through the change management process (explained further in Section 1.044).

Section 1.011 identifies the summative and interim assessment programs included in the scope of this Contract. The summative assessment results are used to measure student proficiency for State and Federal reporting purposes with plans to administer summative assessments in the spring of the school year. The Interim Assessment programs are being developed and implemented in response to education reform efforts and a new emphasis on using assessments that measure student academic growth and determine educator effectiveness. This assessment program is new and consists of optional, online pre- and post-test assessments at grade levels K-8 and in high school courses for which Michigan Merit Curriculum credit is required. Online field-testing and implementation of the Interim Assessment Program will be phased in for some grade level/content area combinations during the term of the Contract, starting with Fall 2014 test cycle.

1.020 Scope of Work and Deliverables

1.021 In Scope

Over the course of this Contract, the design, structure, timing, and processes required for the execution of the MDE assessment programs and projects will alter in significant ways. One major shift is from the paper-and-pencil mode of test administration to online administration.

The State of Michigan has two proprietary systems that interact with administration Contractor(s) on a regular basis: The MDE Secure Site and the MDE Item Bank System (IBS). (Note: Hereafter Item Bank System or IBS always refers to the MDE IBS.) The MDE Secure Site is a web-based test data management system. In addition to pre-identification of students and maintaining rosters of students tested and not tested, the MDE Secure Site is capable of assigning multiple educators to groups of students for test administration and/or reporting purposes.

The IBS is an integrated system for item development, test development, and Print Optimized File (POF) delivery. Blueprint specifications based on content expectations and item statistics is one feature that generates test item sequence for fixed-forms. The IBS will also be able to generate eligible item sets for computer-adaptive testing (CAT). The Contractor must interface and support the transport of items from the IBS to the Contractor compliant with current interoperability industry standards (QTI v2.1).

Both systems have a multi-tier security structure that restricts end-users to their areas of authorization. The Contractor accesses data using table queries or by pulling data in XML format.

The administration and reporting of high-stakes statewide assessments are high-profile activities, with results used for State and Federal reporting. As State and Federal reform efforts have been enacted, including assessing educator effectiveness and student growth, the complexity of and the demands placed upon the Michigan Educational Assessment Systems have grown. It is, therefore, imperative that MDE and the Contractor work as partners in ensuring that the integrity of project management plans and processes are not compromised, that agreed-upon timelines are met, and that all deliverables, including test materials, administration processes, scoring, data analysis, and reporting are accurate, are appropriate for the intended audience, and encompass the highest standards.

In instances where the Contractor selects a Subcontractor to provide deliverables, all tasks must be accomplished by the Subcontractor in a timely and accurate manner. In such cases, the Subcontractor must perform all Contractual deliverables assigned, working in close cooperation with MDE staff, and is subject to the same contractual agreements as all other Contractors chosen to perform Contract deliverables.



In providing systems and services for online administration and reporting, the Contractor is encouraged to use technology standards and applications that support interoperability, innovation, and minimal cost of transfer. Consistency in the processes used, and the presentation of online items from one year's assessment administration to the next year recognizing the IBS as the source of truth, is a critical Michigan requirement. At the request of MDE, all assessment data must be provided to MDE using established interoperability standards.

1.022 Work and Deliverable

The Contractor must provide Deliverables/Services and staff, and otherwise do all things necessary for or incidental to the performance of work, as set forth below:

General Information

During the life of the Contract, Michigan's statewide testing in grades K through 12 is undergoing a major transformation. The work and deliverables included in this Contract are designed to assist the State of Michigan in successfully transitioning from summative testing using a predominantly paper-and-pencil delivery system for over two million assessments to a fully operational online delivery system for administering all assessments, both summative and interim. In addition, interim assessments that assist educators and schools in measuring student progress will be implemented as online Michigan-developed pre- and post-tests in schools volunteering to participate.

In general, the Contractor will assist MDE in implementing high-quality materials and processes for administration, scoring, and reporting all online assessment programs included in this Contract.

The table in **Section 1.041 E** provides a list of required primary activities for a test cycle. The planned summative and interim test windows dates for the 2014-2015 are provided as a base for developing your initial project plan and schedule.

Primary tasks and supporting activities are presented below:

1. Planning for the Kick-Off Meeting and Test Cycle

The Contractor must work closely with MDE to organize, plan, and run a Project Kick-Off Meeting at the start of the Contract and each year thereafter.

- A. The Online Contractor must work closely with MDE to prepare a preliminary agenda and schedule(s) that will be sent to MDE for review and approval no later than 14 days in advance of the Kick-Off Meeting.
- B. An action item for this meeting must be a review of the preliminary project schedule conforming to the requirements set forth in the Contract. After revision, as/if needed, it will be submitted to MDE for approval.

2. Administration Plan and Project Schedule

- A. The activities (tasks and subtasks) addressed in the Statement of Work require the Online Contractor to develop the overall administration plan for developing high-quality materials and processes for the State's K-12 assessment programs that are part of this Contract.
 1. The assessment windows and milestone dates for each cycle are pre-established, and therefore not a direct responsibility of this Statement of Work. These dates are critical to the overall plan because they drive the need for timely completion of primary tasks and supporting activities.
 2. All pre-established critical milestone dates are specified by MDE prior to the start of a test cycle and are to be considered "firm, fixed dates" that are nonnegotiable.
 3. The Contractor must describe their approach and project plan to meet the required timeline provided in **Section 1.041 E**.
 4. The Contractor must maintain the project schedule and update as needed. The Contractor must implement all quality assurance processes that were included as part of the Contractor's proposal and as outlined in this Contract, as part of the project schedule.



- B. The Contractor and MDE will review administration plans and proposed weekly and monthly schedules for regular project management and coordination updates. **Section 1.041** details the appropriate project management procedures needed to ensure timely deliverables and the minimization of risk. The Contractor and MDE staff will also discuss and agree upon escalation procedures and the handling of change of scope requests and CCRs.

3. Electronic Document Management Site

The Online Contractor must set up electronic document management site(s), such as a “SharePoint“-type file structure for the Contract.

- A. The Electronic Document Management site must be a secure web-facing permanent repository of electronic documentation. The directory structure, the naming conventions, the rules for what documents must be kept on the permanent repository, rules for formatting those documents, and rules for versioning and discarding previous versions must be proposed by the Contractor, but may be revised by MDE, and must receive final approval from MDE.
- B. Project management document (schedules, agendas, reports, meeting minutes, etc.), requirements, POFs of print-ready assessment materials, and all other documents related to this Contract must be kept in this permanent electronic documentation repository.
- C. The Contractor must maintain the site, which will be used to securely transfer and maintain all electronic documents and files related to this project that are the property of the State of Michigan. This includes delivery of data and other documents as specific by MDE. Security to access this site must only allow key Administration Contractor and MDE-identified and -approved staff access. The Contractor must issue passwords for the management of electronic document exchange with MDE.
- D. MDE reserves the right to have any individual’s user identification code removed. MDE must be provided a complete listing of all user identification codes that have access to this site on a periodic or “upon request” basis, with a minimum of once before any files or documents are posted plus once per year thereafter. No more than one individual must be assigned to each user identification code. Each user identification code must be passcode restricted. See Technical Requirements in the Work and Deliverables Section.

4. Kick-Off Meeting

The Online Contractor – including key staff as defined in Section 1.031, MDE, and Subcontractors (if used) must meet to review project plans, schedules and activities. The goal is to coordinate the organization of all parties to successfully produce high-quality materials and processes required for the administration, scoring, and reporting of Michigan’s assessments.

A. Location and Duration

The face-to-face meeting will take place in Lansing for one to two days between the Contractor, the State and its Agents. For additional information regarding meeting planning, see Section 1.024.

B. Synchronization of Preliminary Schedules

Contractor must synchronize schedules and adjust as necessary for MDE approval.

C. Overview of Relevant MDE Components

1. MDE will provide an overview and brief demonstration of: the MDE Secure Site, Item Bank System and in-house test development, psychometric, and reporting services.
2. MDE will address questions related to requirements for:
 - i. pre-identification of students,
 - ii. assessment tracking,
 - iii. tested roster,
 - iv. data and table structure,
 - v. test maps production schedule,
 - vi. IBS export
 - vii. Item rendering
 - viii. reporting requirements,
 - ix. system interfaces
 - x. and any other pre-identified topics needed to execute each assessment program.



D. Meeting Responsibilities

The Contractor must provide leadership and supporting materials needed for the Kick-Off Meeting, such as the agenda and, after the initial year, documents from the previous assessment administration cycle.

5. Quality Assurance Planning

A. Requirements Gathering and Documentation

The Online Contractor and MDE must utilize Michigan-based components of current requirement documents for administering, scoring and reporting results of assessment programs as the basis for developing updated requirements.

B. User Acceptance Testing (UAT)

The Online Contractor must develop UAT to ensure that all materials and processes (including hand-offs of data and deliverables) are accomplished and produced with 100% accuracy.

The Contractor must work with MDE to understand and document MDE's user acceptance criteria, including:

- 1) Functional requirements of the system;
- 2) Expectations for the visual display of items and other content;
- 3) Data exchange formats and rules governing the exchange of data between MDE and the Contractor;
- 4) Timing and duration for MDE review of the systems; and
- 5) Procedural documentation for accessing the systems and reporting concerns to the Contractor

6. Distribution of Forms

The Online Contractor must propose plans for distribution of forms that are well suited to the mode of assessment administration used. For this Contract, there are two modes of test administration:

1. Online fixed-form tests that will be spiraled; and
2. CAT that will deliver field-tests and operational items based on the algorithms selected for use with the assessment and online test delivery system.

All procedures used for distribution of forms are based on MDE-approved requirements that have been determined through a collaborative process with the MDE Psychometric team.

Please note: *Because MDE employs pre-equating (the use of fixed item parameters from field testing) as a critical part of its equating and scaling methodology, and will use such an approach with CAT applications as well, it is critical that field-test (non-scored) items be calibrated with operational items in such a way that the pre-equated item parameters are representative of how those field-test items would behave were they to be administered to all students.*

A. Distribution of Spiral Fixed Forms

Multiple fixed-forms per grade and content area will be developed by MDE for online administration.

1. In collaborative with the MDE Psychometric team, the Online Contractor must propose a spiral fixed form distribution plan based upon Michigan's student demographics. It is imperative that the exposure of the various forms be balanced and representative of the demographics of the State of Michigan.
2. The process must begin by computing State of Michigan population values for all of the variables to be included as sampling constraints. The current constraints contain, but are not limited to, the following variables: (Interface 7 – **Appendix A**)
 - a. Gender (2 levels)
 - b. Ethnicity (7 levels)
 - c. Economically Disadvantaged (2 levels)
 - d. Students with Disabilities (SWD) (2 levels)



- e. English Language Learner (ELL) (2 levels)
- 3. The number of forms, in combination with the demographics, must be used to determine the ideal form assignment at the student level.
 - a. Student demographic information must be used to assign forms by joining MDE Secure Site Pre-ID data with current administration statistics to administer the form that would contribute most to meeting the goal of a balanced and representative sample. The Contractor must utilize a solution that leverages real-time administration data and student level demographics, along with physical arrangement of the test administration.
 - b. Each form is to be administered within each building for a grade and content area. When available, classroom/group information must be used to determine the demographic make-up of each school's potential sampling frame.
- 4. Quality Assurance Plan
 - a. The Contractor must provide UAT based on a MDE approved test deck to ensure correct application of the distribution criteria.
 - b. Form usage and demographic distributions must be monitored throughout the testing cycle
 - 1) As part of the regular MDE data exchange (at least once per day), the Online Contractor must push data in a table format to MDE for ongoing review and monitoring of form usage and sample quality.
 - 2) At the end of the test cycle, data must be analyzed to determine if it was a strong sampling plan: were all forms exposed in equal numbers (taking into account the possibility that the accommodated version was not unique) with each form exposed to appropriate proportions of the demographic constraints/variables? The proportions must be within a standard error of the population value.

B. Distribution of Forms: CAT Administration for Michigan Assessments

MDE does not anticipate implementation of CAT administration for the Michigan developed tests during the 2014-15 school year.

The Online Contractor must propose a system for distribution of items based on MDE-approved requirements that have been determined through a collaborative process with the MDE Psychometric team.

- 1. The Online Contractor must propose a plan to leverage the use of student demographics in the selection of field-test items to present. (Interface 7 – **Appendix A**)
 - a. The system must, at a minimum, be able to consider up to five student demographic variables and a prior ability estimate.
- 2. In addition to demographics, the student's estimated ability level (θ) must be considered.
 - a. The θ must be stratified, at the minimum, into deciles for grouping (i.e. achievement becomes a 10-level categorical variable).
 - b. Prior achievement at the item level, or the ability estimate at a given time in the testing process, must be used to determine the next field-test item selected in a way similar to the selection of operational items via the algorithm.
- 3. With CAT, the exposure of items, not intact forms, must be compared to population representative samples. This will require a real-time solution with these constraints included in the CAT algorithm.
- 4. MDE intends to use solutions based on multi-stage CAT systems. These approaches must allow the flexibility of multiple stages of the test operating under multiple sets of algorithms. Different selection rules could then be applied to either consecutive or pre-identified item subsets.
- 5. Quality Assurance Plan
 - a. Item usage and demographic distributions must be monitored throughout the testing cycle
 - 1) As part of the regular MDE data exchange (at least once per day), the Online Contractor must push data in a table format to MDE for ongoing review and monitoring of item usage and sample quality.
 - 2) At the end of the test cycle, data must be analyzed to determine the strength of the CAT sampling: were all items exposed in equal numbers (taking into account the possibility that the accommodated item versions were not unique) to appropriate proportions of the



demographic constraints/variables? The proportions must be within a standard error of the population value.

7. Call Center(s)

The Contractor must provide a Call Center to handle Level 2 phone calls and emails regarding Michigan assessments and projects included in this Contract. The Project Coordination Contractor must handle all Level 1 phone calls and emails for this Contract. The toll-free phone number is provided by MDE, which routes calls to the Level 1 Call Center. Michigan Assessment Coordinators will use this/these number(s) or email address(es) to ask questions and clarify information.

- A. The Contractor must provide a Call Center to handle Level 2 phone calls and emails for the duration of the Contract.
1. The Call Center must be staffed by persons knowledgeable about each assessment program, including materials, processes, and use of Michigan's Secure Site for functions related to tasks under this Contract.
 2. The Call Centers for the Contractor must recognize three levels of support.
 - a. Level 1—Call Center agents for the Project Coordination Contractor must provide coordinated Level 1 support for the Contractor for ASR including online delivery. Level 1 Call Center agents must respond to routine questions that have approved answers.
 - 1) The Contractor must provide to Project Coordination Contractor all current User Guides, Test Administration Manuals, FAQs, and other pertinent documents for storage in their Electronic Document Management Site repository for easy access and revision control.
 - 2) The Contractor must provide training to the Project Coordination Contractor regarding Level 1 calls. The initial training would be two staff for three days of in-person training per the project schedule. Examples of online testing questions include the following:
 - a) Questions about online testing preparation include questions about scheduling online test sessions, training test administrators on online procedures, Michigan policies and procedures, and installing secure browsers.
 - b) Questions during the start-up or beginning of the test window include queries about using the system, setting accommodations, understanding participation, and understanding how to create class-testing rosters.
 - c) Questions during the ongoing administration tend to include resolving questions about system access, passwords, the proctor session, the student interface, and resolving issues involving network latencies.
 - 3) The Contractor's Level 2 Call Center responsibility must provide multiple staff for the initial in-person training that will take place at the designated Level 1 Call Center. Initial training for online testing must include the following:
 - a) Training on the functionality of each component of the online testing systems, including the policies and procedures set forth in all the user guides and manuals.
 - b) Training based on each stage of an online administration: preparation, startup, and ongoing administration.
 - c) Training on the use of detailed scripts, which enable Level 1 agents to ask a series of questions to callers and thereby quickly diagnosing the system and point of issue with which the caller is experiencing difficulty.
 - d) Project-specific training on each assessment's major test administration requirements
 - 4) The Contractor's Level 2 Call Centers responsibility must provide follow-up training (one staff to provide one day of refresher training in-person for the each school year), as needed for the following:
 - a) Subsequent test cycles;
 - b) Changes in systems or procedures;
 - c) Documented instances of Level I calls mistakenly transferred to Levels 2 and 3; and/or
 - d) Level 2 and 3 calls mistakenly transferred back to Level 1 for resolution.
 - e) Clarification or resolution of communication and/or training procedures as identified by project management processes for escalation of issues



- b. Level 2 - Highly technical, new or unique situations related to the tasks under this Contract are forwarded to the Contractor or to a pre-assigned MDE staff member for response.
 - 1) Complex questions about connection issues with an online assessment system are examples of Level 2 calls.
 - 2) The Contractor and MDE will mutually agree on the loosely-coupled XML interface that can be used by the Level 1 Call Center and the Contractor to transfer caller, school, issue, and other information important to support high-quality customer service as users are transferred from Level 1 to Level 2. The Contractor must implement the interface at no additional cost.
 - c. Level 3 - Requires email notification and follow-up phone call to designated MDE staff that locates the answer and provides resolution or status with email response and return phone call to the Contractors Call Center within two working hours of the original service request, and every 24 hours thereafter until a solution is found.
 - d. The Contractor must interface with the MDE Secure Site to obtain assessment coordinator and school information using a direct table read.
- B. Staff must be available from 8 a.m. to 5 p.m. EDT/EST on Monday through Friday (excluding Federal holidays, but including summer vacation days) throughout the entire duration of the Contract.
- 1. During test administration, staffing must be available beginning at 7 a.m. EDT/EST. The Assessment Coordinators will use the Call Center number to ask questions.
 - 2. The staffing of this Call Center can be variable, but must be adequate that individuals are not:
 - a. put on hold for long periods (five minute maximum),
 - b. unable to reach someone due to busy signals, or
 - c. otherwise unable to receive assistance.
- C. Based on an average estimate of 600 calls per month, with a peak of approximately 1,800 during high school testing window provide the following information for the Call Center response:
- 1. Provide call center software and version used.
 - 2. Provide procedure for call monitoring and escalation.
 - 3. Provide procedure for ensuring consistent responses to the same issues.
- D. Quality Assurance Plan
- 1. The Contractor must provide Call Center Detail Reports on a monthly basis, providing
 - a. Date/Time (hours, minutes and a.m. or p.m.) service request received, detailed documentation of the problem, and name and location of requestor.
 - b. Date/Time (hours, minutes and a.m. or p.m.) service request closed and resolution.
 - 1) Name of person providing resolution
 - 2) Service report control number
 - 2. Other information also required for the monthly Call Center report includes
 - a. Volume of calls by day and hour
 - b. Average time on hold by day and hour
 - c. Minimum and maximum hold time by day and hour
 - d. Number of dropped calls by day and hour
 - e. Average time on hold before calls were dropped by day and hour
 - 3. Additional information may also be required for the monthly Call Center report upon request of the Contract Compliance Inspector (CCI) based upon experience with the performance of the Call Center and/or unanticipated types or volumes of support calls.

8. School Readiness for Online Assessment

The schools and districts in the State of Michigan have submitted information related to their testing devices and network infrastructure into the Michigan-developed MTRAx technology readiness survey. This survey will be used to determine if each school's technology readiness for online testing. More information about MTRAx can be found by visiting mtrax.org.

- A. The Online Contractor must provide MDE with the testing device and bandwidth requirements so that a proper determination of readiness can be conducted using MTRAx. The following elements must be included:
 - a. Supported Operating Systems
 - b. Minimum Memory Requirement
 - c. Screen Resolution Requirement



- d. Display Size Requirement
- e. Bandwidth Requirement

The Contractors INSIGHT is a secure, web-based system that operates on a web browser. The Contractors system is compatible with multiple operating systems, including Apple® Mac OS X®, Microsoft® Windows®, and Linux operating systems. The Contractor will also support testing on iPad®, Chromebooks, and Windows tablets (using the non-touch components) beginning in fall 2014; Windows tablets with touch components in spring 2015; and Android devices in spring 2015. The system can be used in several configurations, including standard, single-user devices; remote connectivity configurations (e.g., Citrix, terminal server, remote desktop, etc.); and virtual networks and/or thin client environments.

The following tables outline DRC’s minimum and recommended system specifications. These specification may evolve over time and the parties, upon mutual written agreement may revise these specifications.

Desktop, Laptop, Netbook, and Thin Client/VDI Computers		
Operating System	Minimum Specifications¹	Recommended Specifications
Windows	Windows XP – Service Pack 3 ²	Windows 7 or newer
Mac OS	Mac OS 10.6.8	Mac OS 10.7 or newer
Linux	Ubuntu 12.04.1 (32-bit and 64-bit with Gnome 3.4, Unity shell, and kernels 3.0.1 – 3.3)	Ubuntu 12.04.1 (32-bit and 64-bit with Gnome 3.4, Unity shell, and kernels 3.0.1 – 3.3) or newer
Chrome OS	Chrome OS 19	Chrome OS 31 ⁸ or newer

Tablets		
Operating System	Minimum Specifications¹	Recommended Specifications
Apple iOS	iOS 6 ³	iOS 6 ³ or newer
Windows	Windows RT 8	Windows RT 8.1 or newer
Android	Android 4.1	Android 4.1 or newer

Additional Specifications for Desktop, Laptop, Netbook, and Thin Client/VDI Computers		
	Minimum Specifications¹	Recommended Specifications
Memory	512 MB RAM	1 GB RAM or greater
Processor	500 MHz	1 GHz or faster
Disk Space	100 MB available	100 MB or larger available
Screen Size	9.5 inch screen size or larger	13 inch screen size or larger
Screen Resolution	800 x 600 resolution ⁵	1024 x 768 resolution or better
Internet Connectivity	Computers must be able to connect to the Internet via wired or wireless networks.	Computers must be able to connect to the Internet via wired or wireless networks.
Input Device Requirements	Keyboard – wired or wireless (Bluetooth ⁶) Mouse or Touchpad The input device must allow students to: <ul style="list-style-type: none"> • Select/deselect • Drag • Highlight text, objects, and areas. • Enter letters, numbers, and symbols • Shift, tab, return, delete, and backspace 	Keyboard– wired or wireless (Bluetooth ⁶) Mouse or Touchpad



Additional Devices Allowed	Headphones, Earphones, Earbuds, Microphones
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Additional Specifications for Tablets		
	Minimum Specifications¹	Recommended Specifications
Memory		
Android	512 MB RAM	1GB RAM or greater
Apple iOS ⁷	512 MB RAM	1GB RAM or greater
Windows	512 MB RAM	1GB RAM or greater
Connectivity	Computers must be able to connect to the Internet via wired or wireless networks.	Computers must be able to connect to the Internet via wired or wireless networks.
Screen Size	9.5 inch screen size	9.5 inch screen size or larger
Screen Resolution	1024 x 768 resolution ⁵	1024 x 768 resolution ⁵ or better
Input Device Requirements	Keyboard– wired or wireless (Bluetooth ⁶) Touchscreen or Mouse	Keyboard– wired or wireless (Bluetooth ⁶) Touchscreen or Mouse
	<p>Since a tablet’s virtual keyboard occupies onscreen space, assessments require external keyboards for test administration so the view of test item content and related functionalities are not limited or obscured when text input is required.</p> <p>External keyboards are needed to allow students to enter letters, numbers and symbols as well as to shift, tab, return, delete, and backspace. For other than text input, tablet touchscreen interfaces can be used for student interactions, including to select/deselect, drag, and highlighting.</p>	
Battery	Fully charged battery with 2 hour minimum life	Device connected to plugged in power supply
Additional Devices Allowed	Headphones, Earphones, Earbuds, Microphones	

Additional Guidance
<p>¹ Application will run at or under minimum specification, however, the application will not deliver the optimal student testing experience. Responsiveness of the application and response times during testing will be slower.</p> <p>² Windows XP will no longer be supported by Microsoft after April 8, 2014, presenting security and support risks for schools. (http://windows.microsoft.com/en-US/windows/end-support-help)</p> <p>³ iOS 6 or newer requires an iPad 2 or newer device.</p> <p>⁴ Computers running Windows XP-Service Pack 3 may require a web browser other than Internet Explorer due to HTML5 compatibility limitations. Specific web browser guidance can be found below in the Web Browser Requirements Section.</p> <p>⁵ To Minimize scrolling or panning computers should accommodate the 1024 x 768 screen resolution.</p> <p>⁶ To meet security guidelines, each Bluetooth/wireless keyboard must be configured to pair with only a single computer during testing.</p> <p>⁷ Tablets running iOS 6 and higher cannot run Java so the DRC INSIGHT secure browser cannot lock down the device properly. Devices must be set up in Guided Access to deliver tests securely as well as have spell check, auto-correct, auto-complete, and auto-capitalization disabled.</p> <p>⁸ To deliver tests securely, Chromebooks are required to run in Single App Kiosk Mode to lock down the device properly. Google recommends a minimum version of Chrome OS v31 in order to support Single</p>



App Kiosk Mode.

Testing Site Manager (TSM)

	Minimum Specifications ¹	Recommended Specifications
Operating System		
Windows	Windows XP – Service Pack 3 ²	Windows 7 or newer
Windows Server	Windows Server 2003	Windows Server 2008
Mac OS	Mac OS 10.6.8	Mac OS 10.7 or newer
Linux	Ubuntu 12.04.1 (32-bit and 64-bit with Gnome 3.4, Unity shell, and kernels 3.0.1 – 3.3) ⁵	Ubuntu 12.04.1 (32-bit and 64-bit with Gnome 3.4, Unity shell, and kernels 3.0.1 – 3.3) or newer ⁵

Memory	1 GB RAM	1 GB RAM or greater
Processor	1 GHz	1 GHz or faster
Disk Space		
HVA/TTS	10 GB ⁴ available	15 GB ⁴ or larger available
With VSL ⁵	20 GB ⁴ available	25 GB ⁴ or larger available
Screen Size	9.5 inch screen size or larger	13 inch screen size or larger
Screen Resolution	800 x 600 resolution	1024 x 768 resolution or better
Internet Connectivity	Computers must be able to connect to the Internet via wired or wireless networks.	Computers must be able to connect to the Internet via wired or wireless networks.
Input Device Requirements	Keyboard – wired or wireless (Bluetooth ³) Mouse or Touchpad	Keyboard– wired or wireless (Bluetooth ³) Mouse or Touchpad

Additional Guidance

¹ Application will run at or under minimum specification, however, the application will not deliver the optimal student testing experience. Responsiveness of the application and response times during the testing will be slower.

² Windows XP will no longer be supported by Microsoft after April 8, 2014, presenting security and support risks for schools. (<http://windows.microsoft.com/en-US/windows/end-support-help>)

³ To meet security guidelines, each Bluetooth/wireless keyboard must be configured to pair with only a single computer during testing.

⁴ TSM disk space requirements for Michigan assumes an average Fixed-Form size of 2 MB, an average CAT item pool size of 2 GB (shared across all CATs), and assumes accommodations other than Video Sign Language (VSL). Given the size of video files, the VSL accommodation can increase the storage needs by up to an additional 9 GB.

⁵ Video Sign Language (VSL) is not supported under the Linux operating system.

Web Browser Requirements

The Contractor INSIGHT test delivery interface runs on a custom web browser that is designed to ensure a fully secure environment during testing.

The eDIRECT assessment management system is accessed on standard web browsers. Browsers that will be supported for the eDIRECT system are detailed below based on operating system.



Operating System	Supported Browsers on Operating System
Microsoft Windows	Mozilla Firefox, Google Chrome, Microsoft Internet Explorer
Apple Mac OS X	Mozilla Firefox, Apple Safari, Google Chrome
Linux	Mozilla Firefox, Google Chrome
iOS	Safari for iOS
Chrome OS	Google Chrome

Browser	Minimum	Recommended
Google Chrome	27.x or newer	31.x or newer
Mozilla Firefox	21.x or newer	26.x or newer
Apple Safari	5.x or newer	7.x or newer
Microsoft Internet Explorer	8.x or newer	10.x or newer
Safari for iOS	5.x or newer	6.x or newer

Contractor Operating System and Browser Support Policy

For operating systems and browsers on the Contractor supported list, the Contractor will support all versions which are publically supported by the vendor. These versions are considered to be Supported and Tested by the Contractor.

Any new version of a supported operating system will be supported within three months of public availability of the operating system version or by the next planned common or client-specific release date of the application, whichever duration is greater.

Any new version of a supported browser will be supported within one month of public availability of the browser version or by the next planned common or client-specific release date of the application, whichever duration is greater.

For each of the Contractors applications, once an operating system or browser version has reached the end of vendor support, the Contractors approach is that support will end by the next planned common or client-specific release date of the application. However, the Contractor will work with MDE on the best timing for transitioning off of the versions that no longer have vendor support.

Bandwidth Recommendations

Bandwidth requirements are based on the test content and test response needs of the assessment. Contractor provides network and bandwidth recommendations that can be used by technical staff to optimize the online testing experience for students.

The bandwidth recommendation is based on an average fixed-form test size of 2 MB with an acceptable download time of 60 seconds. (Bandwidth needs for a CAT will be significantly less because items are delivered to the student testing device one item at a time). The peak bandwidth requirement occurs during the downloading of the fixed-form test to the student machine and assumes that all students are beginning the test at the same time, rather than a staggered start. Contractor has designed the INSIGHT testing application so that this download occurs while the student is reading testing instructions so they are generally not waiting for the download to finish.

Minimum and recommended bandwidth for fixed-forms tests is provided below (shown both with and without TSM Content and Response Caching). Speeds are shown per student simultaneously testing. With caching, a site’s internal network will distribute test content to student computers. Local internal network connection speeds will vary based on network configurations or other factors.



Minimum and Recommended Internet Connection Speed for Fixed-Form Tests

Minimum With TSM Caching	Minimum Without TSM Caching	Recommended With TSM Caching	Recommended Without TSM Caching
5 Kbps/student	80 Kbps/student	20 Kbps/student or faster	200 Kbps/student or faster

The minimum speeds listed above for fixed-form testing are adequate for CAT tests as well, if they are used. The Contractor will work with MDE to provide more precise bandwidth recommendations once further information on the assessment designs are provided.

Additional bandwidth may be required for students who use certain online accommodations (e.g., text-to-speech, human voice audio, etc.). As noted previously, sites with low bandwidth and/or large numbers of simultaneous users are encouraged to utilize Contractors TSM Content and Response caching.

- B. The Online Contractor must provide testing clients for the following device types:
 - a. Desktops
 - b. Laptops/Netbooks
 - c. Chrome books
 - d. iPad tablets
 - e. Android tablets (available for use in spring 15)
 - f. Windows tablets (available for use in spring 15)
- C. The Online Contractor must provide a variety of testing software deployment options including:
 - a. Manual installation on a single device
 - b. Deployment through a network distribution system
 - c. Uninstallation without requiring administrative permissions
 - d. No trace of the testing software may remain on the testing device upon removal
- D. The Online Test Delivery System must be designed with a highly scalable architecture to support the delivery of online tests to over 1.5 million students Statewide. The Online Contractor must provide evidence that the system is capable of scaling to the extent required for the State of Michigan.
- E. The Online Contractor must provide a Disaster Recovery Plan that addresses the following:
 - a. Server failure
 - b. Loss of internet connectivity at the hosting site
 - c. Loss of internet connectivity at the testing site
 - d. Data corruption
 - e. Testing device crash or reboot during a test administration

9. Test Development: Fixed Form Test Maps for Michigan Developed Tests

- A. Test Maps
 - 1. Fixed form test maps will be developed and approved by MDE using the Michigan IBS.
 - 2. The fixed form test map will be made available to the Contractor via direct table read.
- B. Item Export
 - 1. The item version in the IBS is the source of truth.
 - 2. Each unique item in the fixed form test map will be provided to the Contractor via IBS export that is compliant with the accepted industry interoperability standards, currently QTI v2.1
 - 3. The Contractor must import the items in compliance with the accepted industry interoperability standards, currently QTI v2.1. and render the items for online delivery.
 - 4. Any element of the items required for Contractor online delivery that are not addressed by QTI v2.1 will be defined during Requirements Gathering and approved by MDE.
- C. Rendering Review Quality Assurance Process
 - 1. Contractor must render each unique item in the test map for online delivery using the IBS export as the source.
 - 2. The Contractor must not change any item content during the rendering process.



3. Contractor must provide MDE access to review and approve the rendered items in a delivery environment that replicates how the student will view/interact with the item.
4. MDE will conduct rendering review and approval of the rendered items in the Contractor delivery environment from step 3 above, using the IBS Rendering Review process.
5. If an error is found in the item content, the item will be changed by MDE in the IBS and re-exported, retaining the IBS as the source of truth for the current item version.
6. If a change is required for item presentation that does not come from the IBS source, the Contractor must make the change in the rendered item, consistent with the established MDE rendering review and approval process.
7. Contractor must export approved rendered item package for each operational item to MDE for upload into the IBS.
8. If no modifications are made to the item delivery elements prior to the next export, the approved rendered item package will be provided to the Contractor. These items will need to undergo the MDE Rendering Review and approval process.

D. Online Test Forms

1. Contractor must assemble the online test forms when all unique items in the test map have been approved as rendered.
2. Contractor must use the Test Map information from the direct table read to assemble the test forms.

E. Test Form Quality Assurance Process

1. Contractor must provide MDE access to a test environment that replicates the student testing environment for form verification and approval.
2. Contractor must provide evidence to MDE during the UAT that all fixed-forms for all hardware and software supported by the Online Testing System have been validated for each test cycle.

10. Test Development: CAT Item Pool for Michigan Developed Tests

A. Item Pool Source

1. MDE will determine and apply the Blueprint specifications to the IBS inventory to identify those items available for the CAT for the specified test event.

B. Item Export

1. The item version in the IBS is the source of truth.
2. Each unique item identified as part of the CAT item pool will be provided to the Contractor via IBS export that is compliant with the accepted industry interoperability standards, currently QTI v2.1
3. The Contractor must import the items in compliance with the accepted industry interoperability standards, currently QTI v2.1. and render the items for online delivery.
4. Any element of the items required for Contractor online delivery that are not addressed by QTI v2.1 will be defined during Requirements Gathering and approved by MDE.

C. Rendering Review Quality Assurance Process

1. The Contractor must render each unique item in the CAT pool for online delivery using the IBS export as the source.
2. The Contractor must not change any item content during the rendering process.
3. The Contractor must provide MDE access to review and approve the rendered items in a delivery environment that replicates how the student will view/interact with the item.
4. MDE will conduct rendering review and approval of the rendered items in the Contractor delivery environment from step 3 above, using the IBS Rendering Review process.
5. The Contractor must provide evidence to MDE during the UAT that the Contractor has verified the CAT item pool renders appropriately for all hardware and software supported by the Online Testing.
6. If an error is found in the item content, the item will be changed by MDE in the IBS and re-exported, retaining the IBS as the source of truth for the current item version.
7. If a change is required for item presentation that does not come from the IBS source, the Contractor must make the change in the rendered item, consistent with the established MDE rendering review and approval process.



8. The Contractor must export approved rendered item package for each Operational item to MDE for upload into the IBS.
9. If no modifications are made to the item delivery elements prior to the next item pool export, the approved rendered item package will be provided to the Contractor. These items will need to undergo the MDE Rendering Review and approval process.

D. CAT Specifications

1. The Contractor must conduct requirements gathering with MDE Psychometric, IT, and Administration and Reporting staff to define the CAT specifications.
2. The Contractor must apply MDE test specifications for each test event.
3. The adaptive student test event must be replicable. Contractor must provide MDE the capability to identify how the adaptive algorithm determined which item to provide a student based on information generated throughout the test on student proficiency estimates.
4. The Contractor must evaluate the functioning of the adaptive test engine after each test cycle and share the results with MDE to determine if further refinements are needed.

E. CAT Quality Assurance Process

1. The Contractor must create UAT simulations for each test event using MDE approved specifications and MDE provided strings of item response data to ensure the adaptive engine functions as expected.
2. The UAT process will include field test (FT) as well as operational (OP) items.
3. Contractor must conduct a parameter recovery study based on MDE provided item response data and fixed parameters.

11. Assessment Consortium (if used) System

MDE may be participating with an Assessment Consortium, a state membership organization, in the development of summative and possibly interim assessments, which are designed to measure student proficiency and growth in the State Standards in mathematics and English Language Arts (ELA) for students in Grades 3-8, and 11. The State assessments may be designed for online Computer Adaptive Testing (CAT). The first Statewide online delivery is planned for the Spring 2015 test cycle. MDE assessment administration and reporting efforts will be done in concert with, and parallel to, the assessment activities of any consortium assessment.

- A. The Contractor must meet administration, scoring, and reporting requirements to deliver any consortium summative and possibly interim assessments in mathematics and ELA to Michigan students. The Contractor must meet the consortium assessment system requirements either by using the Contractor's online assessment system or use open source components, as available. The delivery method must support (i) online administration of Michigan's summative and interim tests, (ii) the consortium system standards and requirements and (iii) interface with the MDE Secure Site.
- B. The Contractor must comply with consortium item pool transport requirements for delivery of the consortium assessments.
- C. The Contractor must provide comprehensive plans describing how the service provider will ensure compliance with consortium specifications and gather all necessary requirements to ensure appropriate administration, scoring and reporting within the expected timeframe.
- D. The Contractor must deliver the consortium interim assessments and CAT summative assessments in Spring 2015, if requested.

12. Pre-Identification of Students

The MDE Secure Site produces the "Pre-ID" file of test-takers that is made available to the Contractor via a web service or direct table read (see Appendix A). The MDE Secure Site currently provides two dates for initial and update pull(s) of fall pre-ID data. Pre-ID pulls are currently identified by date ranges. Online Contractor must pull pre-ID student information according to a pre-established schedule for each test cycle as well as on demand.

A. Pre-ID Pulls

1. Initial Pull

- a. The Online Contractor pulls the initial file of pre-identified students for a test cycle on a pre-established date according to the schedule.



2. Update Pull
 - a. The Online Contractor pulls the update file of pre-identified students using an electronic utility that is preset to pull once an hour, once per day, etc.
3. New Enrollee Pulls
- B. During the administration window for a test cycle, the Online Contractor pulls new enrollee pre-ID information from the MDE Secure Site.
- C. The pre-ID information and test administration group information is transferred to the test delivery engine, enabling new enrollees to test immediately.
- D. Quality Assurance Plan
- E. Results of pre-ID pulls are analyzed for accuracy and to ensure that the Online Test Delivery System correctly organizes students by test administration groups and proctors for specified test (by program, content, grade level and class/group).
- F. Update and subsequent pulls are analyzed for accuracy.
- G. The Contractor must participate in Requirements Gathering with MDE staff to determine the pre-ID pull method, frequency, and define the UAT process and specifications. .

13. System Interfaces

The Online Test Delivery System must have the capability of interfacing with multiple MDE internal systems. The methods used to interface include web services, direct table reads, or file exporting.

- A. MDE Secure Site
System must be able to interface with the MDE Secure Site system:
 1. Single Sign-On for Test Administration Users: Test proctors are provided with credentials within the MDE Secure Site. These same credentials must be used for the proctor to access the Online Test Delivery System.
 2. Test Registration information: The MDE Secure Site is where tests are registered. This registration information must be pulled into the online system. For more information, see **Section 1.022 #10**.
 3. Student Testing Status data: The testing status of each student must be sent to the MDE Secure Site on a daily basis. For more information, see **Section 1.022 #17**.
- B. Other
 1. System must push all assessment data (item-level detail, student response data, response times, raw scores, etc.) to internal MDE systems as well as a third-party psychometric validation firm.
 2. System must provide for bi-directional transfer of student assessment data with MDE Secure Site for the purpose of reporting.

14. Test Preparation

A. Accessibility and Accommodated Item Formats

The Contractor must use IBS item-specific, audio-generated versions (English, Spanish, and Arabic) for presentation of technology-enabled test items on all online tests. For Michigan developed tests, MDE will provide, as needed, human voice audio (HVA) and/or ALT text for graphic so the Contractor's system can deliver text to speech.

1. The audio version with human-generated voice (HVA) will be imported from the IBS with item and/or context tag.
 - a. MDE plans to use audio versions with human-generated voice for the K–2 Interim Assessments.
 - b. The English audio version imported must be used for all students needing HVA, including students with low vision.
2. The text-to-speech engine selected by the Online Contractor must be approved by MDE prior to use.
 - a. The text-to-speech engine must produce speech that is clear and easily understood.
 - b. The IBS-imported English audio script must be used for text-to-speech for Spanish- and Arabic-speaking students.



- c. The text-to-speech engine must be grade-level appropriate and utilize Broadcast Spanish and Standard Arabic.

Note: In the near term, all Arabic audio will be done using Human Voice Audio. When text-to-speech Arabic becomes available in the market, we will evaluate products for MDE's consideration.

- 3. Refreshable Braille: Starting in 2014-15, the Online Contractor must offer refreshable Braille as an online accessibility tool. This includes refreshable Braille integrated rulers as part of the implementation.

B. Requirements Gathering and UAT

- a. The Online Contractor must describe the Test Preparation processes to be used for developing accessibility features or formats.
- b. Contractor must provide existing UAT process and specifications for accessibility UAT. If the existing process does not meet MDE requirements, then the Contractor will modify the UAT process and/or specifications to meet MDE approval.

15. Training of Test Administrators and Technology Coordinators

The Online Contractor must work closely with to develop standardized training presentations for Michigan assessment programs. All training and documentation deliverables are subject to review and approval by MDE. MDE will present important aspects of planning and administering the Michigan assessment programs in a live video or webcast for each assessment program. The initial training videos will be recorded for subsequent workshops with Michigan Assessment Coordinators, Test Administrators, and District Technology Coordinators.

- A. The Online Contractor must provide information about the online test delivery system, including availability of practice tools for online testing, online testing client installation instructions, identifying students to be tested, managing student testing accommodations, test proctoring, and authentication requirements for the online test delivery system.
- B. The Online Contractor must develop the instructions and guidelines for Technology Coordinators to install required software and/or secure browsers.
- C. The Online Contractor must develop the online testing instructions and guidelines to be used in the test administration manuals and training presentations and would print the administration manual and the technology coordinator manual (that will be developed in conjunction with DAS).
- D. The Online Contractor must provide information and participate in training sessions with local educators to enable them to participate in online test administration in their schools and includes the following;
 - 1. The training will be live webcast that is recorded for replay, as needed.
 - 2. The Online Contractor will participate in the webcast so they will travel to the production site.
 - 3. There is one session per test cycle.
 - 4. The Online Contractor should include the cost of production.
- E. A draft of the training presentations must be submitted to MDE for review and approval, no less than 14 days prior to the training workshop.

16. Test Administration

- A. Communication During Test Administration
 - 1. New issues or questions are directed to MDE.
 - 2. Calls of possible test administration irregularities are reported immediately to the designated MDE staff.
 - 3. Numbers and types of calls are reported to MDE according to pre-established reporting frequency.
- B. Critical Security Compliance Activities During Testing
 - 1. The Contractor must provide special security monitors, upon the request of MDE when serious security breaches occur, to accompany MDE staff and assist in securing compliance.
 - 2. The Contractor should expect no more than one critical incident per test cycle and must provide five monitors per day for six days duration. The Contractor must prepare its monitors to do such things as deliver test materials to the assessment room, monitor test administration by school staff, and return test materials to a secure location.



C. Collection of Test Administration Security Compliance Agreements

1. The Contractor must provide security agreements for all staff utilizing the online assessment system and secure student information.
2. These documents are retained in the school and available for review, if needed.

17. Online Test Delivery

The Online Contractor must provide an Online Test Delivery System that adheres to industry best practices, strict security measures, and uses the MDE-approved CAT test administration algorithms that have been adopted, revised, or developed through a joint requirements gathering process with the Online Contractor and MDE for administering CAT assessments. The Contractor will:

- A. Provide proctor tools during the test administration process
- B. Provide security to limit student functionality to the testing environment
- C. Employ methods within the proposed solution to prevent data loss during test administration

18. Testing Certification Process—Tested Roster

The MDE Secure Site provides a process for schools and districts to certify that the student enrollment is correct, students either not tested or unable to test is correct and that evidence is received confirming that all students (scheduled to test) took the test online. A description of the Testing Certification Process—Tested Roster follows:

- A. The Online Contractor must send to MDE Secure Site, using a web service or direct database write, a daily list of students that have completed their assigned test(s).
- B. Tested Roster will be available on the MDE Secure Site for schools to review and identify any possible issues, such as a missing test.
- C. MDE will review possible issues, such as a possible missing test, using the student score response data, which will be made available to MDE prior to the opening of the tested roster.
- D. During the tested roster window, which opens after test administration, the Contractor must pull issues data from the MDE Secure Site.
- E. The Contractor must research missing students and missing tests. The Contractor score found student response strings and correct the student data file for found students and/or tests and provide MDE with the corrected student data file.
- F. The Contractor must provide the updated student response data to MDE according to MDE approved data transfer requirements.

19. Machine Scoring

- A. Contractor must score all machine scorable items.
- B. The scoring system must have the capability to translate student responses into a score for each item (e.g. 0/1) including capability to polytomously score TE interactions.
- C. The Online Contractor does not score CR items. See section 1.022 #20 that follows.
- D. Fixed Form Tests - Contractor must provide MDE with student raw item score data via direct table read. MDE will convert the item scores.
- E. CAT Engine – Contractor must apply MDE approved adaptive scoring model.
- F. Contractor must provide MDE with student score response data for all machine scored items.
- G. Quality Assurance Plan
 1. All items must be scored accurately, efficiently, and reliably. All scoring information must be made available both to MDE and to independent evaluators or auditors as required.
 2. Online Contractor must provide a description of the scoring process, specifying the quality control measures for scoring and verification of the scoring program,
 3. All scoring and QAP plans must be pre-approved by MDE.

20. Constructed-response Scoring

- A. The Contractor does not score constructed response (CR) items, but transports the CR student responses to the CR Scoring Contractor. In support of this, the Contractor must perform the following:
 1. The CR Scoring Contractor must facilitate requirements definition with this Contractor and MDE so it is clear what is required of this Contractor to transport the CR responses.



2. The Contractor must conduct UAT with the CR Scoring Contractor to verify the export fully meets the requirements and that student response data is not lost or compromised in the process.
3. The Contractor must export the CR to the CR Scoring Contractor in compliance with the requirements defined above.
4. The Contractor must implement Quality Assurance as defined during requirements gathering with the CR Scoring Contractor and MDE.

21. Forensic Analysis of Test Administration

A forensic analysis of student responses is conducted to determine aspects (validity and reliability) of the test administration process that otherwise would not be known.

- A. The Contractor must be able to capture a variety of student response data at the time of testing.
- B. The Contractor must schedule and participate in requirements-gathering sessions with appropriate MDE staff to establish guidelines and timelines for delivery of continuously updated student response data during the test window needed for forensic analysis.
- C. The Contractor forensic analysis techniques must include, but will not be limited to, the detection of unusual response times, answer-changing behavior, response latency, gains analysis, pattern similarity, item exposure rates, and time of test administration.
- D. At the least, the Contractor must demonstrate the ability to capture and carry out analysis of answer-changing behavior, including:
 1. all student answer choices including the final choice used for scoring. This includes not only the number of answer changes but the specific values chosen each time
 2. response latency, including the amount of time between initial item presentation and initial response, latency between choices (in the event of an answer change) and latency between initial response and presentation of the next item
 3. tracking the movement of the examinee through the test, including “going back,” item skipping and other behaviors (prohibited, or permitted if not possible to prohibit in the system)
 4. student response times
 5. accessibility options used by the student
 6. the start and end times for a test (by individual student, test administration group)
- E. The Contractor must provide continuously updated electronic reports that include:
 1. student response changes that exceed MDE-defined thresholds
 2. aggregate number of flagged students by district, school, class group code, and teacher ID (where applicable)
- F. The Contractor must provide a summary report within 15 business days after the completion of the test cycle to include the Contractor computed mean of each response change index and the standard deviation by grade and content area.

22. Reporting

- A. Online Assessment Reporting
 1. The Contractor must provide online real-time raw score reporting for machine scored items to the student immediately after the test administration is completed.
 2. The Contractor must include their online real-time raw score reporting, included in their per test administration cost, identifying the following:
 - a. what data elements are reported
 - b. which data elements are:
 - i. stock
 - ii. dynamic
 - iii. customizable
 - c. how raw score data are reported
 - i. overall raw score
 - ii. content standard or reporting group
 - iii. contractor pre-determined reporting categories
 - iv. Customizable per MDE request



- d. what role-based security access permission groupings are available in the Online Reporting access
 - i. Proctor
 - ii. Class/group
 - iii. School
 - iv. District
 - v. State
- e. duration of availability of the online reporting data to the role-based permissions above the student level
- f. availability to screen print online reporting data for role-based permissions above the student level, ensuring that test security is not compromised

B. Requirements Gathering

- 1. The Contractor must participate in Requirements Gathering with DAS staff to define the following:
 - a. specific reporting requirements based on customization available in the per test administration cost
 - b. Specifications for the test cases and student response mock data set to be used for DAS Mock Reporting User Acceptance Testing (UAT)
 - c. Specifications and a Plan for the Production Reporting Quality Assurance

C. User Acceptance Testing

- 1. The Contractor must meet DAS-approved requirements for the Online Mock Reporting User Acceptance Testing.
- 2. The Contractor must develop a student response mock data set based on requirements from DAS to generate a mock online reporting for UAT approval by DAS. The mock data will represent all the possible combinations of online reporting conditions to be defined during requirements gathering. Some examples include:
 - All correct, all incorrect, incomplete test sessions, omitted questions, changed responses, all item types including CR, only CR items, interrupted/dropped test sessions, resumed test sessions, single and multiple content standard groupings, multiple aggregate reporting groups
- 3. The Contractor must develop the mock student information (names, UICs, data reporting categories, etc.) needed for the mock reporting UAT as well as the necessary range of reporting conditions.
- 4. The student response mock data set will be created in such a way that it can be re-used for UAT of different test administrations.
- 5. The Contractor must provide DAS with access to the production student test delivery engine for the online reporting UAT, and the test cases needed for DAS to review and approve the online mock reporting as specified during requirements gathering.
- 6. The Contractor must resolve all issues identified during the Mock Reporting UAT and provide verification to DAS for approval prior to the test administration window, since production reporting is real time after the test session is completed.

D. Production Reporting Quality Assurance

- 1. The Contractor must monitor the real-time raw score reporting as specified in the DAS-approved Production Reporting Quality Assurance Plan.
- 2. The Contractor must provide DAS authorized users with access to the real-time reporting and student response data as specified during requirements gathering to allow for DAS random verification of the production real-time reporting.
- 3. The Contractor must report to DAS any issues discovered during real-time reporting, identifying the issue, level of criticality, with a plan and timeline for how they are addressing the issue.
- 4. The Contractor must provide DAS with a production monitoring report that meets the data requirements and reporting intervals specified during requirements gathering.

23. Document Retention and Storage

- A. The Contractor must work with MDE to update retention requirements for electronic documents.



- B. MDE must have access to all stored documents and files at any point during the Contract or within agreed-upon retention guidelines.
- C. Electronic Files
 - 1. The Contractor must retain all student testing data in a highly secure location with off-site backup for the life of the Contract.
 - 2. Full archives of student testing data must be made available to MDE via an open published API.
 - 3. No student testing data must be deleted without written permission from the MDE Executive Director.

24. Technical Report

MDE requires the annual production of a technical report that documents the development and psychometric characteristics for each of the Michigan assessments. Those reports must be comprehensive, providing reviewers with all the information necessary to evaluate the technical merits of the Michigan assessments and clearly written so that the report is readily accessible to reviewers at the U.S. Department of Education, other oversight bodies, and Michigan stakeholders.

Following each test administration cycle, MDE creates an operational technical report for each assessment program documenting all phases of the test development, scoring, and reporting process and providing evidence for the reliability and validity of the assessments, as well as providing all of the supporting analysis results as appendices. While the vast majority of technical analyses and psychometric processes will reside within the MDE, most of the processes employed to develop, administer and score the assessments are the result of collaborative efforts between the Contractor and the MDE. The proper documentation of all processes serves as crucial validation evidence to support the purpose of the assessment program as well as the inferences made from the assessment scores. Therefore, the Contractor will be expected to schedule and document needs analysis and requirements gathering sessions around the specific documentation and other information they will be expected to provide to the MDE Psychometric Lead(s) to allow for timely and accurate release of the Technical Reports.

The following section is a high-level list of sections of the technical report and relevant features the Contractor will be responsible for providing. The list should not be considered exhaustive; as alluded to previously, there will be specific requirements gathering conducted to determine in greater detail the technical report responsibilities for the Contractor and MDE.

The Contractor must expect to contribute to at least the following technical report sections:

- A. Test Development
 - 1. Provide documentation as to the specific processes employed to import items in their engine according to MDE specifications (e.g. fixed form test maps, eligible pools for adaptive testing, blueprint based bundles, etc.).
 - a. Provide documentation describing the quality control process used to ensure the import was successful. This should include rendering review, match to test map or pool characteristics, and the resolution processes used when discrepancies are found.
 - 2. Provide documentation and evidence of functionality and appropriateness for student based tools and other assistive technologies employed by the engine.
 - a. Includes but is not limited to: highlighting, magnification, text to speech technology, translations, test navigation, underline, bold, protractors, calculators, timing indicators, rulers, and virtual scratch pads or drawing tools.
- B. Test Administration
 - 1. Provide documentation of the process used to ensure tests were delivered as expected.
 - a. Addresses how the sampling plan was carried out, how tests (or items) were packaged for delivery to the students and how the system was able to deliver the forms or appropriate set of items as intended by blueprint or algorithm based restraints.
 - b. Full technical documentation of the algorithm used to determine item selection including but not limited to:
 - 1) Blueprint and content based constraints applied and quality control steps used to ensure adherence.



- 2) Student ability based item selection criteria and rules
- 3) Stopping/termination rules (content based, student based or a combination of constraints)
- c. Navigability
 - 1) Documentation of business rules specified by MDE and how the system applied those rules.
 - 2) Documentation of the appropriateness of the administration experience for all students.
 - 3) Quality control procedures used to ensure users experienced the assessment as designed when they navigate throughout the assessment space.

2. Test security

- a. Full documentation of the procedures employed by the Contractor to ensure security of test items.
 - 1) Exposure control
 - 2) Proctoring/monitoring
 - 3) Secure browsers/LCS/data storage and security
 - 4) Secure and unique log-ins
 - 5) Student stopping and continuation rules
- b. Full documentation of procedures employed to analyze assessment data for possible irregularities post-assessment.
 - 1) Answer changing behavior
 - 2) Proximity analysis
 - 3) Telemetry data
 - 4) Time stamping
 - 5) Unusual response strings
 - 6) Item parameter drift
- c. Technical documentation regarding security of the actual electronic data including the items, the student responses and personally identifiable information.
 - 1) Where does the data reside?
 - 2) Who has access to the data?
 - 3) What security precautions are employed to ensure the data is secure and not vulnerable to breach?
- d. Thorough explanation of test session data collected and provided to MDE for audit purposes. This documentation should be sufficient enough to allow authorized personnel the ability to recreate a student assessment experience item by item when combined with the telemetry data.

C. Test Scoring and Reporting

- 1. Provide documentation of the process used to link student response data to scoring tables for score reporting (fixed form only).
- 2. Provide full description of all scoring algorithms and constraints used to convert student response strings to student ability estimates and subsequent transformation to the reporting metric (adaptive).
- 3. Provide documentation of quality control processes used to ensure student scoring algorithms are applied without error. One example is the parameter recovery studies prescribed by MDE.

25. Functional and System Requirements/Deliverables — Online Test Delivery System

A. System Interfaces

All Contractor system to State system interfaces must utilize web services, XML data exchange, and/or direct (supporting Microsoft SQL Server 2008 and above) table to table reads/writes via VPN connection. The MDE Secure Site is a State-created and maintained solution called MEIS.

B. Technical Priorities

- 1. Overview of Key Technical Priorities
 - a. Highly Available and Scalable System. The Online Test Delivery System must support high availability and scalability and perform under periods of high usage and high processing loads.
 - b. System and Data Recoverability. The Online Test Delivery System will need the ability to recover from a hardware or application failure. It must have built-in redundancy and fail-over architecture to ensure seamless system recovery.



- c. **Data Integrity.** The Online Test Delivery System must provide end-to-end data protections to ensure no data are lost or corrupted during processing, storage, and transportation between applications and interfaces.
- d. **Security.** The Online Test Delivery System must maintain the highest level of security in order to safeguard the confidentiality of items, student information, and assessment results. The required security level is comparable to that required by financial institutions to prevent security breaches.
- e. **System Flexibility.** The Online Test Delivery System will be interfacing with several existing systems within MDE and CEPI. The system must be built with enough flexibility so that it has the capability to interface with other systems in the future. The effective use of standards, business rules, security protocols, and integration architectures will be critical to enabling this level of interoperability.
- f. **Data Management.** The Reporting System must support the seamless and secure sharing of student item data and test results. This includes both the receipt of student data from the State systems and the export of student results back to the State systems.
- g. **Accessibility.** The Online Test Delivery System must be in compliance with Section 508; Americans with Disability Act (ADA) and ideally with the Web Content Accessibility Guidelines 2.0. The substantive content (e.g., items) must be associated with metadata that describe any changes that will be made to the content, display, or input method necessary to provide appropriate accommodations support to the student. In addition, the overall approach must leverage the use of computer-based accessibility tools.

General Requirements:

1. System must be able to interface with the MDE Secure Site system: Single Sign-on for Test Proctors, Test Registration information (pull), and Student Testing Status data (push).
2. System must be able to import items (compliant with QTIv2.1 interoperability standards) from the MDE Item Bank System.
3. System must be able to push all student response data (item-level detail, response times, raw scores,.) to internal MDE systems as well as a third-party psychometric validation firm.
4. System must be able to render test items in compliance with MDE style specifications and export the MDE approved rendered item packages to MDE adhering to industry interoperability standards, for import into the Item Bank System.
5. System must be able to import QTI v2.1 compliant items from multiple item bank systems.
6. System must be able to interface with other MDE systems as needed. (i.e. Data Warehouse).

Test Delivery System

7. System must be able to check student computers to ensure that they have the components necessary to operate the test.
8. System must have the ability to deliver the test securely to “locked-down” student workstations / devices. The Test Delivery System must “lock down” the student device to disable browser navigation.
9. System must prevent printing, screen captures, saving to HTML, and viewing of HTML source during assessment session.
10. System must be able to capture all student answer choices/selections including the final choice used for scoring.



11. System must be able to capture response latency including the amount of time between initial item presentation and initial response, latency between choices (in the event of an answer change) and latency between initial response and presentation of the next item.
12. System must collect a detailed audit trail for use in detecting testing irregularities (i.e. cheating).
13. System must be able to track the movement of the examinee through the test including “going back,” item skipping and other behaviors.
14. System must allow students to review their answers for some sections or sets of questions before moving on to the next section or completing the exam.
15. System must prevent student from “accidentally” exiting an assessment or being accidentally exited from an assessment.
16. System must provide frequent auto-saving of student responses during an assessment, including in-progress constructed response items.
17. If local caching is utilized, the system must provide local caching for both fixed-form and computer adaptive tests.
18. System must provide the ability to display to the proctor detailed directions for assessment administration.
19. System must support multimedia and interactive items that are written in HTML 4 with HTML 5 extensions.
20. System allows test administrators to print items, stimuli, and necessary resources to support system accessibility requirements, with appropriate security procedures.
21. System provides the student with a summary screen prior to submission that visually alerts the student of any unanswered items on a fixed-form assessment.
22. System provides an option that allows a student to go back and review any item and change their answers on a fixed-form assessment prior to submitting.
23. System provides the ability to disable functionality for a specific test. (E.g. notes, reading line, magnifier, etc.) The State must have full control over the options available to the student during test administration.
24. System must be QTI v2.1 compliant.
25. System must provide method to support individual student needs for item delivery format.
26. System provides an age- or grade-appropriate testing interface. (i.e. larger font sizes or different layouts).

Test Administration

27. System must require minimal work for setting up the administration of a test on the testing devices
28. System functionality can be granted or restricted to user groups or entities including MDE, State, district, school, and building level. Groups and entities can be defined in a flexible, tiered manner with no preset limit to tiers.



29. System must allow test administrator to identify students requiring accessibility tools/options.
30. System must provide State the option to specify the default when both human and machine voice options are available.
31. System must support the following item types: multiple-choice, constructed response, and technology-enabled.
32. System must support technology-enhanced items and performance tasks.
33. System allows the creation of style sheets by grade level or test type that controls font sizes, voice settings, and the availability of student tools/accessibility options.
34. System must enable students to be grouped according to classes, programs, or other demographic groupings. (Group information will be provided by MDE Secure Site.)
35. System must allow administrative users to start, stop, resume, and restart student test sessions, giving the reason why.
36. System must save student responses when a test is stopped, paused or suspended. When the test is restarted, previously saved student responses are retained.
37. System does not allow test data to be altered once a test is submitted by a student.
38. System allows administrative users to view student demographic information.

Computer Adaptive Test (CAT) Engine

39. System must be capable of implementing a blueprint based (content category driven) CAT with a preference for multi-stage approaches to allow for embedded field testing. The specific algorithm used will be determined by MDE with consultation from the Contractor to ensure feasibility and implementation as intended.
40. Contractor must share the Algorithm logic with the MDE for replication for quality assurance purposes.
41. System must allow MDE to specify algorithm criteria.
42. System must track student item presentation such that each student can take the same type of test more than once without receiving any duplicate items. (Available for use in Spring of 2015)
43. System must provide a mechanism for evaluating test quality prior to deployment.

Machine Scoring

44. System must score all machine scorable items, including polytomously machine scored items.
45. System must be able to insert unscored items (field test) into tests and log them accordingly for research purposes.

Artificial Intelligence (AI) Scoring

46. System supports the AI Scoring component, which will include transferring student responses to the component and relaying data back to that component.

Accessibility/Accommodations

System must provide:



47. Accessibility tools for students to use during an assessment based on the student's personal needs profile (PNP) data.
48. American Sign Language/ Exact English.
49. Magnification Tool (without distorting images).
50. Masking.
51. Guided Line Reader.
52. Read Aloud/Spanish – both human voice and computer-generated.
53. Read Aloud/Arabic – both human voice and computer-generated.
54. Refreshable Braille. (Available for use in Spring of 2015)
55. Braille Integrated Ruler. (Available for use in Spring of 2015)
56. Vary Screen Color/Contrast.

Student Tools

System must provide:

57. Tools for students to use during an assessment that are enabled based on item characteristics.
58. Answer Eliminator.
59. Dictionary/Glossary/Thesaurus.
60. Line Guide.
61. Calculator(s).
62. Read Aloud/English.
63. Highlighter.
64. Protractor.
65. Ruler.
66. Strike-through.

Reporting

67. System must provide the ability (on/off system proctor preference) to display immediate preliminary score feedback to students at the conclusion of the test based on test type.
68. System must allow select administrative users to view aggregate test information by course, such as number of tests scheduled (by date), number of tests being administered (real-time), number of tests completed, and number of scorable tests completed.
69. System must allow users to change test type, entity, subject, grade, and (where applicable) year settings and have dynamically updated results displayed.



70. System must allow administrative users to access reports or dashboards detailing system usage by school and district. For example: number of users currently logged in; number of unique users that have logged in; number of tests administered; forensic data, etc.

71. System must support the ability to export a data file conducive to support generating PDF reports.

72. System must allow administrative users to access a report of students tested and not tested.

External Reporting

73. System must be able to automate, using web services or API, the export of all raw and computed assessment data from the Test Delivery System to MDE for analysis and reporting.

Systems Architecture

74. The system must support the use of the following testing device platforms:

- Windows
- Mac
- Linux
- Android
- iOS
- ChromeOS

75. The system must operate efficiently within a student screen resolution of 1024x768 with minimal horizontal scrolling. Larger resolutions must not change how the test items are rendered (e.g. image sizes are not relative to the screen resolution).

76. The architecture must be sized suitably for the system specified.

77. The system must keep a log of each transaction that alters the database. Logs must be date and time stamped to allow the system to reconstruct activity for any period.

78. The system must provide data privacy safeguards, and be fully compliant with FERPA and the State of Michigan's standards.

79. The use of a modular framework as part of the main solution, meaning a set of components, wizards, classes, and libraries that minimize programming required to modify or customize the system.

80. The system must provide a response time of two seconds or less between test items.

81. System must provide an architecture that is scalable to support 1.5 million students state-wide that will be participating in both interim and summative assessments concurrently. Contractor system must be capable of supporting this level of assessment activity.

Programming Standards

82. System must support multi-tenancy.

83. System's inter-component communication must use current standards (e.g. SIF, IMS etc.) that support the State's IT System Architecture.

Security/Access Control

84. All computer information systems and applications must operate in a secure manner and comply with State Enterprise IT Security Policy and Procedures as found on the website:

http://www.michigan.gov/dmb/0,1607,7-150-9131_9347---,00.html.



85. System must ensure that the integrity and confidentiality of data is protected by safeguards to prevent release of information without proper consent.
86. System must protect the privacy of student data according to FERPA regulations.
87. System must provide secure access control based upon single unique user login.
88. System must provide secure unique identifiers for all users.
89. System must check each user's access privileges at login, and automatically disables or enables client functions (in real time) based upon the user's profile.
90. The system must provide varying levels of access within the application (Role-based access).
91. System must provide federated identity management capability.
92. System must meet ISO 27001 and ISO 90003 Standards.

Security/Password Controls

93. System must allow users to enter passwords in only non-display fields.
94. System must encrypt passwords when they are routed over the network.
95. System must store passwords in encrypted State.
96. System must provide a method of secure login for all users and comprehensive security for all system components.
97. System must support secure socket delivery such as SSL using industry standard encryption levels.

Security/Activity Logging

98. System must maintain an audit trail of all security maintenance performed by date, time, user ID, device, and location, with easy access to information.

Edit and Validation Control

99. System must include comprehensive field validation to prevent incomplete or incorrect data from entering the system.

Environment

100. The Contractor must provide effective physical security measures for all equipment sites, all processing and operations areas, backup and recovery, secured storage areas and disaster recovery plans.
101. The Contractor must have a current annual security rating from an independent third party auditing firm that certifies that the Contractor meets Federal and the State of Michigan guidelines for the handling of confidential data.

System Auditing

102. Sufficient audits must be available to identify the source and time of data changes related to system components.
103. System must ensure that it logs system activity necessary to monitor and debug the system in a timely and accurate manner.

**Error Handling**

104. System must ensure that all errors are written to an error log.

105. Errors to the end user must be communicated in plain language with an explanation of required action.

106. System must allow for a system administrator to view, filter, sort, and search the error log.

Backup and Recovery

107. The system must support recoverability using commonly available and industry standard backup applications and approaches.

108. The system must provide point-in-time recovery of data to the last completed transaction.

109. The system must allow for continued use of the system during backup.

110. The system must provide a complete backup and recovery process for all database tables and system files.

111. The backup and archival features of the system can be initiated automatically or by manual request.

112. System must use real-time replication so that testing is not interrupted during fail-over.

113. System features 22-hour availability on weekdays (8-hour availability on weekends) with advance notification of downtimes.

114. All scheduled maintenance must occur during the hours of 9 p.m. and 4 a.m. EST/EDT.

115. The system must provide availability guarantees for all system users including students, proctors and administrators and the ability to complete their respective tasks within the system at any time except those designated as a maintenance window described above.

116. System must allow MDE to monitor the State's current operation and usage dashboard, which displays the number and type of all Michigan users currently active in the system, system uptime, test delivered today, and server/application health and availability.

117. System must send automated outage notifications via email to MDE approved users.

Documentation

118. All system updates or upgrades, including emergency maintenance, must be documented with technical and practical consequences including risks and benefits.

1.023 Reserved**1.024 Conducting Meetings**

Throughout the term of the Contract, there will be many meetings pertaining to the tasks covered by this Statement of Work. The Contractor must be responsible for arrangements and compensation for all meetings related to activities as specified in this Statement of Work unless directed otherwise by MDE.

Failure by the Contractor to provide any of the responsibilities listed in this section may result in non-payment of all costs related to the respective meeting(s) and require the Contractor to arrange and pay for a replacement meeting.



A. Basic Meeting Responsibilities of Contractor

1. In consultation with MDE, identify meeting titles, dates, and attendees.
2. Locate, reserve, and pay for a facility on the date(s) identified. The facility must have:
 - a. Seating capacity for the expected attendees.
 - b. A large display screen that can easily be seen by all on-site attendees.
 - c. ADA compliance.
 - d. Unless specifically indicated to the contrary, all meetings will be held in Lansing, Michigan.
 - e. Communications ability should any participants do so remotely.
3. Arrange and pay for overnight accommodations for multi-day meetings for any attendee traveling between 50 and 150 miles to the meeting.
4. Arrange and pay for overnight accommodations for the night before, the night(s) during, and the night following any meeting for any attendee traveling more than 150 miles to the meeting.
5. Provide transportation for any attendee traveling out of the State.
6. Must have written approval from MDE's director before transportation arrangements are made.
7. Provide refreshments (water, coffee, tea, juice, soft drinks, and healthy snacks) for all attendees.
8. Provide healthy lunches to all attendees for meetings lasting more than four hours and beginning at or before 12 noon local time.
9. Prepare an agenda including approximate times/duration for each topic for the meeting.
10. Send out and track invitations to each meeting.
 - a. Send copies of agenda with invitations.
 - b. Provide copies of notes from any related previous meetings.
11. Set up and provide a sign-in sheet with the title and date of each meeting.
 - a. Ensure that all attendees sign in, including Contractor's staff, MDE staff, and committee members.
 - b. Set up a separate sign-in sheet for each date of a multi-day meeting. For example, if one meeting lasts two days then there must be a separate sign-in sheet for each day.
 - c. The original sign-in sheets must be given to MDE within five business days following the meeting.
 - d. The Contractor must retain a copy of the sign-in sheets for up to two years following the end of the term of the Contract.
12. Prepare and maintain accurate minutes of each meeting.
 - a. Send MDE a copy of the minutes within three business days following the meeting.
 - b. Publish final minutes and any stakeholder comments to a password-protected shared data source.

B. Responsibilities of Contractor for Specific Meetings

1. Management Meetings
 - a. These meetings are not the same as the Performance Review (Status) Meeting or the Executive Management Meetings.
 - b. These meetings, one every three months, can rotate between MDE's office in Lansing, MI, and the Contractor's primary facility. Web conferencing or teleconferencing can also be used.
 - c. During these meetings, MDE staff will meet with Contractor's key staff and others as required to review risks and issues for the coming quarter, and both in process and future deliverables/tasks.
 - 1) MDE reserves the right to require other Contractor key staff for specific activities to attend one or more of these meetings. MDE will provide written notification (to the Contractor's Project Manager) requiring the attendance of any such individual in reasonable time for the request to be accommodated.
2. Executive Management Meetings
 - a. MDE's and the Contractor's senior officers must meet at least twice a year to review overall Contract performance.
 - 1) These are high-level meetings to review project goals, assess foreseeable risks, address major issues, and discuss financial matters.
 - 2) The frequency of these meetings may be increased at the discretion of MDE's CCI.



- b. These are all in-person meetings.
 - c. The meetings can rotate between the Contractor's primary facility and MDE's office in Lansing, MI.
 - d. The first meeting must be held within 60 calendar days of start of the Contract.
3. Technical Advisory Committee (TAC) Meetings
- a. The TAC is a panel of nationally recognized assessment experts who provide advice to MDE on complex assessment-related issues. The TAC meetings are conducted and coordinated by MDE.
 - b. The TAC meetings are typically convened four times per year and last up to two days each.
 - c. Since most of the meetings tend to address assessment administration topics, by invitation, MDE may request the presence of two representatives from the Contractor's staff. Therefore, for budget purposes the Contractor should plan on sending two staff four times per year, payable only in cases in which the staff is in attendance.

1.025 Program Development/Assistance

There are many stakeholders involved with various facts of administering and reporting results of Michigan's statewide assessments. At times, there are requests for research, training or special reporting related to Federal or State mandates. Together with its Contractor, MDE expects to be able to handle most of these requests.

In addition, staff may need to attend specific training sessions to maintain their expertise in the programs identified in this Statement of Work. Staff may also be required to provide training to large groups of stakeholders regarding one or more of the administration and reporting activities.

Upon written approval of the MDE Executive Director, the Contractor must Contract with and compensate individuals and organizations selected by the MDE Executive Director to cover the aforementioned needs within this section. Line items are included in the price sheet related to this section.

1.030 Roles and Responsibilities

1.031 Contractor Staff, Roles, and Responsibilities

A staffing organization chart must be submitted by the Contractor of their Online Delivery Team. The chart must consist of the staffing plan and percent effort values for each staff member needed to fulfill the tasks and activities as presented in the Statement of Work. All key staff for this Contract must be identified with an asterisk (*).

If the Contractor chooses to use one or more subcontractors, a staffing organization chart must be submitted for each that also provides a staffing plan and percent effort for each proposed staff member needed to fulfill the assigned subcontractor tasks and activities that have also been identified in the Statement of Work. All key staff for subcontractors must also be identified with an asterisk (*).

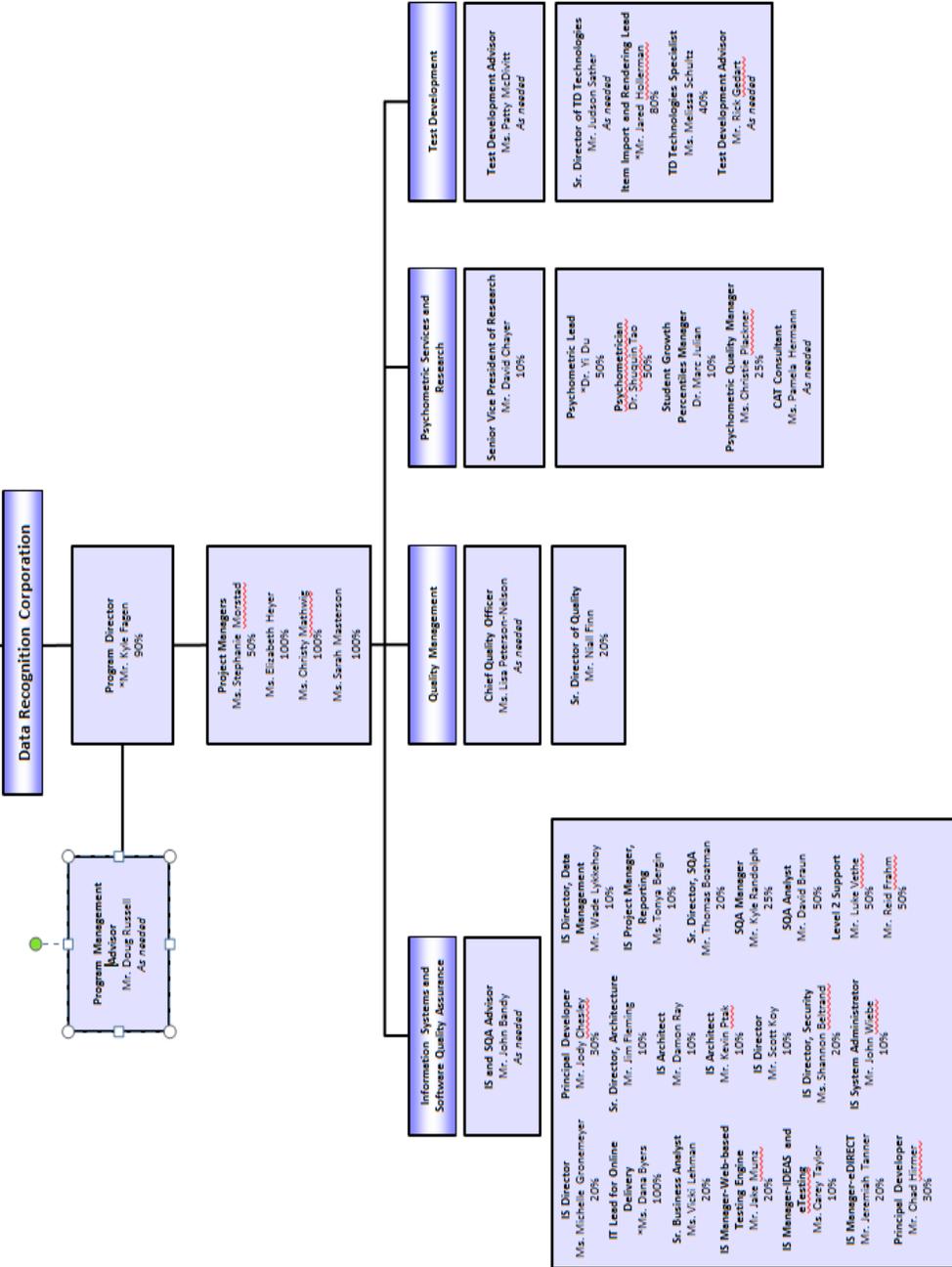
Though the Contractor(s) may select additional key persons, the minimum key staff positions for this Contract are as follows:

- Project Manager
- IT Lead for Online Delivery
- Lead for Item Import and Rendering
- Psychometric Lead

The Project Organizational Chart is shown below:



Michigan Department of Education





1.040 Project Plan

1.041 Project Plan Management

A. Preliminary Project Plan

The Contractor will review, revise in consultation with the MDE Project Manager and resubmit as a deliverable their Project Plan within 20 business days of Contract start.

1. The Preliminary Project Plan must include the following:
 - a. MS Project schedule
 - 1) Internal milestones
 - 2) WBS with task durations with identification of organization/role assigned to each
 - 3) Deliverable target dates and critical paths
 - b. Project approach / Statement of Work
 - 1) Scope Statement with a description of the deliverables to be provided under this Contract
 - c. Assumptions and exclusions
 - d. Critical success factors
 - e. Initial resource plan with anticipated resources by organization, role, and responsibility
 - f. Initial risk plan
 - g. Initial communication plan
 - h. Anticipated hardware, materials, and supplies to be provided by the State
 - i. The Contractor's project organizational structure.
 - j. The Contractor's staffing table with names and titles of personnel assigned to the project.
 - 1) This must include all key staff
 - 2) The final, delivery project plan must be in agreement with staffing of accepted proposal.
 - a) Necessary substitutions due to change of employment status and other unforeseen circumstances may only be made with prior approval of the State.

B. Orientation Meeting

If requested by the State, within 10 calendar days from execution of the Contract, the Contractor must attend an orientation meeting to discuss the content and procedures of the Contract. The meeting must be held in Lansing, Michigan, at a date and time mutually acceptable to the State and the Contractor. The State shall bear no cost for the time and travel of the Contractor for attendance at the meeting.

C. Performance Review Meetings

The Contractor must attend weekly or bi-weekly meetings to review the Contractor's performance under the Contract. The meetings must be held in Lansing, Michigan, or by teleconference, as mutually agreed by the State and the Contractor. The State shall bear no cost for the time and travel of the Contractor for attendance at the meeting.

D. Project Control

1. The Contractor must carry out this project under the direction and control of MDE.
2. The Contractor must manage the project in accordance with the State Unified Information Technology Environment (SUITE) methodology, which includes standards for project management, systems engineering, and associated forms and templates, and which is available at <http://www.michigan.gov/suite>.
 - a. Contractor must use an automated tool for planning, monitoring, and tracking the Contract's progress and the level of effort of any Contractor personnel spent performing Services under the Contract. The tool must have the capability to produce:
 - 1) Staffing tables with names of personnel assigned to Contract tasks.
 - 2) Project plans showing tasks, subtasks, deliverables, and the resources required and allocated to each (including detailed plans for all Services to be performed within the next 60 calendar days, updated weekly or biweekly as directed by the State PM).



- 3) Updates must include actual time spent on each task and a revised estimate to complete. At the discretion of the State PM, and only if deliverable based (vs. time and material) percent completed may be used instead of actual time.
- 4) Graphs showing critical events, dependencies and decision points during the course of the Contract.
- b. Any tool(s) used by the Contractor for such purposes must produce information of a type and in a manner and format that will support reporting in compliance with the State standards.

E. Test Administration Schedules

- 1. Summative Assessment Schedule relative to 2014-15 and 2015-16 school years
 - a. Summative Assessments: Last week of March through the end of May
- 2. Interim Assessment Schedule relative to 2014-15 school year
 - a. Michigan Interim Field Test mid-October through late November*
 - b. Interim Pre-test: November to mid/late Dec (if requested).**
- 3. Interim Assessment Schedule relative to 2015-16 school year (if requested) may include the following;
 - a. Grade-level Assessments
 - 1) Pre-test: September through mid-October
 - 2) Post-test: Mid-April through May
 - b. Full-credit, Course-based Assessments
 - 1) Pre-test: September
 - 2) Post-test: May
 - c. Half-credit, Course-based Assessments
 - 1) Pre-test: September and February
 - 2) Post-test: January and May

1.042 Issue Management

An issue is an identified event that if not addressed, may affect schedule, scope, quality, or budget.

The State will escalate issues for resolution as follows:

- Level 1 — Business leads / Subject matter experts
- Level 2 — Project Managers / Project Leadership Team
- Level 3 — Executive Team

Once an issue has been identified by the Contractor, the Contractor must follow these steps:

- 1. Immediately communicate the issue in writing to the CCI, MDE Director, MDE Project Manager, the respective MDE Manager and other appropriate MDE staff.
- 2. The Contractor must log the issue into an issue tracking system which contains the following minimum elements:
 - a. Description of issue
 - b. Status
 - c. Date reported
 - d. Resolution deadline
 - e. Date resolved
 - f. Project impact (e.g., schedule, resources)
 - g. Priority
 - h. Assigned to
 - i. Related risk
 - j. Notes
- 3. Identify what needs to be done and resources needed to correct the issue.
- 4. Receive approval from the CCI for appropriate action.
- 5. Keep CCI and appropriate MDE staff informed on status of issue based on frequency established by the CCI.
- 6. At least monthly, provide a listing of all issues with their current status, deadlines to correct, and actual dates of completion that have occurred over the previous six months to the CCI.



1.043 Risk Management

A risk is an unknown circumstance or event that, if it occurs, may have a positive or negative impact on the project. If the unknown becomes known or the event occurs, a risk may escalate to become an issue.

Because the assessments within this Contract are large-scale and high-stakes, quality and deadlines are of utmost importance. Therefore, the risk assessment shall be reviewed, at minimum, during the Kick-Off meeting for each assessment cycle and reviewed each month thereafter. It shall include, but is not limited to, the following:

- Establishing a risk management plan including the identification and recording of risk items, prioritization of risks, definition of mitigation strategies, monitoring of risk items, and periodic risk assessment reviews with the State.
- Reviewing the project plan and timelines to ensure resources are, or will be, available.
- Identify deadlines for items and assessment material designs to allow sufficient time to produce.
- Qualitative review and approval of assessment materials by MDE staff designated by the CCI; at a minimum of the beginning, middle, and end of production.
- Approval for actual quantities to produce shall be given in writing by the CCI, or designee.
- Accurate tracking of delivery, retrieval, logging, scanning, and storage of all assessment materials.
- Preventative maintenance and accurate calibration of scanning equipment.
- Identify data management and backup procedures.
- Perform school readiness on the equipment to be used for online assessment.

The Contractor must submit an initial risk management plan to the State for approval within 20 business days from start of the Contract. The risk management plan must be in accordance with the State's PMM methodology. The Contractor must communicate the status of risks to the State's Project Manager weekly, as required or agreed, and the status must contain the following minimum elements:

- Risk
- Status
- Date documented
- Controlled (indicates item managed to minimize risk)
- Impact
- Description
- Trigger event
- Mitigation
- Likely activities impacted
- Owner

The Contractor is responsible for identification of risks throughout the life cycle of the project. Mitigating and/or eliminating risks will be the responsibility of the assigned party.

1.044 Change Management

Change management is defined as the process to communicate, assess, monitor, and control changes to system resources and processes. The State employs change management at the project level and in its administration of the Contracts.

The Contractor must employ change management procedures to handle requests that impact schedule or resources and such things as "out-of-scope" requests or enhancements. Change requests must be submitted to the Project Manager and must be approved by the State in writing before they are implemented. DTMB Procurement will issue an addendum to the Contract, via a Contract Change Notice, if the Change request is approved.



1.045 Reports

A weekly project status report is required from the Contractor to the State Project Manager on the topics of status, schedule, risks, issues, impediments, deliverables, change control, and accomplishments, beginning upon execution of the Contract for the duration of the Contract unless otherwise agreed to.

Reporting topics must include the following items:

- Project Status
- Planned % Complete
- Actual % complete
- Planned Start Date
- Planned Finish Date
- Planned Hours
- Projected Start Date
- Projected Finish Date
- Actual Start
- Actual Finish
- Actual Hours
- On Target for Completion (Y/N)
- Issues
- Risks (and, if relevant, mitigation actions)
- Action Items
- Pending Change Requests under the subheadings Corrective Actions and
- Team Changes

1.050 Acceptance

1.051 Criteria

The following criteria will be used by the State to determine Acceptance of the Services and/or Deliverables provided under this SOW:

- A. Materials produced match the design provided and approved in writing by the CCI.
- B. The quantity of materials produced equals what was approved in writing by the CCI.
- C. The quality of the materials meets the specifications of the Contract.
- D. Standard Setting meetings conducted as specified within the Contract.
- E. All materials produced have been accurately tracked and current location is on record. Any materials considered lost, misplaced, or in a condition of not readable are not acceptable.
- F. All reports and data files meet the specification of the Contract.
- G. All designated reports and data files are delivered to the State with acceptance in writing from the CCI.
- H. All answer documents are stored in a secure and environmentally controlled location during the length of the Contract.
- I. All materials to be destroyed are done so in confidential manner.

1.052 Final Acceptance

Each assessment cycle is viewed as a project and is considered complete after:

- A. The CCI has approved the final reports.
- B. The final reports have been delivered to the appropriate location.
- C. All final data files related to the cycle have been transferred to the State and approved by the CCI.

1.060 Proposal Pricing

1.061 Proposal Pricing

For authorized Services and Price List, see **Attachment A**.



Contractor's out-of-pocket expenses are not separately reimbursable by the State unless, on a case-by-case basis for unusual expenses, the State has agreed in advance and in writing to reimburse Contractor for the expense at the State's current travel reimbursement rates. See www.michigan.gov/dtmb for current rates.

1.062 Price Term

Prices quoted are firm for the entire length of the Contract.

1.063 Tax Excluded from Price

(a) Sales Tax: For purchases made directly by the State, the State is exempt from State and Local Sales Tax. Prices must not include the taxes. Exemption Certificates for State Sales Tax will be furnished upon request.

(b) Federal Excise Tax: The State may be exempt from Federal Excise Tax, or the taxes may be reimbursable, if articles purchased under any resulting Contract are used for the State's exclusive use. Certificates showing exclusive use for the purposes of substantiating a tax-free or tax-reimbursable sale will be sent upon request. If a sale is tax exempt or tax reimbursable under the Internal Revenue Code, prices must not include the Federal Excise Tax.

1.064 Reserved

1.070 Additional Requirements - Reserved



Article 2, Terms and Conditions

2.000 Contract Structure and Term

2.001 Contract Term

The Contract is for a period of two years beginning July 14, 2014 through July 13, 2016. All outstanding Purchase Orders must also expire upon the termination (cancellation for any of the reasons listed in **Section 2.150**) of the Contract, unless otherwise extended under the Contract. Absent an early termination for any reason, Purchase Orders issued but not expired, by the end of the Contract's stated term, will remain in effect for the balance of the fiscal year for which they were issued.

2.002 Options to Renew

The Contract may be renewed in writing by mutual agreement of the parties not less than 30 days before its expiration. The Contract may be renewed for up to two additional one year periods.

2.003 Legal Effect

Contractor must show acceptance of the Contract by signing two copies of the Contract and returning them to the Contract Administrator. The Contractor must not proceed with the performance of the work to be done under the Contract, including the purchase of necessary materials, until both parties have signed the Contract to show acceptance of its terms, and the Contractor receives a Contract release/purchase order that authorizes and defines specific performance requirements.

Except as otherwise agreed in writing by the parties, the State assumes no liability for costs incurred by Contractor or payment under the Contract, until Contractor is notified in writing that the Contract (or Change Order) has been approved by the State Administrative Board (if required), approved and signed by all the parties, and a Purchase Order against the Contract has been issued.

2.004 Attachments & Exhibits

All Attachments and Exhibits affixed to any and all Statement(s) of Work, or appended to or referencing the Contract, are incorporated in their entirety and form part of the Contract.

2.005 Ordering

The State will issue a written Purchase Order, Blanket Purchase Order, Direct Voucher or Procurement Card Order, which must be approved by the Contract Administrator or the Contract Administrator's designee, to order any Services/Deliverables under the Contract. All orders are subject to the terms and conditions of the Contract. No additional terms and conditions contained on either a Purchase Order or Blanket Purchase Order apply unless they are also specifically contained in that Purchase Order's or Blanket Purchase Order's accompanying Statement of Work. Exact quantities to be purchased are unknown; however, the Contractor must furnish all such materials and services as may be ordered during the Contract period. Quantities specified, if any, are estimates based on prior purchases, and the State is not obligated to purchase in these or any other quantities.

2.006 Order of Precedence

(a) The Contract, including any Statements of Work and Exhibits, to the extent not contrary to the Contract, each of which is incorporated for all purposes, constitutes the entire agreement between the parties with respect to the subject matter and supersedes all prior agreements, whether written or oral, with respect to the subject matter and as additional terms and conditions on the purchase order must apply as limited by **Section 2.005**.

(b) In the event of any inconsistency between the terms of the Contract and a Statement of Work, the terms of the Statement of Work will take precedence (as to that Statement of Work only); provided, however, that a Statement of Work may not modify or amend the terms of the Contract, which may be modified or amended only by a formal Contract amendment.



2.007 Headings

Captions and headings used in the Contract are for information and organization purposes. Captions and headings, including inaccurate references, do not, in any way, define or limit the requirements or terms and conditions of the Contract.

2.008 Form, Function & Utility

If the Contract is for use of more than one State agency and if the Deliverable/Service does not meet the form, function, and utility required by that State agency, that agency may, subject to State purchasing policies, procure the Deliverable/Service from another source.

2.009 Reformation and Severability

Each provision of the Contract is severable from all other provisions of the Contract and, if one (1) or more of the provisions of the Contract is declared invalid, the remaining provisions of the Contract remain in full force and effect.

2.010 Consents and Approvals

Except as expressly provided otherwise in the Contract, if either party requires the consent or approval of the other party for the taking of any action under the Contract, the consent or approval must be in writing and must not be unreasonably withheld or delayed.

2.011 No Waiver of Default

If a party fails to insist upon strict adherence to any term of the Contract then the party has not waived the right to later insist upon strict adherence to that term, or any other term, of the Contract.

2.012 Survival

Any provisions of the Contract that impose continuing obligations on the parties, including without limitation the parties' respective warranty, indemnity and confidentiality obligations, survive the expiration or termination of the Contract for any reason. Specific references to survival in the Contract are solely for identification purposes and not meant to limit or prevent the survival of any other section.

2.020 Contract Administration

2.021 Issuing Office

The Contract is issued by the Department of Technology Management and Budget, DTMB-Procurement and Michigan Department of Education (collectively, including all other relevant State of Michigan departments and agencies, the "State"). DTMB-Procurement is the sole point of contact in the State with regard to all procurement and contractual matters relating to the Contract. DTMB-Procurement **is the only State office authorized to change, modify, amend, alter or clarify the prices, specifications, terms and conditions of the Contract.** The Contractor Administrator within DTMB-Procurement for the Contract is:

Donald Mandernach, Buyer
DTMB-Procurement
Constitution Hall, 1st Floor
525 W. Allegan Street
PO Box 30026
Lansing, MI 48933-1502
Email Mandernachd@michigan.gov
Phone (517) 284-7019

2.022 Contract Compliance Inspector

After DTMB-Procurement receives the properly executed Contract, it is anticipated that the Chief Procurement Officer, DTMB-Procurement, in consultation with Michigan Department of Education will direct the person named below, or any other person so designated, to monitor and coordinate the activities for the Contract on a



day-to-day basis during its term. However, monitoring of the Contract implies **no authority to change, modify, clarify, amend, or otherwise alter the prices, terms, conditions and specifications of the Contract as that authority is retained by DTMB Procurement.** The CCI for the Contract is:

Andrew Middlestead, Director for Office of Standards & Assessment
Michigan Department of Education
P.O. Box 30008
Lansing, MI 48909
middlesteda@michigan.gov
Phone (517) 241-2694
Fax 517- 335-1186

2.023 Project Manager

The following individual will oversee the project:

David Judd, State Office Administrator 17
Bureau of Assessment & Accountability
Michigan Department of Education
P.O. Box 30008
Lansing, MI 48909
JuddD@michigan.gov
(517) 373-4311
Fax 517- 335-1186

2.024 Change Requests

The State reserves the right to request, from time to time, any changes to the requirements and specifications of the Contract and the work to be performed by the Contractor under the Contract. During the course of ordinary business, it may become necessary for the State to discontinue certain business practices or create Additional Services/Deliverables. At a minimum, to the extent applicable, the State would like the Contractor to provide a detailed outline of all work to be done, including tasks necessary to accomplish the services/deliverables, timeframes, listing of key personnel assigned, estimated hours for each individual per task, and a complete and detailed cost justification.

If the Contractor does not so notify the State, the Contractor has no right to claim thereafter that it is entitled to additional compensation for performing that service or providing that deliverable.

Change Requests:

- (a) By giving Contractor written notice within a reasonable time, the State must be entitled to accept a Contractor proposal for Change, to reject it, or to reach another agreement with Contractor. Should the parties agree on carrying out a Change, a written Contract Change Notice must be prepared and issued under the Contract, describing the Change and its effects on the Services and any affected components of the Contract (a "Contract Change Notice").
- (b) No proposed Change may be performed until the proposed Change has been specified in a duly executed Contract Change Notice issued by the DTMB-Procurement.
- (c) If the State requests or directs the Contractor to perform any activities that Contractor believes constitute a Change, the Contractor must notify the State that it believes the requested activities are a Change before beginning to work on the requested activities. If the Contractor fails to notify the State before beginning to work on the requested activities, then the Contractor waives any right to assert any claim for additional compensation or time for performing the requested activities. If the Contractor commences performing work outside the scope of the Contract and then ceases performing that work, the Contractor must, at the request of the State, retract any out-of-scope work that would adversely affect the Contract.

**2.025 Notices**

Any notice given to a party under the Contract must be deemed effective, if addressed to the State contact as noted in Section 2.021 and the Contractor's contact as noted on the cover page of the contract, upon: (i) delivery, if hand delivered; (ii) receipt of a confirmed transmission by facsimile if a copy of the notice is sent by another means specified in this Section; (iii) the third Business Day after being sent by U.S. mail, postage pre-paid, return receipt requested; or (iv) the next Business Day after being sent by a nationally recognized overnight express courier with a reliable tracking system.

Either party may change its address where notices are to be sent by giving notice according to this Section.

2.026 Binding Commitments

Representatives of Contractor must have the authority to make binding commitments on Contractor's behalf within the bounds set forth in the Contract. Contractor may change the representatives from time to time upon written notice.

2.027 Relationship of the Parties

The relationship between the State and Contractor is that of client and independent contractor. No agent, employee, or servant of Contractor or any of its Subcontractors is an employee, agent or servant of the State. Contractor is solely and entirely responsible for its acts and the acts of its agents, employees, servants and Subcontractors during the performance of the Contract.

2.028 Covenant of Good Faith

Each party must act reasonably and in good faith. Unless stated otherwise in the Contract, the parties must not unreasonably delay, condition, or withhold the giving of any consent, decision, or approval that is either requested or reasonably required of them in order for the other party to perform its responsibilities under the Contract.

2.029 Assignments

(a) Neither party may assign the Contract, or assign or delegate any of its duties or obligations under the Contract, to any other party (whether by operation of law or otherwise), without the prior written consent of the other party; provided, however, that the State may assign the Contract to any other State agency, department, division or department without the prior consent of Contractor and Contractor may assign the Contract to an affiliate so long as the affiliate is adequately capitalized and can provide adequate assurances that the affiliate can perform the requirements of the Contract. The State may withhold consent from proposed assignments, subcontracts, or novations when the transfer of responsibility would operate to decrease the State's likelihood of receiving performance on the Contract or the State's ability to recover damages.

(b) Contractor may not, without the prior written approval of the State, assign its right to receive payments due under the Contract. If the State permits an assignment, the Contractor is not relieved of its responsibility to perform any of its contractual duties, and the requirement under the Contract that all payments must be made to one (1) entity continues.

(c) If the Contractor intends to assign the Contract or any of the Contractor's rights or duties under the Contract, the Contractor must notify the State in writing at least 90 days before the assignment. The Contractor also must provide the State with adequate information about the assignee within a reasonable amount of time before the assignment for the State to determine whether to approve the assignment.

2.030 General Provisions**2.031 Reserved****2.032 Media Releases**

News releases (including promotional literature and commercial advertisements) pertaining to the RFP and Contract or project to which it relates must not be made without prior written State approval, and then only in accordance with the explicit written instructions from the State. No results of the activities associated with the



RFP and Contract are to be released without prior written approval of the State and then only to persons designated.

2.033 Contract Distribution

DTMB-Procurement retains the sole right of Contract distribution to all State agencies and local units of government unless other arrangements are authorized by DTMB-Procurement.

2.034 Permits

Contractor must obtain and pay any associated costs for all required governmental permits, licenses and approvals for the delivery, installation and performance of the Services.

2.035 Website Incorporation

The State is not bound by any content on the Contractor's website, even if the Contractor's documentation specifically referenced that content and attempts to incorporate it into any other communication, unless the State has actual knowledge of the content and has expressly agreed to be bound by it in a writing that has been manually signed by an authorized representative of the State.

2.036 Future Bidding Preclusion

Contractor acknowledges that, to the extent the Contract involves the creation, research, investigation or generation of a future RFP, it may be precluded from bidding on the subsequent RFP. The State reserves the right to disqualify any bidder if the State determines that the bidder has used its position (whether as an incumbent Contractor, or as a Contractor hired to assist with the RFP development, or as a Vendor offering free assistance) to gain a competitive advantage on the RFP

2.037 Freedom of Information

All information in any proposal submitted to the State by Contractor and the Contract is subject to the provisions of the Michigan Freedom of Information Act, 1976 PA 442, MCL 15.231, et seq (the "FOIA").

2.038 Disaster Recovery

Contractor and the State recognize that the State provides essential services in times of natural or man-made disasters. Therefore, except as so mandated by Federal disaster response requirements, Contractor personnel dedicated to providing Services/Deliverables under the Contract must provide the State with priority service for repair and work around in the event of a natural or man-made disaster.

2.040 Financial Provisions

2.041 Fixed Prices for Services/Deliverables

Each Statement of Work or Purchase Order issued under the Contract must specify (or indicate by reference to the appropriate Contract Exhibit) the firm, fixed prices for all Services/Deliverables, and the associated payment milestones and payment amounts. The State may make progress payments to the Contractor when requested as work progresses, but not more frequently than monthly, in amounts approved by the Contract Administrator, after negotiation. Contractor must show verification of measurable progress at the time of requesting progress payments.

2.042 Adjustments for Reductions in Scope of Services/Deliverables

If the scope of the Services/Deliverables under any Statement of Work issued under the Contract is subsequently reduced by the State, the parties must negotiate an equitable reduction in Contractor's charges under such Statement of Work commensurate with the reduction in scope.

2.043 Services/Deliverables Covered

For all Services/Deliverables to be provided by Contractor (and its Subcontractors, if any) under the Contract, the State must not be obligated to pay any amounts in addition to the charges specified in the Contract.



2.044 Invoicing and Payment – In General

(a) Each Statement of Work issued under the Contract must list (or indicate by reference to the appropriate Contract Exhibit) the prices for all Services/Deliverables, equipment and commodities to be provided, and the associated payment milestones and payment amounts.

(b) Each Contractor invoice must show details as to charges by Service/Deliverable component and location at a level of detail reasonably necessary to satisfy the State's accounting and charge-back requirements. Invoices for Services performed on a time and materials basis must show, for each individual, the number of hours of Services performed during the billing period, the billable skill/labor category for such person and the applicable hourly billing rate. Prompt payment by the State is contingent on the Contractor's invoices showing the amount owed by the State minus any holdback amount to be retained by the State in accordance with **Section 1.064**.

(c) Correct invoices will be due and payable by the State, in accordance with the State's standard payment procedure as specified in 1984 PA 279, MCL 17.51 et seq., within 45 days after receipt, provided the State determines that the invoice was properly rendered.

All invoices should reflect actual work done. Specific details of invoices and payments will be agreed upon between the CCI and the Contractor.

The specific payment schedule for any Contract(s) entered into, as the State and the Contractor(s) must mutually agree upon. The schedule must show payment amount and must reflect actual work done by the payment dates, less any penalty cost charges accrued by those dates. As a general policy, statements must be forwarded to the designated representative by the 15th day of the following month.

The State may make progress payments to the Contractor when requested as work progresses, but not more frequently than monthly, in amounts approved by the CCI, after negotiation. Contractor must show verification of measurable progress at the time of requesting progress payments.

2.045 Pro-ration

To the extent there are any Services that are to be paid for on a monthly basis, the cost of such Services must be pro-rated for any partial month.

2.046 Antitrust Assignment

The Contractor assigns to the State any claim for overcharges resulting from antitrust violations to the extent that those violations concern materials or services supplied by third parties to the Contractor, toward fulfillment of the Contract.

2.047 Final Payment

The making of final payment by the State to Contractor does not constitute a waiver by either party of any rights or other claims as to the other party's continuing obligations under the Contract, nor will it constitute a waiver of any claims by one party against the other arising from unsettled claims or failure by a party to comply with the Contract, including claims for Services and Deliverables not reasonably known until after acceptance to be defective or substandard. Contractor's acceptance of final payment by the State under the Contract must constitute a waiver of all claims by Contractor against the State for payment under the Contract, other than those claims previously filed in writing on a timely basis and still unsettled.

2.048 Electronic Payment Requirement

Electronic transfer of funds is required for payments on State contracts. The Contractor must register with the State electronically at <http://www.cpexpress.state.mi.us>. As stated in 1984 PA 431, all contracts that the State enters into for the purchase of goods and services must provide that payment will be made by Electronic Fund Transfer (EFT).



2.050 Taxes

2.051 Employment Taxes

Contractors are expected to collect and pay all applicable federal, state, and local employment taxes.

2.052 Sales and Use Taxes

Contractors are required to be registered and to remit sales and use taxes on taxable sales of tangible personal property or services delivered into the State. Contractors that lack sufficient presence in Michigan to be required to register and pay tax must do so as a volunteer. This requirement extends to: (1) all members of any controlled group as defined in § 1563(a) of the Internal Revenue Code and applicable regulations of which the company is a member, and (2) all organizations under common control as defined in § 414(c) of the Internal Revenue Code and applicable regulations of which the company is a member that make sales at retail for delivery into the State are registered with the State for the collection and remittance of sales and use taxes. In applying treasury regulations defining “two (2) or more trades or businesses under common control” the term “organization” means sole proprietorship, a partnership (as defined in § 701(a)(2) of the Internal Revenue Code), a trust, an estate, a corporation, or a limited liability company.

2.060 Contract Management

2.061 Contractor Personnel Qualifications

All persons assigned by Contractor to the performance of Services under the Contract must be employees of Contractor or its majority-owned (directly or indirectly, at any tier) subsidiaries (or a State-approved Subcontractor) and must be fully qualified to perform the work assigned to them. Contractor must include a similar provision in any subcontract entered into with a Subcontractor. For the purposes of the Contract, independent contractors engaged by Contractor solely in a staff augmentation role must be treated by the State as if they were employees of Contractor for the Contract only; however, the State understands that the relationship between Contractor and Subcontractor is an independent contractor relationship.

2.062 Contractor Key Personnel

- (a) The Contractor must provide the CCI with the names of the Key Personnel.
- (b) Key Personnel must be dedicated as defined in the Statement of Work to the Project for its duration in the applicable Statement of Work with respect to other individuals designated as Key Personnel for that Statement of Work.
- (c) The State reserves the right to recommend and approve in writing the initial assignment, as well as any proposed reassignment or replacement, of any Key Personnel. Before assigning an individual to any Key Personnel position, Contractor must notify the State of the proposed assignment, must introduce the individual to the appropriate State representatives, and must provide the State with a resume and any other information about the individual reasonably requested by the State. The State reserves the right to interview the individual before granting written approval. If the State disapproves an individual, the State will provide a written explanation including reasonable detail outlining the reasons for the rejection.
- (d) Contractor must not remove any Key Personnel from their assigned roles on the Contract without the prior written consent of the State. The Contractor’s removal of Key Personnel without the prior written consent of the State is an unauthorized removal (“Unauthorized Removal”). Unauthorized Removals does not include replacing Key Personnel for reasons beyond the reasonable control of Contractor, including illness, disability, leave of absence, personal emergency circumstances, resignation or for cause termination of the Key Personnel’s employment. Unauthorized Removals does not include replacing Key Personnel because of promotions or other job movements allowed by Contractor personnel

policies or Collective Bargaining Agreement(s) as long as the State receives prior written notice before shadowing occurs and Contractor provides 30 days of shadowing unless parties agree to a different time period. The Contractor with the State must review any Key Personnel replacements and appropriate transition



planning must be established. Any Unauthorized Removal may be considered by the State to be a material breach of the Contract.

(e) The Contractor must notify the CCI and the Contract Administrator at least 10 business days before redeploying non-Key Personnel, who are dedicated to primarily to the Project, to other projects. If the State does not object to the redeployment by its scheduled date, the Contractor may then redeploy the non-Key Personnel.

(f) Liquidated damages may be assessed by the State for Unauthorized Removal as provided in Section 2.243, Liquidated Damages.

2.063 Re-assignment of Personnel at the State's Request

The State reserves the right to require the removal from the Project of Contractor personnel found, in the judgment of the State, to be unacceptable. The State's request must be written with reasonable detail outlining the reasons for the removal request. Additionally, the State's request must be based on legitimate, good-faith reasons. Replacement personnel for the removed person must be fully qualified for the position. If the State exercises this right, and the Contractor cannot immediately replace the removed personnel, the State agrees to an equitable adjustment in schedule or other terms that may be affected by the State's required removal. If any incident with removed personnel results in delay not reasonably anticipatable under the circumstances and which is attributable to the State, the applicable SLAs for the affected Service will not be counted for a time as agreed to by the parties.

2.064 Contractor Personnel Location

All staff assigned by Contractor to work on the Contract must perform their duties either primarily at Contractor's offices and facilities or at State facilities. Without limiting the generality of the foregoing, Key Personnel must, at a minimum, spend at least the amount of time on-site at State facilities as indicated in the applicable Statement of Work. Subject to availability, selected Contractor personnel may be assigned office space to be shared with State personnel.

2.065 Contractor Identification

Contractor employees must be clearly identifiable while on State property by wearing a State-issued badge, as required. Contractor employees are required to clearly identify themselves and the company they work for whenever making contact with State personnel by telephone or other means.

2.066 Cooperation with Third Parties

Contractor must cause its personnel and the personnel of any Subcontractors to cooperate with the State and its agents and other contractors including the State's Quality Assurance personnel. The Contractor must provide to the State's agents and other contractors reasonable access to Contractor's Project personnel, systems and facilities to the extent the access relates to activities specifically associated with the Contract and will not interfere or jeopardize the safety or operation of the systems or facilities.

2.067 Contractor Return of State Equipment/Resources

The Contractor must return to the State any State-furnished equipment, facilities, and other resources when no longer required for the Contract in the same condition as when provided by the State, reasonable wear and tear excepted.

2.068 Contract Management Responsibilities

The Contractor must assume responsibility for all contractual activities, whether or not that Contractor performs them. Further, the State considers the Contractor to be the sole point of contact with regard to contractual matters, including payment of any and all charges resulting from the anticipated Contract. If any part of the work is to be subcontracted, the Contract must include a list of Subcontractors, including firm name and address, contact person and a complete description of work to be subcontracted. The State reserves the right to approve Subcontractors and to require the Contractor to replace Subcontractors found to be unacceptable.



The Contractor is totally responsible for adherence by the Subcontractor to all provisions of the Contract. Any change in Subcontractors must be approved by the State, in writing, prior to such change.

2.070 Subcontracting by Contractor

2.071 Contractor Full Responsibility

Contractor has full responsibility for the successful performance and completion of all of the Services and Deliverables. The State will consider Contractor to be the sole point of contact with regard to all contractual matters under the Contract, including payment of any and all charges for Services and Deliverables.

2.072 State Consent to Delegation

Contractor must not delegate any duties under the Contract to a Subcontractor unless the DTMB-Procurement has given written consent to such delegation. The State reserves the right of prior written approval of all Subcontractors and to require Contractor to replace any Subcontractors found, in the reasonable judgment of the State, to be unacceptable. Replacement Subcontractor(s) for the removed Subcontractor must be fully qualified for the position. If the State exercises this right, and the Contractor cannot immediately replace the removed Subcontractor, the State will agree to an equitable adjustment in schedule or other terms that may be affected by the State's required removal. If any such incident with a removed Subcontractor results in delay not reasonable anticipatable under the circumstances and which is attributable to the State, the applicable SLA for the affected Work will not be counted for a time agreed upon by the parties.

2.073 Subcontractor Bound to Contract

In any subcontracts entered into by Contractor for the performance of the Services, Contractor must require the Subcontractor, to the extent of the Services to be performed by the Subcontractor, to be bound to Contractor by the terms of the Contract and to assume toward Contractor all of the obligations and responsibilities that Contractor, by the Contract, assumes toward the State. The State reserves the right to receive copies of and review all subcontracts, although Contractor may delete or mask any proprietary information, including pricing, contained in such contracts before providing them to the State. The management of any Subcontractor is the responsibility of Contractor, and Contractor must remain responsible for the performance of its Subcontractors to the same extent as if Contractor had not subcontracted such performance. Contractor must make all payments to Subcontractors or suppliers of Contractor. Except as otherwise agreed in writing by the State and Contractor, the State will not be obligated to direct payments for the Services other than to Contractor. The State's written approval of any Subcontractor engaged by Contractor to perform any obligation under the Contract will not relieve Contractor of any obligations or performance required under the Contract.

2.074 Flow Down

Except where specifically approved in writing by the State on a case-by-case basis, Contractor must flow down the obligations in **Sections 2.031, 2.060, 2.100, 2.110, 2.120, 2.130, 2.200** in all of its agreements with any Subcontractors.

2.075 Competitive Selection

The Contractor must select Subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the Contract.

2.080 State Responsibilities

2.081 Equipment

The State must provide only the equipment and resources identified in the Statements of Work and other Contract Exhibits.

2.082 Facilities

The State must designate space as long as it is available and as provided in the Statement of Work, to house the Contractor's personnel whom the parties agree will perform the Services/Deliverables at State facilities (collectively, the "State Facilities"). The Contractor must have reasonable access to, and, unless agreed



otherwise by the parties in writing, must observe and comply with all rules and regulations relating to each of the State Facilities (including hours of operation) used by the Contractor in the course of providing the Services. Contractor must not, without the prior written consent of the State, use any State Facilities or access any State information systems provided for the Contractor's use, or to which the Contractor otherwise gains access in the course of performing the Services, for any purpose other than providing the Services to the State.

2.090 Security

2.091 Background Checks

On a case-by-case basis, the State may investigate the Contractor's personnel before they may have access to State facilities and systems. The scope of the background check is at the discretion of the State and the results will be used to determine Contractor personnel eligibility for working within State facilities and systems. The investigations will include Michigan State Police Background checks (ICHAT) and may include the National Crime Information Center (NCIC) Finger Prints. Proposed Contractor personnel may be required to complete and submit an RI-8 Fingerprint Card for the NCIC Finger Print Check. Any request for background checks will be initiated by the State and will be reasonably related to the type of work requested.

2.100 Confidentiality

2.101 Confidentiality

Contractor and the State each acknowledge that the other possesses, and will continue to possess, confidential information that has been developed or received by it. As used in this Section, "Confidential Information" of Contractor must mean all non-public proprietary information of Contractor (other than Confidential Information of the State as defined below) which is marked confidential, restricted, proprietary, or with a similar designation. "Confidential Information" of the State must mean any information which is retained in confidence by the State (or otherwise required to be held in confidence by the State under applicable federal, state and local laws and regulations) or which, in the case of tangible materials provided to Contractor by the State under its performance under the Contract, is marked as confidential, proprietary, or with a similar designation by the State. "Confidential Information" excludes any information (including the Contract) that is publicly available under the Michigan FOIA.

2.102 Protection and Destruction of Confidential Information

The State and Contractor must each use at least the same degree of care to prevent disclosing to third parties the Confidential Information of the other as it employs to avoid unauthorized disclosure, publication, or dissemination of its own confidential information of like character, but in no event less than reasonable care. Neither Contractor nor the State will (i) make any use of the Confidential Information of the other except as contemplated by the Contract, (ii) acquire any right in or assert any lien against the Confidential Information of the other, or (iii) if requested to do so, refuse for any reason to promptly return the other party's Confidential Information to the other party. Each party must limit disclosure of the other party's Confidential Information to employees and Subcontractors who must have access to fulfill the purposes of the Contract. Disclosure to, and use by, a Subcontractor is permissible where (A) use of a Subcontractor is authorized under the Contract, (B) the disclosure is necessary or otherwise naturally occurs in connection with work that is within the Subcontractor's scope of responsibility, and (C) Contractor obligates the Subcontractor in a written Contract to maintain the State's Confidential Information in confidence. At the State's request, any employee of Contractor and of any Subcontractor having access or continued access to the State's Confidential Information may be required to execute an acknowledgment that the employee has been advised of Contractor's and the Subcontractor's obligations under this Section and of the employee's obligation to Contractor or Subcontractor, as the case may be, to protect the Confidential Information from unauthorized use or disclosure.

Promptly upon termination or cancellation of the Contract for any reason, Contractor must certify to the State that Contractor has destroyed all State Confidential Information.

2.103 Reserved

2.104 Exclusions



Notwithstanding the foregoing, the provisions of **Section 2.100** will not apply to any particular information which the State or Contractor can demonstrate (i) was, at the time of disclosure to it, in the public domain; (ii) after disclosure to it, is published or otherwise becomes part of the public domain through no fault of the receiving party; (iii) was in the possession of the receiving party at the time of disclosure to it without an obligation of confidentiality; (iv) was received after disclosure to it from a third party who had a lawful right to disclose the information to it without any obligation to restrict its further disclosure; or (v) was independently developed by the receiving party without reference to Confidential Information of the furnishing party. Further, the provisions of **Section 2.100** will not apply to any particular Confidential Information to the extent the receiving party is required by law to disclose the Confidential Information, provided that the receiving party (i) promptly provides the furnishing party with notice of the legal request, and (ii) assists the furnishing party in resisting or limiting the scope of the disclosure as reasonably requested by the furnishing party.

2.105 No Implied Rights

Nothing contained in this Section must be construed as obligating a party to disclose any particular Confidential Information to the other party, or as granting to or conferring on a party, expressly or impliedly, any right or license to the Confidential Information of the other party.

2.106 Security Breach Notification

If the Contractor breaches this Section, the Contractor must (i) promptly cure any deficiencies and (ii) comply with any applicable federal and state laws and regulations pertaining to unauthorized disclosures. Contractor and the State will cooperate to mitigate the effects of any breach, intrusion, or unauthorized use or disclosure. Contractor must report to the State, in writing, any use or disclosure of Confidential Information, whether suspected or actual, other than as provided for by the Contract within 72 hours after becoming aware of the use or disclosure or the shorter time period as is reasonable under the circumstances.

2.107 Respective Obligations

The parties' respective obligations under this Section must survive the termination or expiration of the Contract for any reason.

2.110 Records and Inspections

2.111 Inspection of Work Performed

The State's authorized representatives have the right to enter the Contractor's premises or any other places where work is being performed in relation to this Contract. The representatives may inspect, monitor, or evaluate the work being performed at any time. The Contractor must provide reasonable assistance for the State's representatives during inspections.

2.112 Retention of Records

(a) The Contractor must retain all financial and accounting records related to this Contract for a period of 7 years after the Contractor performs any work under this Contract (Audit Period).

(b) If an audit, litigation, or other action involving the Contractor's records is initiated before the end of the Audit Period, the Contractor must retain the records until all issues arising out of the audit, litigation, or other action are resolved or until the end of the Audit Period, whichever is later.

2.113 Examination of Records

(a) The State, upon 10 days' notice to the Contractor, may examine and copy any of the Contractor's records that relate to this Contract any time during the Audit Period. The State does not have the right to review any information deemed confidential by the Contractor if access would require the information to become publicly available. This requirement also applies to the records of any parent, affiliate, or subsidiary organization of the Contractor, or any Subcontractor that performs services in connection with this Contract.

(b) In addition to the rights conferred upon the State in paragraph (a) of this section and in accordance with MCL 18.1470, DTMB or its designee may audit the Contractor to verify compliance with the Contract. The financial and accounting records associated with the Contract shall be made available to DTMB or its designee



and the auditor general, upon request, during the term of the Contract and any extension of the Contract and for 3 years after the later of the expiration date or final payment under the Contract.

2.114 Audit Resolution

If necessary, the Contractor and the State will meet to review any audit report promptly after its issuance. The Contractor must respond to each report in writing within 30 days after receiving the report, unless the report specifies a shorter response time. The Contractor and the State must develop, agree upon, and monitor an action plan to promptly address and resolve any deficiencies, concerns, or recommendations in the report.

2.115 Errors

(a) If an audit reveals any financial errors in the records provided to the State, the amount in error must be reflected as a credit or debit on the next invoice and subsequent invoices until the amount is paid or refunded in full. However, a credit or debit may not be carried forward for more than four invoices or beyond the termination of the Contract. If a balance remains after four invoices, the remaining amount will be due as a payment or refund within 45 days of the last invoice on which the balance appeared or upon termination of the Contract, whichever is earlier.

(b) In addition to other available remedies, if the difference between the State's actual payment and the correct invoice amount, as determined by an audit, is greater than 10%, the Contractor must pay all reasonable audit costs.

2.120 Warranties

2.121 Warranties and Representations

The Contractor represents and warrants:

- (a) It is capable in all respects of fulfilling and must fulfill all of its obligations under the Contract. The performance of all obligations under the Contract must be provided in a timely, professional, and workman-like manner and must meet the performance and operational standards required under the Contract.
- (b) The Contract Appendices, Attachments and Exhibits identify the equipment and software and services necessary for the Deliverable(s) to perform and Services to operate in compliance with the Contract's requirements and other standards of performance.
- (c) It is the lawful owner or licensee of any Deliverable licensed or sold to the State by Contractor or developed by Contractor under the Contract, and Contractor has all of the rights necessary to convey to the State the ownership rights or licensed use, as applicable, of any and all Deliverables. None of the Deliverables provided by Contractor to the State under the Contract, nor their use by the State, will infringe the patent, copyright, trade secret, or other proprietary rights of any third party.
- (d) If, under the Contract, Contractor procures any equipment, software or other Deliverable for the State (including equipment, software and other Deliverables manufactured, re-marketed or otherwise sold by Contractor under Contractor's name), then in addition to Contractor's other responsibilities with respect to the items in the Contract, Contractor must assign or otherwise transfer to the State or its designees, or afford the State the benefits of, any manufacturer's warranty for the Deliverable.
- (e) The Contract signatory has the power and authority, including any necessary corporate authorizations, necessary to enter into the Contract, on behalf of Contractor.
- (f) It is qualified and registered to transact business in all locations where required.
- (g) Neither the Contractor nor any affiliates, nor any employee of either, has, must have, or must acquire, any contractual, financial, business, or other interest, direct or indirect, that would conflict in any manner or degree with Contractor's performance of its duties and responsibilities to the State under the Contract or otherwise create an appearance of impropriety with respect to the award or performance of this Agreement.



Contractor must notify the State about the nature of the conflict or appearance of impropriety within two days of learning about it.

(h) If any of the certifications, representations, or disclosures made in the Contractor's original bid response change after the Contract start date, the Contractor must report those changes immediately to DTMB-Procurement.

2.122 Warranty of Merchantability

Goods provided by Contractor under this agreement must be merchantable. All goods provided under the Contract must be of good quality within the description given by the State, must be fit for their ordinary purpose, must be adequately contained and packaged within the description given by the State, must conform to the agreed upon specifications, and must conform to the affirmations of fact made by the Contractor or on the container or label.

2.123 Warranty of Fitness for a Particular Purpose

When the Contractor has reason to know or knows any particular purpose for which the goods are required, and the State is relying on the Contractor's skill or judgment to select or furnish suitable goods, there is a warranty that the goods are fit for such purpose.

2.124 Warranty of Title

Contractor must, in providing goods to the State, convey good title in those goods, whose transfer is right and lawful. All goods provided by Contractor must be delivered free from any security interest, lien, or encumbrance of which the State, at the time of contracting, has no knowledge. Goods provided by Contractor, under the Contract, must be delivered free of any rightful claim of any third person by of infringement or the like.

2.125 Reserved

2.126 Reserved

2.127 Reserved

2.128 Consequences For Breach

In addition to any remedies available in law, if the Contractor breaches any of the warranties contained in this section, the breach may be considered as a default in the performance of a material obligation of the Contract.

2.130 Insurance

2.131 Liability Insurance

For the purpose of this Section, "State" includes its departments, divisions, agencies, offices, commissions, officers, employees, and agents.

(a) The Contractor must provide proof that it has obtained the minimum levels of insurance coverage indicated or required by law, whichever is greater. The insurance must protect the State from claims that may arise out of, or result from, or are alleged to arise out of, or result from, the Contractor's or a Subcontractor's performance, including any person directly or indirectly employed by the Contractor or a Subcontractor, or any person for whose acts the Contractor or a Subcontractor may be liable.

(b) The Contractor waives all rights against the State for the recovery of damages that are covered by the insurance policies the Contractor is required to maintain under this Section. The Contractor's failure to obtain and maintain the required insurance will not limit this waiver.

(c) All insurance coverage provided relative to this Contract is primary and non-contributing to any comparable liability insurance (including self-insurance) carried by the State.

(d) The State, in its sole discretion, may approve the use of a fully-funded self-insurance program in place of any specified insurance identified in this Section.

(e) Unless the State approves otherwise, any insurer must have an A.M. Best rating of "A" or better and a financial size of VII or better, or if those ratings are not available, a comparable rating from an insurance rating



agency approved by the State. All policies of insurance must be issued by companies that have been approved to do business in the State.

(f) Where specific coverage limits are listed in this Section, they represent the minimum acceptable limits. If the Contractor's policy contains higher limits, the State is entitled to coverage to the extent of the higher limits.

(g) The Contractor must maintain all required insurance coverage throughout the term of this Contract and any extensions. However, in the case of claims-made Commercial General Liability policies, the Contractor must secure tail coverage for at least three years following the termination of this Contract.

(h) The Contractor must provide, within five business days, written notice to the Director of DTMB-Procurement if any policy required under this section is cancelled. The notice must include the applicable Contract or Purchase Order number.

(i) The minimum limits of coverage specified are not intended, and may not be construed, to limit any liability or indemnity of the Contractor to any indemnified party or other persons.

(j) The Contractor is responsible for the payment of all deductibles.

(k) If the Contractor fails to pay any premium for a required insurance policy, or if any insurer cancels or significantly reduces any required insurance without the State's approval, the State may, after giving the Contractor at least 30 days' notice, pay the premium or procure similar insurance coverage from another company or companies. The State may deduct any part of the cost from any payment due the Contractor, or require the Contractor to pay that cost upon demand.

(l) In the event the State approves the representation of the State by the insurer's attorney, the attorney may be required to be designated as a Special Assistant Attorney General by the Michigan Attorney General.

(m) The Contractor is required to pay for and provide the type and amount of insurance checked below:

(i) Commercial General Liability

Minimal Limits:

- \$2,000,000 General Aggregate Limit other than Products/Completed Operations;
- \$2,000,000 Products/Completed Operations Aggregate Limit;
- \$1,000,000 Personal & Advertising Injury Limit; and
- \$1,000,000 Each Occurrence Limit.

Deductible maximum:

\$50,000 Each Occurrence

Additional Requirements:

The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents as additional insureds on the Commercial General Liability certificate. The Contractor also agrees to provide evidence that the insurance policy contains a waiver of subrogation by the insurance company.

(ii) Umbrella or Excess Liability

Minimal Limits:

\$10,000,000.00 General Aggregate

Additional Requirements:

Umbrella or Excess Liability limits must at least apply to the insurance required in (i), General Commercial Liability. The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents as additional insureds on the certificate. The Contractor also agrees to provide evidence that insurance policies contain a waiver of subrogation by the insurance company.

(iii) Motor Vehicle

Minimal Limits:



If a motor vehicle is used in relation to the Contractor's performance, the Contractor must have vehicle liability insurance on the motor vehicle for bodily injury and property damage as required by law.

(iv) Hired and Non-Owned Motor Vehicle

Minimal Limits:

\$1,000,000 Per Accident

Additional Requirements:

The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents as additional insureds on the vehicle liability certificate. The Contractor also agrees to provide evidence that insurance policies contain a waiver of subrogation by the insurance company.

(v) Workers' Compensation Insurance

Minimal Limits:

The Contractor must provide Workers' Compensation coverage according to applicable laws governing work activities in the state of the Contractor's domicile. If the applicable coverage is provided by a self-insurer, the Contractor must provide proof of an approved self-insured authority by the jurisdiction of domicile.

For employees working outside of the state of the Contractor's domicile, the Contractor must provide certificates of insurance proving mandated coverage levels for the jurisdictions where the employees' activities occur.

Additional Requirements:

The Contractor must provide the applicable certificates of insurance and a list of states where the coverage is applicable. Contractor must provide proof that the Workers' Compensation insurance policies contain a waiver of subrogation by the insurance company, except where such a provision is prohibited or limited by the laws of the jurisdiction in which the work is to be performed.

(vi) Employers Liability

Minimal Limits:

\$100,000 Each Incident;
 \$100,000 Each Employee by Disease
 \$500,000 Aggregate Disease

Additional Requirements:

The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents as additional insureds on the certificate.

(vii) Employee Fidelity (Crime)

Minimal Limits:

\$1,000,000 Employee Theft Per Loss

Deductible Maximum:

\$50,000 Per Loss

Additional Requirements:

Insurance must cover Forgery and Alteration, Theft of Money and Securities, Robbery and Safe Burglary, Computer Fraud, Funds Transfer Fraud, Money Order and Counterfeit Currency.

The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents as Loss Payees on the certificate.

(viii) Professional Liability (Errors and Omissions)



Minimal Limits:

\$3,000,000 Each Occurrence
 \$3,000,000 Annual Aggregate

Deductible Maximum:

\$50,000 Per Loss

(ix) Medical Malpractice

Minimal Limits:

(Small Provider)\$200,000 Each Occurrence
 \$600,000 Annual Aggregate

(Large Provider)\$1,000,000 Each Occurrence
 \$3,000,000 Annual Aggregate

Deductible Maximum:

\$5,000 Each Occurrence

(x) Cyber Liability

Minimal Limits:

\$1,000,000 Each Occurrence
 \$1,000,000 Annual Aggregate

Additional Requirements:

Insurance should cover (a) unauthorized acquisition, access, use, physical taking, identity theft, mysterious disappearance, release, distribution or disclosures of personal and corporate information; (b) Transmitting or receiving malicious code via the insured's computer system; (c) Denial of service attacks or the inability to access websites or computer systems.

The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents as additional insureds on the certificate.

(xi) Property Insurance

Property Insurance covering any loss or damage to the State-owned office space used by Contractor for any reason under this Contract, and the State-owned equipment, software and other contents of the office space, including without limitation, those contents used by Contractor to provide the Services to the State, up to its replacement value, where the office space and its contents are under the care, custody and control of Contractor. The State must be endorsed on the policy as a loss payee as its interests appear.

2.132 Subcontractor Insurance Coverage

Except where the State has approved a subcontract with other insurance provisions, the Contractor must require any Subcontractor to purchase and maintain the insurance coverage required in Section 2.13.1, Liability Insurance. Alternatively, the Contractor may include a Subcontractor under the Contractor's insurance on the coverage required in that Section. The failure of a Subcontractor to comply with insurance requirements does not limit the Contractor's liability or responsibility.

2.133 Certificates of Insurance



Before the Contract is signed, and not less than 20 days before the insurance expiration date every year thereafter, the Contractor must provide evidence that the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents are listed as additional insureds as required. The Contractor must provide DTMB-Procurement with all applicable certificates of insurance verifying insurance coverage or providing, if approved, satisfactory evidence of self-insurance as required in Section 2.13.1, Liability Insurance. Each certificate must be on the standard "Accord" form or equivalent and **MUST IDENTIFY THE APPLICABLE CONTRACT OR PURCHASE ORDER NUMBER.**

2.140 Indemnification

2.141 General Indemnification

The Contractor must indemnify, defend and hold harmless the State from liability, including all claims and losses, and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement,

judgments, interest and penalties), accruing or resulting to any person, firm or corporation that may be injured or damaged by the Contractor in the performance of the Contract and that are attributable to the negligence or tortious acts of the Contractor or any of its Subcontractors, or by anyone else for whose acts any of them may be liable.

2.142 Code Indemnification

The Contractor must indemnify, defend and hold harmless the State from any claim, loss, or expense arising from Contractor's breach of the No Surreptitious Code Warranty.

2.143 Employee Indemnification

In any claims against the State of Michigan, its departments, divisions, agencies, sections, commissions, officers, employees and agents, by any employee of the Contractor or any of its Subcontractors, the indemnification obligation under the Contract must not be limited in any way by the amount or type of damages, compensation or benefits payable by or for the Contractor or any of its Subcontractors under worker's disability compensation acts, disability benefit acts or other employee benefit acts. This indemnification clause is intended to be comprehensive. Any overlap in provisions, or the fact that greater specificity is provided as to some categories of risk, is not intended to limit the scope of indemnification under any other provisions.

2.144 Patent/Copyright Infringement Indemnification

The Contractor must indemnify, defend and hold harmless the State from and against all losses, liabilities, damages (including taxes), and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties) incurred in connection with any action or proceeding threatened or brought against the State to the extent that the action or proceeding is based on a claim that any piece of equipment, software, commodity or service supplied by the Contractor or its Subcontractors, or the operation of the equipment, software, commodity or service, or the use or reproduction of any documentation provided with the equipment, software, commodity or service infringes any United States patent, copyright, trademark or trade secret of any person or entity, which is enforceable under the laws of the United States.

In addition, should the equipment, software, commodity, or service, or its operation, become or in the State's or Contractor's opinion be likely to become the subject of a claim of infringement, the Contractor must at the Contractor's sole expense (i) procure for the State the right to continue using the equipment, software, commodity or service or, if the option is not reasonably available to the Contractor, (ii) replace or modify to the State's satisfaction the same with equipment, software, commodity or service of equivalent function and performance so that it becomes non-infringing, or, if the option is not reasonably available to Contractor, (iii) accept its return by the State with appropriate credits to the State against the Contractor's charges and reimburse the State for any losses or costs incurred as a consequence of the State ceasing its use and returning it.



Notwithstanding the foregoing, the Contractor has no obligation to indemnify or defend the State for, or to pay any costs, damages or attorneys' fees related to, any claim based upon (i) equipment developed based on written specifications of the State; (ii) use of the equipment in a configuration other than implemented or approved in writing by the Contractor, including, but not limited to, any modification of the equipment by the State; or (iii) the combination, operation, or use of the equipment with equipment or software not supplied by the Contractor under the Contract.



2.145 Continuation of Indemnification Obligations

The Contractor's duty to indemnify under this Section continues in full force and effect, notwithstanding the expiration or early cancellation of the Contract, with respect to any claims based on facts or conditions that occurred before expiration or cancellation.

2.146 Indemnification Procedures

The procedures set forth below must apply to all indemnity obligations under the Contract.

(a) After the State receives notice of the action or proceeding involving a claim for which it will seek indemnification, the State must promptly notify Contractor of the claim in writing and take or assist Contractor in taking, as the case may be, any reasonable action to avoid the imposition of a default judgment against Contractor. No failure to notify the Contractor relieves the Contractor of its indemnification obligations except to the extent that the Contractor can prove damages attributable to the failure. Within 10 days following receipt of written notice from the State relating to any claim, the Contractor must notify the State in writing whether Contractor agrees to assume control of the defense and settlement of that claim (a "Notice of Election"). After notifying Contractor of a claim and before the State receiving Contractor's Notice of Election, the State is entitled to defend against the claim, at the Contractor's expense, and the Contractor will be responsible for any reasonable costs incurred by the State in defending against the claim during that period.

(b) If Contractor delivers a Notice of Election relating to any claim: (i) the State is entitled to participate in the defense of the claim and to employ counsel at its own expense to assist in the handling of the claim and to monitor and advise the State about the status and progress of the defense; (ii) the Contractor must, at the request of the State, demonstrate to the reasonable satisfaction of the State, the Contractor's financial ability to carry out its defense and indemnity obligations under the Contract; (iii) the Contractor must periodically advise the State about the status and progress of the defense and must obtain the prior written approval of the State before entering into any settlement of the claim or ceasing to defend against the claim and (iv) to the extent that any principles of Michigan governmental or public law may be involved or challenged, the State has the right, at its own expense, to control the defense of that portion of the claim involving the principles of Michigan governmental or public law. But the State may retain control of the defense and settlement of a claim by notifying the Contractor in writing within 10 days after the State's receipt of Contractor's information requested by the State under clause (ii) of this paragraph if the State determines that the Contractor has failed to demonstrate to the reasonable satisfaction of the State the Contractor's financial ability to carry out its defense and indemnity obligations under this Section. Any litigation activity on behalf of the State, or any of its subdivisions under this Section, must be coordinated with the Department of Attorney General. In the event the insurer's attorney represents the State under this Section, the insurer's attorney may be required to be designated as a Special Assistant Attorney General by the Attorney General of the State of Michigan.

(c) If Contractor does not deliver a Notice of Election relating to any claim of which it is notified by the State as provided above, the State may defend the claim in the manner as it may deem appropriate, at the cost and expense of Contractor. If it is determined that the claim was one against which Contractor was required to indemnify the State, upon request of the State, Contractor must promptly reimburse the State for all the reasonable costs and expenses, including attorney fees.

2.150 Termination/Cancellation

2.151 Notice and Right to Cure

If the Contractor breaches the Contract, and the State, in its sole discretion, determines that the breach is curable, then the State must provide the Contractor with written notice of the breach and a time period (not less than 30 days) to cure the Breach. The notice of breach and opportunity to cure is inapplicable for successive or repeated breaches or if the State determines in its sole discretion that the breach poses a serious and imminent threat to the health or safety of any person or the imminent loss, damage, or destruction of any real or tangible personal property.



2.152 Termination for Cause

(a) The State may terminate the Contract, for cause, by notifying the Contractor in writing, if the Contractor (i) breaches any of its material duties or obligations under the Contract (including a Chronic Failure to meet any particular SLA), or (ii) fails to cure a breach within the time period specified in the written notice of breach provided by the State

(b) If the Contract is terminated for cause, the Contractor must pay all costs incurred by the State in terminating the Contract, including but not limited to, State administrative costs, reasonable attorneys' fees and court costs, and any reasonable additional costs the State may incur to procure the Services/Deliverables required by the Contract from other sources. Re-procurement costs are not consequential, indirect or incidental damages, and cannot be excluded by any other terms otherwise included in the Contract, provided the costs are not in excess of 50% more than the prices for the Service/Deliverables provided under the Contract.

(c) If the State chooses to partially terminate the Contract for cause, charges payable under the Contract will be equitably adjusted to reflect those Services/Deliverables that are terminated and the State must pay for all Services/Deliverables for which Final Acceptance has been granted provided up to the termination date. Services and related provisions of the Contract that are terminated for cause must cease on the effective date of the termination.

(d) If the State terminates the Contract for cause under this Section, and it is determined, for any reason, that Contractor was not in breach of contract under the provisions of this section, that termination for cause must be deemed to have been a termination for convenience, effective as of the same date, and the rights and obligations of the parties must be limited to that otherwise provided in the Contract for a termination for convenience.

2.153 Termination for Convenience

The State may terminate the Contract for its convenience, in whole or part, if the State determines that a termination is in the State's best interest. Reasons for the termination must be left to the sole discretion of the State and may include, but not necessarily be limited to (a) the State no longer needs the Services or products specified in the Contract, (b) relocation of office, program changes, changes in laws, rules, or regulations make implementation of the Services no longer practical or feasible, (c) unacceptable prices for Additional Services or New Work requested by the State, or (d)

falsification or misrepresentation, by inclusion or non-inclusion, of information material to a response to any RFP issued by the State. The State may terminate the Contract for its convenience, in whole or in part, by giving Contractor written notice at least 30 days before the date of termination. If the State chooses to terminate the Contract in part, the charges payable under the Contract must be equitably adjusted to reflect those Services/Deliverables that are terminated. Services and related provisions of the Contract that are terminated for cause must cease on the effective date of the termination.

2.154 Termination for Non-Appropriation

(a) Contractor acknowledges that, if the Contract extends for several fiscal years, continuation of the Contract is subject to appropriation or availability of funds for the Contract. If funds to enable the State to effect continued payment under the Contract are not appropriated or otherwise made available, the State must terminate the Contract and all affected Statements of Work, in whole or in part, at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to Contractor. The State must give Contractor at least 30 days advance written notice of termination for non-appropriation or unavailability (or the time as is available if the State receives notice of the final decision less than 30 days before the funding cutoff).

(b) If funding for the Contract is reduced by law, or funds to pay Contractor for the agreed-to level of the Services or production of Deliverables to be provided by Contractor are not appropriated or otherwise unavailable, the State may, upon 30 days' notice to Contractor, reduce the level of the Services or the change



the production of Deliverables in the manner and for the periods of time as the State may elect. The charges payable under the Contract will be equitably adjusted to reflect any equipment, services or commodities not provided by reason of the reduction.

(c) If the State terminates the Contract, eliminates certain Deliverables, or reduces the level of Services to be provided by Contractor under this Section, the State must pay Contractor for all Work-in-Process performed through the effective date of the termination or reduction in level, as the case may be and as determined by the State, to the extent funds are available.

2.155 Termination for Criminal Conviction

The State may terminate the Contract immediately and without further liability or penalty in the event Contractor, an officer of Contractor, or an owner of a 25% or greater share of Contractor is convicted of a criminal offense related to a State, public or private Contract or subcontract.

2.156 Termination for Approvals Rescinded

The State may terminate the Contract if any final administrative or judicial decision or adjudication disapproves a previously approved request for purchase of personal services under Constitution 1963, Article 11, § 5, and Civil Service Rule 7-1. In that case, the State must pay the Contractor for only the work completed to that point under the Contract. Termination may be in whole or in part and may be immediate as of the date of the written notice to Contractor or may be effective as of the date stated in the written notice.

2.157 Rights and Obligations upon Termination

(a) If the State terminates the Contract for any reason, the Contractor must (a) stop all work as specified in the notice of termination, (b) take any action that may be necessary, or that the State may direct, for preservation and protection of Deliverables or other property derived or resulting from the Contract that may be in Contractor's possession, (c) return all materials and property provided directly or indirectly to Contractor by any entity, agent or employee of the State, (d) transfer title in, and deliver to, the State, unless otherwise directed, all Deliverables intended to be transferred to the State at the termination of the Contract and which are resulting from the Contract (which must be provided to the State on an "As-Is" basis except to the extent the amounts paid by the State in respect of the items included compensation to Contractor for the provision of warranty services in respect of the materials), and (e) take any action to mitigate and limit any potential damages, or requests for Contractor adjustment or termination settlement costs, to the maximum practical extent, including terminating or limiting as otherwise applicable those subcontracts and outstanding orders for material and supplies resulting from the terminated Contract.

(b) If the State terminates the Contract before its expiration for its own convenience, the State must pay Contractor for all charges due for Services provided before the date of termination and, if applicable, as a separate item of payment under the Contract, for Work In Process, on a percentage of completion basis at the level of completion determined by the State. All completed or partially completed Deliverables prepared by Contractor under the Contract, at the option of the State, becomes the State's property, and Contractor is entitled to receive equitable fair compensation for the Deliverables. Regardless of the basis for the termination, the State is not obligated to pay, or otherwise compensate, Contractor for any lost expected future profits, costs or expenses incurred with respect to Services not actually performed for the State.

(c) Upon a good faith termination, the State may assume, at its option, any subcontracts and agreements for Services and Deliverables provided under the Contract, and may further pursue completion of the Services/Deliverables under the Contract by replacement contract or otherwise as the State may in its sole judgment deem expedient.

2.158 Reservation of Rights

Any termination of the Contract or any Statement of Work issued under it by a party must be with full reservation of, and without prejudice to, any rights or remedies otherwise available to the party with respect to any claims arising before or as a result of the termination.



2.160 Reserved

2.170 Transition Responsibilities

2.171 Contractor Transition Responsibilities

If the State terminates the Contract, for convenience or cause, or if the Contract is otherwise dissolved, voided, rescinded, nullified, expires or rendered unenforceable, the Contractor agrees to comply with direction provided by the State to assist in the orderly transition of equipment, services, software, leases, etc. to the State or a third party designated by the State. If the Contract expires or terminates, the Contractor agrees to make all reasonable efforts to effect an orderly transition of services within a reasonable period of time that in no event will exceed 120 days. These efforts must include, but are not limited to, those listed in **Sections 2.171, 2.172, 2.173, 2.174, and 2.175.**

2.172 Contractor Personnel Transition

The Contractor must work with the State, or a specified third party, to develop a transition plan setting forth the specific tasks and schedule to be accomplished by the parties to effect an orderly transition. The Contractor must allow as many personnel as practicable to remain on the job to help the State, or a specified third party, maintain the continuity and consistency of the services required by the Contract. In addition, during or following the transition period, in the event the State requires the Services of the Contractor's Subcontractors or vendors, as necessary to meet its needs, Contractor agrees to reasonably, and with good-faith, work with the State to use the Services of Contractor's Subcontractors or vendors. Contractor must notify all of Contractor's subcontractors of procedures to be followed during transition.

2.173 Contractor Information Transition

The Contractor agrees to provide reasonable detailed specifications for all Services/Deliverables needed by the State, or specified third party, to properly provide the Services/Deliverables required under the Contract. The Contractor must provide the State with asset management data generated from the inception of the Contract through the date on which the Contractor is terminated in a comma-delineated format unless otherwise requested by the State. The Contractor must deliver to the State any remaining owed reports and documentation still in Contractor's possession subject to appropriate payment by the State.

2.174 Contractor Software Transition

The Contractor must reasonably assist the State in the acquisition of any Contractor software required to perform the Services/use the Deliverables under the Contract. This must include any documentation being used by the Contractor to perform the Services under the Contract. If the State transfers any software licenses to the Contractor, those licenses must, upon expiration of the Contract, transfer back to the State at their current revision level. Upon notification by the State, Contractor may be required to freeze all non-critical changes to Deliverables/Services.

2.175 Transition Payments

If the transition results from a termination for any reason, reimbursement must be governed by the termination provisions of the Contract. If the transition results from expiration, the Contractor will be reimbursed for all reasonable transition costs (i.e. costs incurred within the agreed period after contract expiration that result from transition operations) at the rates agreed upon by the State. The Contractor must prepare an accurate accounting from which the State and Contractor may reconcile all outstanding accounts.

2.176 State Transition Responsibilities

In the event that the Contract is terminated, dissolved, voided, rescinded, nullified, or otherwise rendered unenforceable, the State agrees to perform the following obligations, and any others upon which the State and the Contractor agree:

- (a) Reconciling all accounts between the State and the Contractor;
- (b) Completing any pending post-project reviews.



2.180 Stop Work



2.181 Stop Work Orders

The State may, at any time, by written stop work order to Contractor, require that Contractor stop all, or any part, of the work called for by the Contract for a period of up to 90 calendar days after the stop work order is delivered to Contractor, and for any further period to which the parties may agree. The stop work order must be identified as a stop work order and must indicate that it is issued under this **Section 2.180**. Upon receipt of the stop work order, Contractor must immediately comply with its terms and take all reasonable steps to minimize incurring costs allocable to the work covered by the stop work order during the period of work stoppage. Within the period of the stop work order, the State must either: (a) cancel the stop work order; or (b) terminate the work covered by the stop work order as provided in **Section 2.150**.

2.182 Cancellation or Expiration of Stop Work Order

The Contractor must resume work if the State cancels a Stop Work Order or if it expires. The parties will agree upon an equitable adjustment in the delivery schedule, the Contract price, or both, and the Contract must be modified, in writing, accordingly, if: (a) the stop work order results in an increase in the time required for, or in Contractor's costs properly allocable to, the performance of any part of the Contract; and (b) Contractor asserts its right to an equitable adjustment within 30 calendar days after the end of the period of work stoppage; provided that, if the State decides the facts justify the action, the State may receive and act upon a Contractor proposal submitted at any time before final payment under the Contract. Any adjustment must conform to the requirements of **Section 2.024**.

2.183 Allowance of Contractor Costs

If the stop work order is not canceled and the work covered by the stop work order is terminated for reasons other than material breach, the termination must be deemed to be a termination for convenience under **Section 2.150**, and the State will pay reasonable costs resulting from the stop work order in arriving at the termination settlement. The State is not liable to Contractor for loss of profits because of a stop work order issued under this **Section 2.180**.

2.190 Dispute Resolution

2.191 In General

Any claim, counterclaim, or dispute between the State and Contractor arising out of or relating to the Contract or any Statement of Work must be resolved as follows. For all Contractor claims seeking an increase in the amounts payable to Contractor under the Contract, or the time for Contractor's performance, Contractor must submit a letter, together with all data supporting the claims, executed by Contractor's Contract Administrator or the Contract Administrator's designee certifying that (a) the claim is made in good faith, (b) the amount claimed accurately reflects the adjustments in the amounts payable to Contractor or the time for Contractor's performance for which Contractor believes the State is liable and covers all costs of every type to which Contractor is entitled from the occurrence of the claimed event, and (c) the claim and the supporting data are current and complete to Contractor's best knowledge and belief.

2.192 Informal Dispute Resolution

(a) All disputes between the parties must be resolved under the Contract Management procedures in the Contract. If the parties are unable to resolve any disputes after compliance with the processes, the parties must meet with the Director of Procurement, DTMB, or designee, for the purpose of attempting to resolve the dispute without the need for formal legal proceedings, as follows:

- (i) The representatives of Contractor and the State must meet as often as the parties reasonably deem necessary to gather and furnish to each other all information with respect to the matter in issue which the parties believe to be appropriate and germane in connection with its resolution. The representatives must discuss the problem and negotiate in good faith in an effort to resolve the dispute without the necessity of any formal proceeding.
- (ii) During the course of negotiations, all reasonable requests made by one party to another for non-privileged information reasonably related to the Contract must be honored in order that each of the parties may be fully advised of the other's position.



(iii) The specific format for the discussions will be left to the discretion of the designated State and Contractor representatives, but may include the preparation of agreed upon statements of fact or written statements of position.

(iv) Following the completion of this process within 60 calendar days, the Director of Procurement, DTMB, or designee, must issue a written opinion regarding the issue(s) in dispute within 30 calendar days. The opinion regarding the dispute must be considered the State's final action and the exhaustion of administrative remedies.

(b) This Section must not be construed to prevent either party from instituting, and a party is authorized to institute, formal proceedings earlier to avoid the expiration of any applicable limitations period, to preserve a superior position with respect to other creditors, or under **Section 2.193**.

(c) The State will not mediate disputes between the Contractor and any other entity, except state agencies, concerning responsibility for performance of work under the Contract.

2.193 Injunctive Relief

A claim between the State and the Contractor is not subject to the provisions of Section 2.192, Informal Dispute Resolution, where a party makes a good faith determination that a breach of the Contract by the other party will result in damages so immediate, so large or severe, and so incapable of adequate redress that a temporary restraining order or other injunctive relief is the only adequate remedy.

2.194 Continued Performance

Each party agrees to continue performing its obligations under the Contract while a dispute is being resolved except to the extent the issue in dispute precludes performance (dispute over payment must not be deemed to preclude performance) and without limiting either party's right to terminate the Contract as provided in **Section 2.150**, as the case may be.

2.200 Federal and State Contract Requirements

2.201 Nondiscrimination

In the performance of the Contract, Contractor must comply with the Elliott-Larsen Civil Rights Act, 1976 PA 453, MCL 37.2101 et seq., as amended, and all applicable federal, State and local fair employment practices and equal opportunity laws as amended. Contractor agrees not to discriminate against any employee or applicant for employment, with respect to his or her hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, religion, national origin, ancestry, age, sex, height, weight, marital status, or physical or mental disability. Contractor further agrees that every subcontract entered into for the performance of the Contract or any purchase order resulting from the Contract must contain a provision requiring non-discrimination in employment, as specified here, binding upon each Subcontractor. This covenant is required under the Elliot Larsen Civil Rights Act, 1976 PA 453, MCL 37.2101, et seq., as amended, and the Persons with Disabilities Civil Rights Act, 1976 PA 220, MCL 37.1101, et seq., as amended, and any breach of this provision may be regarded as a material breach of the Contract.

2.202 Unfair Labor Practices

Under 1980 PA 278, MCL 423.321, et seq., the State must not award a Contract or subcontract to an employer whose name appears in the current register of employers failing to correct an unfair labor practice compiled under Section 2 of the Act. This information is compiled by the United States National Labor Relations Board. A Contractor of the State, in relation to the Contract, must not enter into a contract with a Subcontractor, manufacturer, or supplier whose name appears in this register. Under Section 4 of 1980 PA 278, MCL 423.324, the State may void any Contract if, after award of the Contract, the name of Contractor as an employer or the name of the Subcontractor, manufacturer or supplier of Contractor appears in the register.

2.203 Workplace Safety and Discriminatory Harassment

In performing Services for the State, the Contractor and any Subcontractor must comply with all applicable state and federal laws.



2.204 Reserved

2.210 Governing Law

2.211 Governing Law

The Contract must in all respects be governed by, and construed according to, the substantive laws of the State of Michigan without regard to any Michigan choice of law rules that would apply the substantive law of any other jurisdiction to the extent not inconsistent with, or pre-empted by federal law.

2.212 Compliance with Laws

Contractor must comply with all applicable state, federal and local laws and ordinances in providing the Services/Deliverables.

2.213 Jurisdiction

Any dispute arising from the Contract must be resolved in the State of Michigan and the Contractor expressly consents to personal jurisdiction in Michigan. With respect to any claim between the parties, the Contractor consents to venue in Ingham County, Michigan, and irrevocably waives any objections to this venue.

Contractor agrees to appoint agents in the State of Michigan to receive service of process.

2.220 Limitation of Liability

2.221 Limitation of Liability

Neither the Contractor nor the State is liable to each other, regardless of the form of action, for consequential, incidental, indirect, or special damages. This limitation of liability does not apply to claims for infringement of United States patent, copyright, trademark or trade secrets; to claims for personal injury or damage to property caused by the gross negligence or willful misconduct of the Contractor; to claims covered by other specific provisions of this Contract calling for liquidated damages; or to court costs or attorneys' fees awarded by a court in addition to damages after litigation based on this Contract.

2.230 Disclosure Responsibilities

2.231 Disclosure of Litigation

(a) Disclosure. Contractor must disclose any material criminal litigation, investigations or proceedings involving the Contractor (and each Subcontractor) or any of its officers or directors or any litigation, investigations or proceedings under the Sarbanes-Oxley Act. In addition, each Contractor (and each Subcontractor) must notify the State of any material civil litigation, arbitration or proceeding which arises during the term of the Contract and extensions, to which Contractor (or, to the extent Contractor is aware, any Subcontractor) is a party, and which involves: (i) disputes that might reasonably be expected to adversely affect the viability or financial stability of Contractor or any Subcontractor; or (ii) a claim or written allegation of fraud against Contractor or, to the extent Contractor is aware, any Subcontractor by a governmental or public entity arising out of their business dealings with governmental or public entities. The Contractor must disclose in writing to the Contract Administrator any litigation, investigation, arbitration or other proceeding (collectively, "Proceeding") within 30 days of its occurrence. Details of settlements which are prevented from disclosure by the terms of the settlement may be annotated. Information provided to the State from Contractor's publicly filed documents referencing its material litigation will be deemed to satisfy the requirements of this Section.

(b) Assurances. If any Proceeding disclosed to the State under this Section, or of which the State otherwise becomes aware, during the term of the Contract would cause a reasonable party to be concerned about:

- (i) the ability of Contractor (or a Subcontractor) to continue to perform the Contract according to its terms and conditions, or
- (ii) whether Contractor (or a Subcontractor) in performing Services for the State is engaged in conduct which is similar in nature to conduct alleged in the Proceeding, which conduct would constitute a breach of the Contract or a violation of Michigan law, regulations or public policy, then the Contractor must provide the State all reasonable assurances requested by the State to demonstrate that:



- (a) Contractor and its Subcontractors must be able to continue to perform the Contract and any Statements of Work according to its terms and conditions, and
- (b) Contractor and its Subcontractors have not and will not engage in conduct in performing the Services which is similar in nature to the conduct alleged in the Proceeding.
- (c) Contractor must make the following notifications in writing:
 - (1) Within 30 days of Contractor becoming aware that a change in its ownership or officers has occurred, or is certain to occur, or a change that could result in changes in the valuation of its capitalized assets in the accounting records, Contractor must notify DTMB-Procurement.
 - (2) Contractor must also notify DTMB Procurement within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership or officers.
 - (3) Contractor must also notify DTMB Procurement within 30 days whenever changes to company affiliations occur.

2.232 Call Center Disclosure

Contractor and/or all Subcontractors involved in the performance of the Contract providing call or contact center services to the State must disclose the location of its call or contact center services to inbound callers. Failure to disclose this information is a material breach of the Contract.

2.233 Bankruptcy and Insolvency

The State may, without prejudice to any other right or remedy, terminate the Contract, in whole or in part, and, at its option, may take possession of the “Work in Process” and finish the Works in Process by whatever appropriate method the State may deem expedient if:

- (a) the Contractor files for protection under the bankruptcy laws;
- (b) an involuntary petition is filed against the Contractor and not removed within 30 days;
- (c) the Contractor becomes insolvent or if a receiver is appointed due to the Contractor's insolvency;
- (d) the Contractor makes a general assignment for the benefit of creditors; or
- (e) the Contractor or its affiliates are unable to provide reasonable assurances that the Contractor or its affiliates can deliver the services under the Contract.

The Contractor must place appropriate notices or labels on the Work in Process to indicate ownership by the State. To the extent reasonably possible, materials and Work in Process must be stored separately from other stock and marked conspicuously with labels indicating ownership by the State.

2.240 Performance

2.241 Time of Performance

- (a) Contractor must use commercially reasonable efforts to provide the resources necessary to complete all Services and Deliverables according to the time schedules contained in the Statements of Work and other Exhibits governing the work, and with professional quality.
- (b) Without limiting the generality of **Section 2.241(a)**, Contractor must notify the State in a timely manner upon becoming aware of any circumstances that may reasonably be expected to jeopardize the timely and successful completion of any Deliverables/Services on the scheduled due dates in the latest State-approved delivery schedule and must inform the State of the projected actual delivery date.
- (c) If the Contractor believes that a delay in performance by the State has caused or will cause the Contractor to be unable to perform its obligations according to specified Contract time periods, the Contractor must notify the State in a timely manner and must use commercially reasonable efforts to perform its obligations according to the Contract time periods notwithstanding the State's failure. Contractor will not be in default for a delay in performance to the extent the delay is caused by the State.



2.242 Service Level Agreements (SLAs)

- (a) SLAs will be completed with the following operational considerations:
 - (i) SLAs will not be calculated for individual Incidents where any event of Excusable Failure has been determined; Incident means any interruption in Services.
 - (ii) SLAs will not be calculated for individual Incidents where loss of service is planned and where the State has received prior notification or coordination.
 - (iii) SLAs will not apply if the applicable Incident could have been prevented through planning proposed by Contractor and not implemented at the request of the State. To invoke this consideration, complete documentation relevant to the denied planning proposal must be presented to substantiate the proposal.
 - (iv) Time period measurements will be based on the time Incidents are received by the Contractor and the time that the State receives notification of resolution based on 24x7x365 time period, except that the time period measurement will be suspended based on the following:
 - 1. Time period(s) will not apply where Contractor does not have access to a physical State Location and where access to the State Location is necessary for problem identification and resolution.
 - 2. Time period(s) will not apply where Contractor needs to obtain timely and accurate information or appropriate feedback and is unable to obtain timely and accurate information or appropriate feedback from the State.
- (b) Chronic Failure for any Service(s) is defined as three unscheduled outage(s) or interruption(s) on any individual Service for the same reason or cause or if the same reason or cause was reasonably discoverable in the first instance over a rolling 30 day period. Chronic Failure will result in the State’s option to terminate the effected individual Service(s) and procure them from a different vendor for the chronic location(s) with Contractor to pay the difference in charges for up to three additional months. The termination of the Service must not affect any tiered pricing levels.
- (c) Root Cause Analysis must be performed on any business critical outage(s) or outage(s) on Services when requested by the Contract Administrator. Contractor must provide its analysis within two weeks of outage(s) and provide a recommendation for resolution.
- (d) All decimals must be rounded to two decimal places, with five and greater rounding up and four and less rounding down, unless otherwise specified.

2.243 Liquidated Damages

Liquidated Damages shall apply on all scheduled testing days and shall be subject to any limitations of Liability in Section 2.220.

Tests, Reports, and Data

It is understood and agreed by the Contractor that time is of the essence in the delivery of tests, reports, and data of the content and quality specified in this Contract, and its proposal document. In the event these specified tests, reports, and data are not available by the dates specified in this Contract or as reflected in schedules, the Contractor and the State agree that if there is late or improper completion of the Work and the State does not elect to exercise its rights under Section 2.152, the State is entitled to collect liquidated damages as shown below when Contractor fails to remedy the late or improper completion of the Work which includes but is not limited to Reports; except if the delivery is delayed by an act, negligence, or default on the part of the State of Michigan, public enemy, war, embargo, fire, or explosion not caused by the negligence or intentional act of the Contractor or Contractor’s supplier(s), or by riot, sabotage, or labor trouble that results from a cause or causes entirely beyond the control or fault of the Contractor or the Contractor’s supplier(s), a reasonable extension of time as the MDE deems appropriate may be granted. Upon receipt of a written request and justification for any extension from the Contractor, the MDE may extend the time for performance of the Contract or delivery of goods therein specified, at the MDE ’s sole discretion, for good cause shown.

Issue: The opening of the testing window or the delivery of student data is delayed.

Remedy: \$37,500 for more than 10 minutes up to 60 minutes and from 1-2hrs \$75,000, from 2-4 hrs. \$200,000 and from 4hrs.- to a complete full class day an additional \$100,000 which will increase by \$50,000 for each day consecutive day this occurs.



It is acknowledged that an Unauthorized Removal of Key Personnel will interfere with the timely and proper completion of the Contract, to the loss and damage of the State, and that it would be impracticable and extremely difficult to fix the actual damage sustained by the State as a result of any Unauthorized Removal of Key Personnel. Therefore, Contractor and the State agree that in the case of any Unauthorized Removal in respect of which the State does not elect to exercise its rights under Section 2.152, the State may assess liquidated damages against Contractor as specified below.

For the Unauthorized Removal of any Key Personnel designated in the applicable Statement of Work, the liquidated damages amount is \$25,000.00 per individual if the Contractor identifies a replacement approved by the State under **Section 2.060** and assigns the replacement to the Project to shadow the Key Personnel who is leaving for a period of at least 30 days before the Key Personnel's removal.

Security Breaches

It is understood and agreed by the Contractor that security and proprietary use of test items and forms must be maintained at all times. Should a breach of security resulting from negligence on the part of the Contractor occur, the sum of **\$3,000 per compromised test item** will be deducted, not as a penalty but as liquidated damages.

It is understood and agreed by the Contractor that security of student level data must be maintained at all times. Should a breach of security resulting from negligence on the part of the Contractor occur, the sum of **\$50,000 per occurrence** will be deducted, not as a penalty but as liquidated damages.

To the extent that any late delivery or untimely performance is caused or contributed to by the acts or failures to act of the MDE or any third party outside the control of the Contractor, liquidated damages shall not be assessed.

Service Interruptions

A service interruption is defined as a failure on the part of the selected Contractor to provide access for students to log in and/or begin taking a test available through Contractor's online test delivery system during regularly scheduled testing hours within established testing windows, or as the failure on the part of the selected vendor to provide access for LEA/school personnel to perform administrative functions of the online system during scheduled periods of availability for the assessment. The selected Contractor will not be held liable for service interruptions due to issues caused or contributed to by any acts or omissions of a school or a third party, including but not limited to an school's technology infrastructure or a school's lack of implementation of provided procedures for online.

For each service interruption which prevents students from taking tests for more than 10 minutes, the MDE may assess liquidated damages of **\$5,000 per interruption**. Total liquidated damages for service interruptions to students on any given day between 0800 EST/EDT and 1600 EST/EDT will not exceed the amount(s) noted above

Liquidated damages will be assessed for each service interruption that prevents school or MDE personnel from accessing administrative functions for more than two (2) hours (between 0700 EST/EDT and 2000 EST/EDT) from the months of August through June at a rate of \$5,000 for each full interrupted hour, inclusive.

If Contractor fails to assign a replacement to shadow the removed Key Personnel for at least 30 days, in addition to the \$25,000.00 liquidated damages for an Unauthorized Removal, Contractor must pay the amount of \$833.33 per day for

each day of the 30 day shadow period that the replacement Key Personnel does not shadow the removed Key Personnel, up to \$25,000.00 maximum per individual. The total liquidated damages that may be assessed per Unauthorized Removal and failure to provide 30 days of shadowing must not exceed \$50,000.00 per individual.



2.244 Excusable Failure

Neither party will be liable for any default, damage, or delay in the performance of its obligations that is caused by government regulations or requirements, power failure, electrical surges or current fluctuations, war, water or other forces of nature or acts of God, delays or failures of transportation, equipment shortages, suppliers' failures, or acts or omissions of common carriers, fire; riots, civil disorders; labor disputes, embargoes; injunctions (provided the injunction was not issued as a result of any fault or negligence of the party seeking to have its default or delay excused); or any other cause beyond the reasonable control of a party; provided the non-performing party and its Subcontractors are without fault in causing the default or delay, and the default or delay could not have been prevented by reasonable precautions and cannot reasonably be circumvented by the non-performing party through the use of alternate sources, workaround plans or other means, including disaster recovery plans.

If a party does not perform its contractual obligations for any of the reasons listed above, the non-performing party will be excused from any further performance of its affected obligation(s) for as long as the circumstances prevail. but the party must use commercially reasonable efforts to recommence performance whenever and to whatever extent possible without delay. A party must promptly notify the other party in writing immediately after the excusable failure occurs, and also when it abates or ends.

If any of the above-enumerated circumstances substantially prevent, hinder, or delay the Contractor's performance of the Services/provision of Deliverables for more than 10 Business Days, and the State determines that performance is not likely to be resumed within a period of time that is satisfactory to the State in its reasonable discretion, then at the State's option: (a) the State may procure the affected Services/Deliverables from an alternate source, and the State is not be liable for payment for the unperformed Services/ Deliverables not provided under the Contract for so long as the delay in performance continues; (b) the State may terminate any portion of the Contract so affected and the charges payable will be equitably adjusted to reflect those Services/Deliverables terminated; or (c) the State may terminate the affected Statement of Work without liability to Contractor as of a date specified by the State in a written notice of termination to the Contractor, except to the extent that the State must pay for Services/Deliverables provided through the date of termination.

The Contractor will not have the right to any additional payments from the State as a result of any Excusable Failure occurrence or to payments for Services not rendered/Deliverables not provided as a result of the Excusable Failure condition. Defaults or delays in performance by Contractor which are caused by acts or omissions of its Subcontractors will not relieve Contractor of its obligations under the Contract except to the extent that a Subcontractor is itself subject to an Excusable Failure condition described above and Contractor cannot reasonably circumvent the effect of the Subcontractor's default or delay in performance through the use of alternate sources, workaround plans or other means.

2.250 Approval of Deliverables

2.251 Delivery Responsibilities

Unless otherwise specified by the State within an individual order, the following must be applicable to all orders issued under the Contract.

(a) Shipment responsibilities - Services performed/Deliverables provided under the Contract must be delivered "F.O.B. Destination, within Government Premises." The Contractor must have complete responsibility for providing all Services/Deliverables to all site(s) unless otherwise stated. Actual delivery dates must be specified on the individual purchase order.

(b) Delivery locations - Services must be performed/Deliverables must be provided at every State of Michigan location within Michigan unless otherwise stated in the SOW. Specific locations will be provided by the State or upon issuance of individual purchase orders.



(c) Damage Disputes - At the time of delivery to State Locations, the State must examine all packages. The quantity of packages delivered must be recorded and any obvious visible or suspected damage must be noted at time of delivery using the shipper's delivery document(s) and appropriate procedures to record the damage.

Where there is no obvious or suspected damage, all deliveries to a State Location must be opened by the State and the contents inspected for possible internal damage not visible externally within 14 days of receipt. Any damage must be reported to the Contractor within five days of inspection

2.252 Delivery of Deliverables

Where applicable, the Statements of Work/POs contain lists of the Deliverables to be prepared and delivered by Contractor including, for each Deliverable, the scheduled delivery date and a designation of whether the Deliverable is a document ("Written Deliverable"), a good ("Physical Deliverable") or a Service. All Deliverables must be completed and delivered for State review and written approval and, where applicable, installed according to the State-approved delivery schedule and any other applicable terms and conditions of the Contract.

2.253 Testing

(a) Before delivering any of the above-mentioned Statement of Work Physical Deliverables or Services to the State, Contractor must first perform all required quality assurance activities to verify that the Physical Deliverable or Service is complete and conforms with its specifications listed in the applicable Statement of Work or Purchase Order. Before delivering a Physical Deliverable or Service to the State, Contractor must certify to the State that (1) it has performed the quality assurance activities, (2) it has performed any applicable testing, (3) it has corrected all material deficiencies discovered during the quality assurance activities and testing, (4) the Deliverable or Service is in a suitable state of readiness for the State's review and approval, and (5) the Deliverable/Service has all Critical Security patches/updates applied.

(b) If a Deliverable includes installation at a State Location, then Contractor must (1) perform any applicable testing, (2) correct all material deficiencies discovered during the quality assurance activities and testing, and (3) inform the State that the Deliverable is in a suitable state of readiness for the State's review and approval. To the extent that testing occurs at State Locations, the State is entitled to observe or otherwise participate in testing.

2.254 Approval of Deliverables, In General

(a) All Deliverables (Physical Deliverables and Written Deliverables) and Services require formal written approval by the State, according to the following procedures. Formal approval by the State requires the State to confirm in writing that the Deliverable meets its specifications. Formal approval may include the successful completion of Testing as applicable in **Section 2.253**, to be led by the State with the support and assistance of Contractor. The approval process will be facilitated by ongoing consultation between the parties, inspection of interim and intermediate Deliverables and collaboration on key decisions.

(b) The State's obligation to comply with any State Review Period is conditioned on the timely delivery of Deliverables/Services being reviewed.

(c) Before commencement of its review or testing of a Deliverable/Service, the State may inspect the Deliverable/Service to confirm that all components of the Deliverable/Service have been delivered without material deficiencies. If the State determines that the Deliverable/Service has material deficiencies, the State may refuse delivery of the Deliverable/Service without performing any further inspection or testing of the Deliverable/Service. Otherwise, the review period will be deemed to have started on the day the State receives the Deliverable or the Service begins, and the State and Contractor agree that the Deliverable/Service is ready for use and, where applicable, certification by Contractor according to **Section 2.253**.

(d) The State must approve in writing a Deliverable/Service after confirming that it conforms to and performs according to its specifications without material deficiency. The State may, but is not be required to, conditionally approve in writing a Deliverable/Service that contains material deficiencies if the State elects to



permit Contractor to rectify them post-approval. In any case, Contractor will be responsible for working diligently to correct within a reasonable time at Contractor's expense all deficiencies in the Deliverable/Service that remain outstanding at the time of State approval.

(e) If, after three opportunities (the original and two (2) repeat efforts), the Contractor is unable to correct all deficiencies preventing Final Acceptance of a Deliverable/Service, the State may: (i) demand that the Contractor cure the failure and give the Contractor additional time to cure the failure at the sole expense of the Contractor; or (ii) keep the Contract in force and do, either itself or through other parties, whatever the Contractor has failed to do, and recover the difference between the cost to cure the deficiency and the contract price plus an additional sum equal to 10% of the cost to cure the deficiency to cover the State's general expenses provided the State can furnish proof of the general expenses; or (iii) terminate the particular Statement of Work for default, either in whole or in part by notice to Contractor provided Contractor is unable to cure the breach. Notwithstanding the foregoing, the State cannot use, as a basis for exercising its termination rights under this Section, deficiencies discovered in a repeat State Review Period that could reasonably have been discovered during a prior State Review Period.

(f) The State, at any time and in its reasonable discretion, may halt the testing or approval process if the process reveals deficiencies in or problems with a Deliverable/Service in a sufficient quantity or of a sufficient severity that renders continuing the process unproductive or unworkable. If that happens, the State may stop using the Service or return the applicable Deliverable to Contractor for correction and re-delivery before resuming the testing or approval process.

2.255 Process For Approval of Written Deliverables

The State Review Period for Written Deliverables will be the number of days set forth in the applicable Statement of Work following delivery of the final version of the Deliverable (and if the Statement of Work does not state the State Review Period, it is by default five Business Days for Written Deliverables of 100 pages or less and 10 Business Days for Written Deliverables of more than 100 pages). The duration of the State Review Periods will be doubled if the State has not had an opportunity to review an interim draft of the Written Deliverable before its submission to the State. The State agrees to notify Contractor in writing by the end of the State Review Period either stating that the Deliverable is approved in the form delivered by Contractor or describing any deficiencies that must be corrected before approval of the Deliverable (or at the State's election, after approval of the Deliverable). If the State notifies the Contractor about deficiencies, the Contractor must correct the described deficiencies and within 30 Business Days resubmit the Deliverable in a form that shows all revisions made to the original version delivered to the State. Contractor's correction efforts must be made at no additional charge. Upon receipt of a corrected Deliverable from Contractor, the State must have a reasonable additional period of time, not to exceed the length of the original State Review Period, to review the corrected Deliverable to confirm that the identified deficiencies have been corrected.

2.256 Process for Approval of Services

The State Review Period for approval of Services is governed by the applicable Statement of Work (and if the Statement of Work does not state the State Review Period, it is by default 30 Business Days for Services). The State agrees to notify the Contractor in writing by the end of the State Review Period either stating that the Service is approved in the form delivered by the Contractor or describing any deficiencies that must be corrected before approval of the Services (or at the State's election, after approval of the Service). If the State delivers to the Contractor a notice of deficiencies, the Contractor must correct the described deficiencies and within 30 Business Days resubmit the Service in a form that shows all revisions made to the original version delivered to the State. The Contractor's correction efforts must be made at no additional charge. Upon implementation of a corrected Service from Contractor, the State must have a reasonable additional period of time, not to exceed the length of the original State Review Period, to review the corrected Service for conformity and that the identified deficiencies have been corrected.

2.257 Process for Approval of Physical Deliverables

The State Review Period for approval of Physical Deliverables is governed by the applicable Statement of Work (and if the Statement of Work does not state the State Review Period, it is by default 30 continuous Business Days for a Physical Deliverable). The State agrees to notify the Contractor in writing by the end of



the State Review Period either stating that the Deliverable is approved in the form delivered by the Contractor or describing any deficiencies that must be corrected before approval of the Deliverable (or at the State's election, after approval of the Deliverable). If the State delivers to the Contractor a notice of deficiencies, the Contractor must correct the described deficiencies and within 30 Business Days resubmit the Deliverable in a form that shows all revisions made to the original version delivered to the State. The Contractor's correction efforts must be made at no additional charge. Upon receipt of a corrected Deliverable from the Contractor, the State must have a reasonable additional period of time, not to exceed the length of the original State Review Period, to review the corrected Deliverable to confirm that the identified deficiencies have been corrected.

2.258 Final Acceptance

Unless otherwise stated in the Article 1, Statement of Work or Purchase Order, "Final Acceptance" of each Deliverable must occur when each Deliverable/Service has been approved by the State following the State Review Periods identified in **Sections 2.251-2.257**. Payment will be made for Deliverables installed and accepted. Upon acceptance of a Service, the State will pay for all Services provided during the State Review Period that conformed to the acceptance criteria.

2.260 Ownership

2.261 Ownership of Work Product by State

The State owns all Deliverables as they are works made for hire by the Contractor for the State. The State owns all United States and international copyrights, trademarks, patents, or other proprietary rights in the Deliverables.

2.262 Vesting of Rights

With the sole exception of any preexisting licensed works identified in the SOW, the Contractor assigns, and upon creation of each Deliverable automatically assigns, to the State, ownership of all United States and international copyrights, trademarks, patents, or other proprietary rights in each and every Deliverable, whether or not registered by the

Contractor, insofar as any the Deliverable, by operation of law, may not be considered work made for hire by the Contractor for the State. From time to time upon the State's request, the Contractor must confirm the assignment by execution and delivery of the assignments, confirmations of assignment, or other written instruments as the State may request. The State may obtain and hold in its own name all copyright, trademark, and patent registrations and other evidence of rights that may be available for Deliverables.

2.263 Rights in Data

(a) The State is the owner of all data made available by the State to the Contractor or its agents, Subcontractors or representatives under the Contract. The Contractor must not use the State's data for any purpose other than providing the Services, nor will any part of the State's data be disclosed, sold, assigned, leased or otherwise disposed of to the general public or to specific third parties or commercially exploited by or on behalf of the Contractor. No employees of the Contractor, other than those on a strictly need-to-know basis, have access to the State's data. Contractor must not possess or assert any lien or other right against the State's data. Without limiting the generality of this Section, the Contractor must only use personally identifiable information as strictly necessary to provide the Services and must disclose the information only to its employees who have a strict need-to-know the information. The Contractor must comply at all times with all laws and regulations applicable to the personally identifiable information.

(b) The State is the owner of all State-specific data under the Contract. The State may use the data provided by the Contractor for any purpose. The State must not possess or assert any lien or other right against the Contractor's data. Without limiting the generality of this Section, the State may use personally identifiable information only as strictly necessary to utilize the Services and must disclose the information only to its employees who have a strict need to know the information, except as provided by law. The State must comply at all times with all laws and regulations applicable to the personally identifiable information. Other material developed and provided to the State remains the State's sole and exclusive property.



2.264 Ownership of Materials

The State and the Contractor will continue to own their respective proprietary technologies developed before entering into the Contract. Any hardware bought through the Contractor by the State, and paid for by the State, will be owned by the State. Any software licensed through the Contractor and sold to the State, will be licensed directly to the State.

2.270 State Standards

2.271 Existing Technology Standards

The Contractor must adhere to all existing standards as described within the comprehensive listing of the State's existing technology standards at <http://www.michigan.gov/dmb/0,4568,7-150-56355-108233--,00.html>.

2.272 Acceptable Use Policy

To the extent that Contractor has access to the State computer system, Contractor must comply with the State's Acceptable Use Policy, see http://www.michigan.gov/cybersecurity/0,1607,7-217-34395_34476---,00.html. All Contractor employees must be required, in writing, to agree to the State's Acceptable Use Policy before accessing the State system. The State reserves the right to terminate Contractor's access to the State system if a violation occurs.

2.273 Systems Changes

Contractor is not responsible for and not authorized to make changes to any State systems without written authorization from the Project Manager. Any changes Contractor makes to State systems with the State's approval must be done according to applicable State procedures, including security, access, and configuration management procedures.

2.274 Electronic Receipt Processing Standard

All electronic commerce applications that allow for electronic receipt of credit/debit card and electronic check (ACH) transactions must be processed via the Centralized Electronic Payment Authorization System (CEPAS).

2.280 Extended Purchasing Program - Reserved

2.290 Environmental Provision

2.291 Environmental Provision

Hazardous Materials:

For the purposes of this Section, "Hazardous Materials" is a generic term used to describe asbestos, ACBMs, PCBs, petroleum products, construction materials including paint thinners, solvents, gasoline, oil, and any other material the manufacture, use, treatment, storage, transportation, or disposal of which is regulated by the federal, State, or local laws governing the protection of the public health, natural resources, or the environment. This includes, but is not limited to, materials such as batteries and circuit packs, and other materials that are regulated as (1) "Hazardous Materials" under the Hazardous Materials Transportation Act, (2) "chemical hazards" under the Occupational Safety and Health Administration standards, (3) "chemical substances or mixtures" under the Toxic Substances Control Act, (4) "pesticides" under the Federal Insecticide Fungicide and Rodenticide Act, and (5) "hazardous wastes" as defined or listed under the Resource Conservation and Recovery Act.

(a) The Contractor must use, handle, store, dispose of, process, transport and transfer any material considered a Hazardous Material according to all federal, State, and local laws. The State must provide a safe and suitable environment for performance of Contractor's Work. Before the commencement of Work, the State must advise the Contractor of the presence at the work site of any Hazardous Material to the extent that the State is aware of the Hazardous Material. If the Contractor encounters material reasonably believed to be a Hazardous Material and which may present a substantial danger, the Contractor must immediately stop all affected Work, notify the State in writing about the conditions encountered, and take appropriate health and safety precautions.



(b) Upon receipt of a written notice, the State will investigate the conditions. If (a) the material is a Hazardous Material that may present a substantial danger, and (b) the Hazardous Material was not brought to the site by the Contractor, or does not result in whole or in part from any violation by the Contractor of any laws covering the use, handling, storage, disposal of, processing, transport and transfer of Hazardous Materials, the State must order a suspension of Work in writing. The State must proceed to have the Hazardous Material removed or rendered harmless. In the alternative, the State must terminate the affected Work for the State's convenience.

(c) Once the Hazardous Material has been removed or rendered harmless by the State, the Contractor must resume Work as directed in writing by the State. Any determination by the Michigan Department of Community Health or the Michigan Department of Environmental Quality that the Hazardous Material has either been removed or rendered harmless is binding upon the State and Contractor for the purposes of resuming the Work. If any incident with Hazardous Material results in delay not reasonable anticipatable under the circumstances and which is attributable to the State, the applicable SLAs for the affected Work will not be counted in **Section 2.242** for a time as mutually agreed by the parties.

(d) If the Hazardous Material was brought to the site by the Contractor, or results in whole or in part from any violation by the Contractor of any laws covering the use, handling, storage, disposal of, processing, transport and transfer of Hazardous Material, or from any other act or omission within the control of the Contractor, the Contractor must bear its proportionate share of the delay and costs involved in cleaning up the site and removing and rendering harmless the Hazardous Material according to Applicable Laws to the condition approved by applicable regulatory agency(ies).

Michigan has a Consumer Products Rule pertaining to labeling of certain products containing volatile organic compounds. For specific details visit http://www.michigan.gov/deq/0,1607,7-135-3310_4108-173523--,00.html

Refrigeration and Air Conditioning:

The Contractor must comply with the applicable requirements of Sections 608 and 609 of the Clean Air Act (42 U.S.C. 7671g and 7671h) as each or both apply to the Contract.

Environmental Performance:

Waste Reduction Program: Contractor must establish a program to promote cost-effective waste reduction in all operations and facilities covered by the Contract. The Contractor's programs must comply with applicable Federal, State, and local requirements, specifically including Section 6002 of the Resource Conservation and Recovery Act (42 U.S.C. 6962, et seq.).

2.300 Other Provisions

2.311 Forced Labor, Convict Labor, Forced or Indentured Child Labor, or Indentured Servitude Made Materials

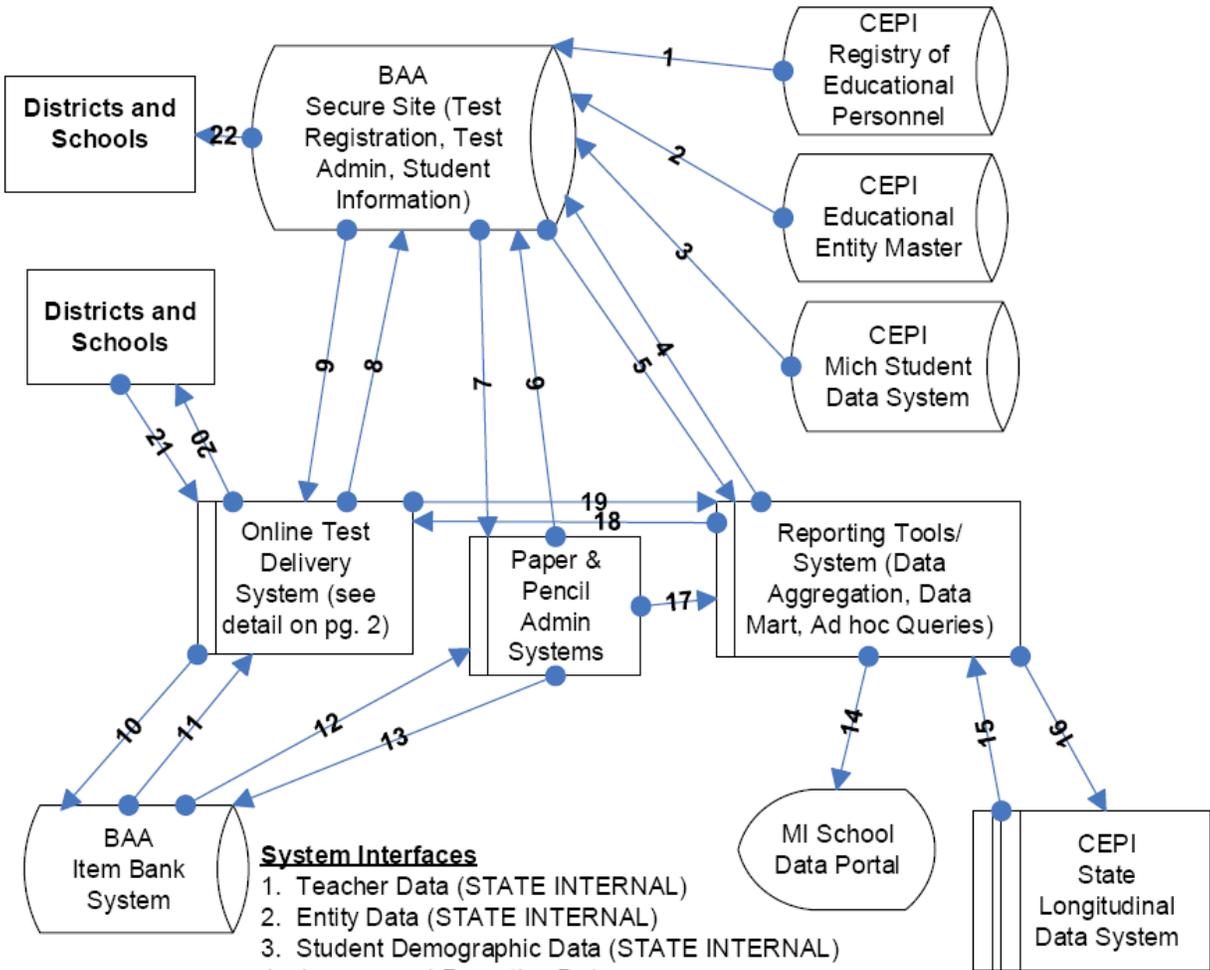
Equipment, materials, or supplies, that will be furnished to the State under the Contract must not be produced in whole or in part by forced labor, convict labor, forced or indentured child labor, or indentured servitude.

"Forced or indentured child labor" means all work or service: exacted from any person under the age of 18 under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily; or performed by any person under the age of 18 under a contract the enforcement of which can be accomplished by process or penalties.



Appendix A, Interfaces

BAA System Interfaces – For Information Purposes Only



System Interfaces

1. Teacher Data (STATE INTERNAL)
2. Entity Data (STATE INTERNAL)
3. Student Demographic Data (STATE INTERNAL)
4. Assessment Reporting Data
5. Student/Teacher/Class Group Data and data requests
6. Tested Roster/Answer Doc Images/Material Order/Shipping Data
7. Student Pre-id/Material Order/Roster Entity Data
8. Student Testing status Data
9. Student/Roster/Test Info/Entity Data
10. Item usage statistics (Raw Data)
11. Items/Test Maps Data
12. Items/Test Maps Data
13. Item usage statistics (Raw Data)
14. Aggregated Results
15. Historical Student Results
16. Student and Aggregated Results
17. Student Answers and Results
18. Historical Student Results
19. Student Answers and Results
20. Online test items
21. Student Responses
22. Report data

BAA Item Bank
Includes:
- Item Authoring
- Item Bank
- Test Authoring



1. Teacher Data (STATE INTERNAL)
 - a. Teacher data from the Registry of Educational Personnel (REP) are accessed for assessment purposes in the MDE Secure Site.
2. Entity Data (STATE INTERNAL)
 - a. Entity (School, District, and Intermediate School District (ISD) data from the Educational Entity Master (EEM) are accessed for assessment purposes in the MDE Secure Site.
3. Student Demographic Data (STATE INTERNAL)
 - a. Student demographic data from the Michigan Student Data System (MSDS) are accessed for assessment purposes in the MDE Secure Site.
4. Assessment Reporting Data
 - a. Reporting data are accessed by the MDE Secure Site in the Reporting System via a direct table read. The reporting system must support both static report displays and dynamic customized reports based on data-mining tools. Summative and interim assessment interpretive guides, graphic displays of data, and text must focus on the particular needs of students, parents, teachers, and school and district administrators. They must be tailored to each major user group and allow for varying degrees of customization, depending on the needs of the particular user group. Access to student data and reporting tools must be credential-dependent to ensure student privacy and protect the security of individual student results. The results must be of immediate value to students, parents, teachers, and school and district administrators. Through credential-based access to the reporting suite, stakeholders can view and generate meaningful interim assessment reports appropriate to their level of access.
5. Student/Teacher/Class Group Data
 - a. Teacher and student roster data will also be accessed by the reporting system from the MDE Secure Site for reporting purposes.
 - b. Data requests for ad hoc queries will be submitted through the MDE Secure Site to the reporting system.
6. Tested Roster/Material Order/Shipping Data
 - a. Contractor sends back packing list, shipment information and a link to the shipment tracking website.
 - b. Tested Roster overview: Tested Roster Processing is the method by which schools view scanned data from student answer documents and verify the demographic information. The data sent to the MDE Tested Roster process by the assessment contractor do not include answer documents returned with non-scorable materials (such as secure but unused answer documents that are required to be returned, scanned, and accounted for but are not processed further). If a school finds any issue with the posted data, it alerts MDE, which in turn works with the assessment contractor to correct the data. Tested Roster Processing includes the following processes:
 - i) **No Bar Code processing:** The answer documents that were scanned with no bar code or invalid bar codes go through No Bar Code processing. If a bar code for the document can be located or created by MDE, the document is sent for No Bar Code processing. If the document cannot be assigned a bar code due to insufficient data, it is not included in further processing.
 - ii) **Duplicate Bar Code processing:** Answer documents with duplicate bar codes can exist for the same student or for different students. The assessment contractor attempts to resolve as many duplicate bar codes as possible before sending any to MDE.
 - iii) **Out of Level processing:** A student may be administered a test in a grade level that does not match his enrolled grade. The student's documents are sent to the Tested Roster process and a new barcode may be assigned.
 - iv) **Tested Roster processing.** All answer documents that are valid for Tested Roster, including those that received a valid bar code as the result of bar code processing, are included in the Tested Roster processing. A valid answer document has at least one multiple-choice item bubbled or one constructed response in the answer document. A blank document is not sent to the bar code or Tested Roster processes. An answer document with



no apparent bubbled responses to test questions, returned with scorable materials, is sent to data correction to confirm that all positions for bubbled and written answers are blank. The presence of demographic data, including a student bar code, has no bearing on this determination. Upon such confirmation, this document is marked as blank and is not processed further, including the processes in this document.

c. Barcode handling process:

Scenario	Handling Instructions
No barcode - no required values	Barcode cannot be assigned by BAA due to insufficient data. The document is not sent and not processed further.
No barcode - partial required values	<p>If the district-school code combination cannot be resolved, the record is not sent and the document is not processed further.</p> <p>If the district code and school code exist, but the grade, last name, first name, or birth date are missing, the record is sent but BAA may not be able to assign a barcode.</p> <p>If BAA cannot locate or create a barcode, the document remains as is until the school calls about it. The document is not processed further until it gets a valid barcode.</p> <p>If successful, the new barcode is retrieved and assigned to the answer document.</p>
No barcode - all required values	<p>The record is sent (including birth date if valid) and BAA attempts to locate or create a barcode.</p> <p>If this cannot be done, the document is not processed further.</p> <p>If successful, the new barcode is retrieved and assigned to the answer document.</p>
Invalid barcode - partial required values	<p>If the district-school code combination cannot be resolved, the record is not sent and the document is not processed further.</p> <p>If the district code and school code exist, but the grade, last name, first name, or birth date are missing, the record is sent but BAA may not be able to assign a barcode.</p> <p>If BAA cannot locate or create a barcode, the document must be reviewed and the school must be contacted to obtain more information about the document. The document is not processed further until it gets a valid barcode.</p> <p>If successful, the new barcode is retrieved and assigned to the answer document.</p>
Invalid barcode - all required values	<p>The record is sent (including birth date if valid) and BAA attempts to locate or create a barcode.</p> <p>If this cannot be done, the document is not processed further.</p> <p>If successful, the new barcode is retrieved and assigned to the answer document.</p>

d. Tested Roster Issues: As the districts identify issues with scanned data, these issues are recorded and reviewed by the MDE business office. The following issues can be created by the Districts/Schools.

- 1) **Combine:** If a District/School determines that there are student tests on their roster that should be combined to one student, they submit a combine issue. The District/School chooses one of the student test records to be the Primary Test Record and the records they choose to be combined update the primary test record chosen. If the combine is accepted by MDE, the records are combined on the MDE system. The primary record is updated with

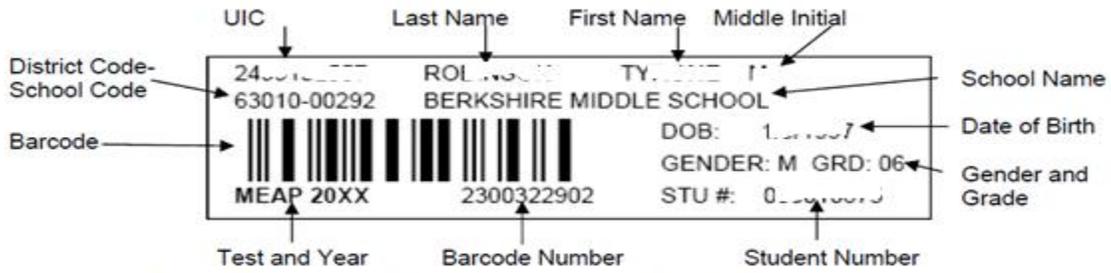


the test information from the other records and the other records are unassigned from the test cycle. Tests of the same subject cannot be combined. Tests of different grades cannot be combined.

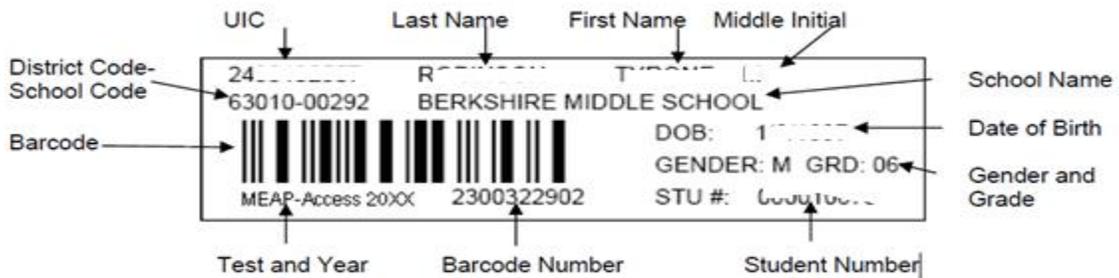
- 2) **Missing Test:** If a District/School determines that there are student test records on their roster that are missing for a student, they submit a missing test issue for the content area that is missing. If a missing test issue is approved by MDE, the Contractor pulls the missing test information from the system. If the Contractor finds the test for the student, and if the document qualifies for Tested Roster processing, the data from the scanned document are loaded to the database. The issue created for the missing test is flagged as resolved whenever the data for the test are processed by MDE. If the Contractor finds the missing test and it is blank, MDE is notified. MDE marks the ticket as resolved with a comment that the test found was a blank. MDE updates student test records when appropriate.
 - 3) **Missing Student:** If a District/School determines that there are students who are missing on their roster, they submit a missing student issue for the student who is missing. If a missing student issue is approved by MDE, the contractor pulls the missing student information from the system. If the contractor finds the tests for the student, and if the documents qualify for Tested Roster processing, the data from the scanned documents are loaded to the database. The issue created for the missing student is flagged as resolved whenever the data for the student are processed by MDE. If the contractor finds all the tests for the missing student and they are all blank, MDE is notified. MDE marks the ticket as resolved. MDE updates student test records when appropriate.
 - 4) **Move:** If a District/School determines that there are students who are no longer in their district or school, they submit a move issue. If a move request is entered by the District/School and approved by MDE to a school within the requesting District, the test is moved to the new school. If a move request is entered by the District/School to move a student out of the district and it is approved by MDE, the student is moved out of the District and MDE will assign it to the correct school.
7. Student Pre-ID/Material Order/Roster Entity Data
- a. The Contractor must be able to pull pre-ID data from the system multiple times. For example, Pre-ID overprinting on answer documents, label printing by the Contractor and later pulls. **Student Pre-ID overview:** Pre-ID labels are sprayed on answer documents or attached to answer documents by school personnel to correctly identify a student and to associate the student's demographic information with his or her answer folder. Student demographic data used to create Pre-ID labels is provided by MDE. In grade 3 for both MEAP and MEAP-Access, two labels are printed for Reading because there are separate test booklets for session 1 and session 2. Note that if a student is not pre-identified for a subject, a label is not printed for that subject for that student even if the student is pre-identified for other subjects. Also, a label is not printed for a student when a student is incorrectly pre-identified for a subject when that subject is invalid for a grade. Pre-ID labels are printed on two different dates. For MEAP the Pre-ID labels from the initial printing are sent to the printer of the initial test materials and sprayed directly on the answer document (or test booklet/answer document for grade 3). For MEAP-Access the pre-ID labels from the initial printing are printed on Avery 5161 (or comparable) continuous form 1" x 4" labels (20 per page). Any new or changed student demographic data are captured during a second pre-ID label process, and are printed and shipped separately from test materials. School personnel will separate the labels by grade, subject, and class for use during testing. Labels for students who register late and whose demographic information is not contained in the two previous pre-ID label shipments are printed locally in the schools. The student demographic data are obtained via the MDE secure website.
 - b. Pre-ID label format:



An example of a MEAP PreID label and a key to the fields is shown below:



An example of a MEAP-Access PreID label and a key to the fields is shown below:



- c. Barcode specifications: Barcodes are printed as machine-scannable Interleaved 2 of 5 (I2of5) or Free 3 of 9 Extended Regular (Fre3of9x) barcode numbers and also as 10-digit human-readable barcode text in 8.5 point Arial font. The barcodes are approximately 1 5/8" wide and 3/8" high. The student barcode supplied by MDE is 10 digits in length and includes a check digit that is calculated by MDE.
- d. The Contractor needs to pull the initial order information (a one-time pull) with shipping information for schools and districts and additional order information (on a daily basis for a period of time).
- 8. Student Testing Status Data
Data related to student's online testing status are accessed by the MDE Secure Site.
- 9. Student Pre-ID/Roster/Test Info/Entity Data
 - a. For the online test delivery system, the Contractor must be able to pull pre-ID data at the beginning of the test period and at a minimum on a daily basis throughout the test period.
 - b. The Contractor must use the State's UIC and a barcode generated from the State's Secure Site System in the online test delivery system.
 - c. The Contractor must utilize the grouping of students by the roster data retrieved from the MDE Secure Site, allowing test proctoring in these groups via the online test delivery system. This grouping is optionally entered in the MDE Secure Site by districts and schools.
- 10. Item Usage Statistics (Online)
Item usage statistics data are accessed by the Item Bank System from the Online Test Delivery System.
- 11. Items/Test Maps Data (Online)
Item and test map data are exchanged from the Item Bank System to the Online Test Delivery System.
- 12. Items/Test Maps Data (Print)
Print Optimized Files (POFs) and Test map data are made available to the Contractor for the paper-and-pencil administration from the Item Bank System.
- 13. Item Usage Statistics (Print)
Item usage statistics data are accessed by the Item Bank System from the Online Test Delivery System.



14. Aggregated Results
Assessment results aggregated for public reporting are made available via an extraction/transform/load process to the MI School Data Web Portal.
15. Historical Student Results
Longitudinally connected student assessment data are made available for queries from the MDE Secure Site.
16. Student and Aggregated Results
Student-level and aggregated assessment data are made available via an extraction/transform/load process to the State Longitudinal Data System (SLDS).
17. Student Answers and Results (Print)
Student responses via scanned paper answer documents are sent to the reporting system.
18. Historical Student Results
Longitudinally connected student assessment data are made available for queries from the Online Test Delivery System.
19. Student Answers and Results (Online)
Student responses via the Online Test Delivery System are sent to the reporting system.
20. Online test items
Schools and districts utilize the Online Test Delivery System to administer tests to students.
21. Student Responses (Online)
Student responses via the Online Test Delivery System are entered for scoring and reporting.
22. Report data
Student-level and school and district aggregated results are available via the MDE Secure Site for teachers and administrators appropriate to their level of access.



Attachment A, Pricing



Attachment A	Deliverable Reference	Unit Type	Year 1: 2014-2015			Year 2: 2015-2016			Total 2 Years	
			Quantity	Rate Per Unit	Amount	Quantity	Rate Per Unit	Amount		
All quantities listed are for bid purposes only. The State of Michigan will only pay for quantities delivered.										
General Administration										
1	Meetings	1.024	Meeting	7	7,251.10	94,264	7	8,916.1	89,998	184,262
2	Contractor Travel (State Rates)	1.024	Prsn/mtg	49	824.9	39,590	49	852.86	34,194	73,784
3	Food and Lodging	1.024	Prsn/day	89	298.46	26,264	78	304.65	23,353	49,617
4	Program Dev. Assistance (If needed)	1.025	Annual	100,000	-	100,000	100,000	-	100,000	200,000
5	Call Center	1.022.7	Annual	1	43,982.26	43,982	1	62,040.93	62,041	106,023
6	Electronic Document Management Site (Sharepoint)	1.022.3	Annual	1	24,564.22	24,564	1	25,546.79	25,547	50,111
General Administration Subtotal										
7	Online Assessment Reporting	1.022.22	Assessment	2	36,976.76	73,954	2	62,787.31	125,741	199,695
8	Interim Assessment Reporting		Assessment	1	61,550.27	61,550	1	63,880.89	63,881	125,431
9	Summative Assessment Reporting		Assessment	1	135,504	135,504	1	189,456	189,456	324,960
Online Assessment Reporting Subtotal										
Miscellaneous										
10	Setup for Refreshable Braille	1.022.14	Test Cycle	10	102.00	1,020	38	1042.00	40,638	50,758
11	Generate Input for Technical Report	1.022.26	Annual	1	100,032.86	100,033	1	94,034.17	94,034	204,067
12	Student Growth Percentiles - Develop Model (Reserved)	1.022.23	One Time	1	-	-	1	-	-	-
13	Student Growth Percentiles - Calculation and Reporting (Reserved)	1.022.23	Annual	1	-	-	1	-	-	-
14	Psychometric Backup (Reserved)	1.022.24	FTE	1	-	-	3	-	-	-
15	Participation Fees	1.022.11	Student	791,000	6.20	4,904,200	791,000	6.20	4,904,200	9,808,400
16	Summative (\$6.20/Student)		Student	508,500	3.35	1,703,475	847,500	3.35	2,839,125	4,542,600
17	Interim (\$3.35/Student)		Student	508,500	3.35	1,703,475	847,500	3.35	2,839,125	4,542,600
Miscellaneous Subtotal										
Non-Test Administration Subtotal										
Online Test Administration and Scoring										
Online test administration covers all deliverables of 1.022 not explicitly referenced elsewhere in Attachment A.										
18	Supported Independence (SI) and Participation (P) Online Answer Document	1.011.1.b.2	Student/content/per test administered	33,000	0.36	11,880	33,999	0.36	12,239	24,119
This section (lines 28 to 40) pulls information from Table A.1 below, in order to establish a comparative cost structure. Table A.1 must be completed in its entirety.										
Michigan Summative										
19	Fixed Form		Student/content/per test	508,000	0.42	213,360	576,300	0.38	218,994	432,354
20	CAT		Student/content/per test	-	0.74	-	-	0.67	-	-
Michigan Interim										
21	Fixed Form		Student/content/per test	2,542,500	0.56	1,423,800	4,237,500	0.42	1,779,750	3,203,550
22	CAT		Student/content/per test	-	0.99	-	-	0.74	-	-
Smarter Balance Summative										
23	Fixed Form		Student/content/per test	-	0.42	-	-	0.38	-	-
24	CAT		Student/content/per test	1,965,000	0.74	878,030	1,344,700	0.67	900,949	1,778,979
Smarter Balance Interim										
25	Fixed Form		Student/content/per test	-	0.56	-	-	0.42	-	-
26	CAT		Student/content/per test	1,423,800	0.99	1,409,562	2,373,000	0.74	1,756,020	3,165,582
Online Test Administration and Scoring Subtotal										
Contract Total										

TABLE A.1												
Percentage of Estimated Cap ->			0-10%	10.01-20%	20.01-30%	30.01-40%	40.01-50%	50.01-60%	60.01-70%	70.01-80%	80.01-90%	90.01-100%
All pricing is based on 113,000 students per grade. The test administration will be either CAT or Fixed Form that can vary by grade and/or content.												
Interim Test Administration Pre/Post												
Pricing is based upon number of tests administered. Cap is based upon enrollment per grade taking both a pre and post assessment for grades K-12. Smarter Balance Interim assessments have a total of up to 28 assessments per year over all the grades. Michigan based Interim assessments have up to 50 assessments per year over all grades.												
1	Fixed Form-Smarter Balance (Estimated Cap of 3,164,000 Tests Administered)		5.26	1.75	1.10	0.78	0.56	0.51	0.46	0.42	0.38	0.34
2	CAT-Smarter Balance (Estimated Cap of 3,164,000 Tests Administered)		9.26	3.09	1.93	1.38	0.99	0.90	0.82	0.74	0.67	0.60
3	Fixed Form-Michigan (Estimated Cap of 5,650,000 Tests Administered)		5.26	1.75	1.10	0.78	0.56	0.51	0.46	0.42	0.38	0.34
4	CAT-Michigan (Estimated Cap of 5,650,000 Tests Administered)		9.26	3.09	1.93	1.38	0.99	0.90	0.82	0.74	0.67	0.60
Summative Test Administration												
Pricing is based upon number of tests administered. The Smarter Balance cap is based on grades 3-8, plus 11, for a total of up to 14 assessments total over all grades. Summative Michigan cap is based on up to 20 assessments total over all grades. ELA and Math will be either Smarter Balance or Michigan but not both.												
5	Fixed Form-Smarter Balance ELA, Math (Estimated Cap of 1,582,000 Tests Administered)		5.26	1.75	1.10	0.78	0.56	0.51	0.46	0.42	0.38	0.34
6	CAT-Smarter Balance ELA, Math (Estimated Cap of 1,582,000 Tests Administered)		9.26	3.09	1.93	1.38	0.99	0.90	0.82	0.74	0.67	0.60
7	Fixed Form-Michigan ELA, Math (Estimated Cap of 1,582,000 Tests Administered)		5.26	1.75	1.10	0.78	0.56	0.51	0.46	0.42	0.38	0.34
8	CAT-Michigan ELA, Math (Estimated Cap of 1,582,000 Tests Administered)		9.26	3.09	1.93	1.38	0.99	0.90	0.82	0.74	0.67	0.60
9	Fixed Form-Michigan Science, Social Studies (Estimated Cap of 678,000 Tests Administered)		5.26	1.75	1.10	0.78	0.56	0.51	0.46	0.42	0.38	0.34
10	CAT-Michigan Science, Social Studies (Estimated Cap of 678,000 Tests Administered)		9.26	3.09	1.93	1.38	0.99	0.90	0.82	0.74	0.67	0.60