



United States Government  
 Interagency Agreement (IAA) - Agreement Between Federal Agencies  
 General Terms and Conditions (GT&C) Section

IAA Number CPSC-1-15-0022 - 0000 - 0000  
 GT&C #                      Order # Amendment/Mod #

<p>9. Estimated Agreement Amount (The Servicing Agency completes all information for the estimated agreement amount.)          (Optional for Assisted Acquisitions)</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">Direct Cost</td> <td style="width:20%; text-align:right;">\$180,000.00</td> <td rowspan="3" style="width:20%; vertical-align: top;">Provide a general explanation of the Overhead Fees &amp; Charges</td> </tr> <tr> <td>Overhead Fees &amp; Charges</td> <td style="text-align:right;">\$0.00</td> </tr> <tr> <td>Total Estimated Amount</td> <td style="text-align:right;">\$180,000.00</td> </tr> </table>		Direct Cost	\$180,000.00	Provide a general explanation of the Overhead Fees & Charges	Overhead Fees & Charges	\$0.00	Total Estimated Amount	\$180,000.00													
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<p>10. STATUTORY AUTHORITY</p> <p>a. Requesting Agency's Authority (Check One)</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">Franchise Fund</td> <td style="width:15%;">Revolving Fund</td> <td style="width:15%;">Working Capital Fund</td> <td style="width:25%;">Economy Act (31 U.S.C. 1535/FAR 17.5)</td> <td style="width:30%;">Other Authority</td> </tr> <tr> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> </table> <p>Fill in Statutory Authority Title and Citation for Franchise Fund, Revolving Fund, Working Capital Fund, or Other Authority, Section 29(d) of the Consumer Product Safety Act, (15 U.S.C. 2078(d)); NIST Organic Act, 15 USC Sections 273, 275b, and 278b</p> <p>b. Servicing Agency's Authority (Check One)</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">Franchise Fund</td> <td style="width:15%;">Revolving Fund</td> <td style="width:15%;">Working Capital Fund</td> <td style="width:25%;">Economy Act (31 U.S.C. 1535/FAR 17.5)</td> <td style="width:30%;">Other Authority</td> </tr> <tr> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> <td align="center"><input checked="" type="checkbox"/></td> </tr> </table> <p>Fill in Statutory Authority Title and Citation for Franchise Fund, Revolving Fund, Working Capital Fund, or Other Authority 15 U.S.C. Sections 272(b)(8), (b)(10), and (b)(11) and (c)(8); NIST Organic Act, 15 USC Sections 273, 275b, and 278b (c) (15)</p>		Franchise Fund	Revolving Fund	Working Capital Fund	Economy Act (31 U.S.C. 1535/FAR 17.5)	Other Authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Franchise Fund	Revolving Fund	Working Capital Fund	Economy Act (31 U.S.C. 1535/FAR 17.5)	Other Authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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<p>11. Requesting Agency's Scope (State and/or list attachments that support Requesting Agency's Scope.)          See attached Statement of Work titled, INTERAGENCY AGREEMENT BETWEEN THE U.S. CONSUMER PRODUCT SAFETY COMMISSION AND THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, Title: Smoke Alarm Performance to Fire and Nuisance Source Tests</p>																					
<p>12. Roles &amp; Responsibilities for the Requesting Agency and Servicing Agency (State and/or list attachments for the roles and responsibilities for the Requesting Agency and the Servicing Agency.)          See attached Statement of Work titled, INTERAGENCY AGREEMENT BETWEEN THE U.S. CONSUMER PRODUCT SAFETY COMMISSION AND THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, Title: Smoke Alarm Performance to Fire and Nuisance Source Tests</p>																					

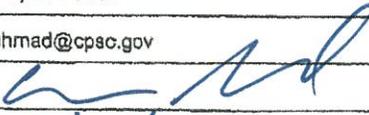
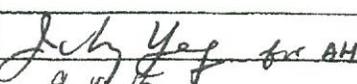
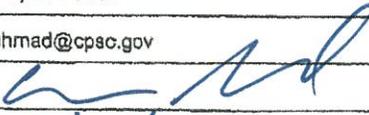
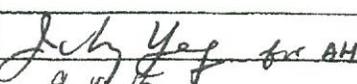
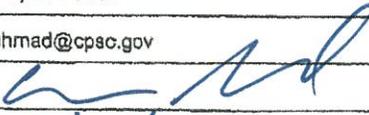
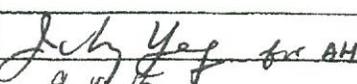
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GT&C # Order # Amendment/Mod #

<p>13. Restrictions (Optional) (State and/or attach unique requirements and/or mission specific restrictions specific to this IAA). See attached Statement of Work titled, INTERAGENCY AGREEMENT BETWEEN THE U.S. CONSUMER PRODUCT SAFETY COMMISSION AND THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, Title: Smoke Alarm Performance to Fire and Nuisance Source Tests</p>
<p>14. Assisted Acquisition Small Business Credit Clause (The Servicing Agency will allocate the socio-economic credit to the Requesting Agency for any contract actions it has executed on behalf of the Requesting Agency.)</p>
<p>15. Disputes: Disputes related to this IAA shall be resolved in accordance with instructions provided in the Treasury Financial Manual (TFM) Volume I, Part 2, Chapter 4700, Appendix 10; Intragovernmental Business Rules.</p>
<p>16. Termination (Insert the number of days that this IAA may be terminated by written notice by either the Requesting or Servicing Agency.) 30 If this agreement is canceled, any implementing contract/order may also be canceled. If the IAA is terminated, the agencies shall agree to the terms of the termination, including costs attributable to each party and the disposition of awarded and pending actions. If the Servicing Agency incurs costs due to the Requesting Agency's failure to give the requisite notice of its intent to terminate the IAA, the Requesting Agency shall pay any actual costs incurred by the Servicing Agency as a result of the delay in notification, provided such costs are directly attributable to the failure to give notice.</p>
<p>17. Assisted Acquisition Agreements - Requesting Agency's Organizations Authorized To Request Acquisition Assistance for this IAA. (State or attach a list of Requesting Agency's organizations authorized to request acquisition assistance for this IAA.) See attached Statement of Work titled, INTERAGENCY AGREEMENT BETWEEN THE U.S. CONSUMER PRODUCT SAFETY COMMISSION AND THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, Title: Smoke Alarm Performance to Fire and Nuisance Source Tests</p>
<p>18. Assisted Acquisition Agreements - Servicing Agency's Organizations authorized to Provide Acquisition Assistance for this IAA. (State or attach a list of Servicing Agency's organizations authorized to provide acquisition for this IAA.)</p>
<p>19. Requesting Agency Clause(s) (Optional) (State and/or attach any additional Requesting Agency clauses.) CPSC requires monthly financial reports</p>

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<p>20. Servicing Agency Clause(s) (Optional) (State and/or attach any additional Servicing Agency clauses.)          NIST will be reimbursed for all costs incurred. No contractors will perform work under this agreement. No students or U.S. citizens working under a NIST financial assistance award made under the authority of 15 U.S.C. 278 g-1 will perform work under this agreement. No employees or agents of recipients working under a NIST financial assistance award will perform work under this agreement.</p>																								
<p>21. Additional Requesting Agency and/or Servicing Agency Attachments (Optional) (State and/or attach any additional Requesting Agency and/or Servicing Agency attachments.)  <b>See attached Statement of Work titled, INTERAGENCY AGREEMENT BETWEEN THE U.S. CONSUMER PRODUCT SAFETY COMMISSION AND THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, Title: Smoke Alarm Performance to Fire and Nuisance Source Tests</b></p>																								
<p>22. Annual Review of IAA</p> <p>By signing this agreement, the parties agree to annually review the IAA if the agreement period exceeds one year. Appropriate changes will be made by amendment to the GT&amp;C and/or modification to any affected Order(s).</p> <p align="center"><b>AGENCY OFFICIAL</b></p> <p>The Agency Official is the highest level accepting authority or official as designated by the Requesting Agency and Servicing Agency to sign this agreement. Each Agency Official must ensure that the general terms and conditions are properly defined, including the stated statutory authorities, and, that the scope of work can be fulfilled per the agreement.</p> <p>The Agreement Period Start Date (Block 5) must be the same as or later than the signature dates.</p> <p>Actual work for this IAA may NOT begin until an Order has been signed by the appropriate individuals, as stated in the instructions for Blocks 37 and 38.</p>																								
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:20%;"></th> <th style="width:40%;">Requesting Agency</th> <th style="width:40%;">Servicing Agency</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Eddie Ahmad</td> <td>National Institute of Standards and Technology Anthony Hamins</td> </tr> <tr> <td>Title</td> <td>CPSC Contracting Officer</td> <td>Chief, Fire Research Division</td> </tr> <tr> <td>Telephone Number(s)</td> <td>(301) 504-7884</td> <td>301-975-6598</td> </tr> <tr> <td>Fax Number</td> <td>(978) 244-8640</td> <td></td> </tr> <tr> <td>Email Address</td> <td>aahmad@cpsc.gov</td> <td>ahamins@nist.gov</td> </tr> <tr> <td>SIGNATURE</td> <td></td> <td></td> </tr> <tr> <td>Approval Date</td> <td>9/17/15</td> <td>9-10-15</td> </tr> </tbody> </table>		Requesting Agency	Servicing Agency	Name	Eddie Ahmad	National Institute of Standards and Technology Anthony Hamins	Title	CPSC Contracting Officer	Chief, Fire Research Division	Telephone Number(s)	(301) 504-7884	301-975-6598	Fax Number	(978) 244-8640		Email Address	aahmad@cpsc.gov	ahamins@nist.gov	SIGNATURE			Approval Date	9/17/15	9-10-15
	Requesting Agency	Servicing Agency																						
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United States Government  
 Interagency Agreement (IAA) – Agreement Between Federal Agencies  
 Order Requirements and Funding Information (Order) Section

IAA Number CPSC-I-15-0022 -                      -                           Servicing Agency's Agreement  
 GT&C #                      Order #      Amendment/Mod #      Tracking Number (Optional) 1505-733-06

PRIMARY ORGANIZATION/OFFICE INFORMATION					
24.		Requesting Agency	Servicing Agency		
Primary Organization/Office Name	U.S. Consumer Product Safety Commission	National Institute of Standards and Technology			
Responsible Organization/Office Address	5 Reseach Place Rockville, Maryland 20850	100 Bureau Drive MS 8602 Gaithersburg, MD 20899			
ORDER/REQUIREMENTS INFORMATION					
25. Order Action (Check One)					
<input checked="" type="checkbox"/> New <input type="checkbox"/> Modification (Mod) – List affected Order blocks being changed and explains the changes being made. For Example: for a performance period mod, state new performance period for this Order in Block 27. Fill out the Funding Modification Summary by Line (Block 26) if the mod involves adding, deleting or changing Funding for an Order Line.  <input type="checkbox"/> Cancellation – Provide a brief explanation for Order cancellation and fill in the Performance Period End Date for the effective cancellation date.					
26. Funding Modification Summary by Line					
	Line # _____	Line # _____	Line # _____	Total of All Other Lines (attach funding details)	Total
Original Line Funding	\$	\$	\$	\$	\$0.00
Cumulative Funding Changes From Prior Mods (addition (+) or reduction (-))	\$	\$	\$	\$	\$0.00
Funding Change for This Mod	\$	\$	\$	\$	\$0.00
<b>TOTAL Modified Obligation</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
Total Advance Amount (-)	\$	\$	\$	\$	\$0.00
Net Modified Amount Due	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
27. Performance Period					
	Start Date	date of last signature	End Date	10 months from effective	
		MM-DD-YYYY		MM-DD-YYYY date	
For a performance period mod, insert the start and end dates that reflect the new performance period.					



IAA Order

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29. Advance Information (Complete Block 29 if the Advance Payment for Products/Services was checked "Yes" on the GT&C.)  
Total Advance Amount for the Order \$ 180,000.00 [All Order Line advance amounts (Block 28) must sum to this total.]  
Revenue Recognition Methodology (according to SFFAS 7) (Identify the Revenue Recognition Methodology that will be used to account for the Requesting Agency's expense and the Servicing Agency's revenue)  
 Straight-line - Provide amount to be accrued \$ 180,000.00 and Number of Months 10  
 Accrual Per Work Completed - Identify the accounting posting period:  
 Monthly per work completed & invoiced  
 Other - Explain other regular period (bimonthly, quarterly, etc.) \_\_\_\_\_

30. Total Net Order Amount: \$ 180,000.00  
[All Order Line Net Amounts Due for reimbursable agreements and Net Total Costs for Assisted Acquisition Agreements (Block 28) must sum to this total.]

31. Attachments (State or list attachments.)  
 Key project and/or acquisition milestones (Optional except for Assisted Acquisition Agreements)  
  
 Other Attachments (Optional)  
See attached Statement of Work titled, INTERAGENCY AGREEMENT BETWEEN THE U.S. CONSUMER PRODUCT SAFETY COMMISSION AND THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, Title: Smoke Alarm Performance to Fire and Nuisance Source Tests

**BILLING & PAYMENT INFORMATION**

32. Payment Method (Check One) [Intra-governmental Payment and Collection (IPAC) is the Preferred Method.]  
[If IPAC is used, the payment method must agree with the IPAC Trading Partner Agreement (TPA).]  
 Requesting Agency Initiated IPAC     Servicing Agency Initiated IPAC  
 Credit Card     Other - Explain other payment method and reasoning \_\_\_\_\_

33. Billing Frequency (Check One)  
[An Invoice must be submitted by the Servicing Agency and accepted by the Requesting Agency BEFORE funds are reimbursed (i.e., via IPAC transaction)]  
 Monthly     Quarterly     Other Billing Frequency (include explanation) Advance Payment

34. Payment Terms (Check One)  
 7 days     Other Payment Terms (include explanation): \_\_\_\_\_

IAA Order

IAA Number CPSC-I-15-0022  
 QT&C# \_\_\_\_\_

Order # \_\_\_\_\_  
 Amendment/Mod # \_\_\_\_\_

Servicing Agency's Agreement  
 Tracking Number (Optional) 1505-733-06

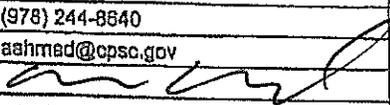
35. Funding Clauses/Instructions (Optional) (State and/or list funding clauses/Instructions.)		
N/A		
36. Delivery/Shipping Information for Products (Optional)		
Agency Name		
Point of Contact (POC) Name & Title		
POC Email Address		
Delivery Address /Room Number		
POC Telephone Number		
Special Shipping Information		
<b>APPROVALS AND CONTACT INFORMATION</b>		
<b>37. PROGRAM OFFICIALS</b>		
The Program Officials, as identified by the Requesting Agency and Servicing Agency, must ensure that the scope of work is properly defined and can be fulfilled for this Order. The Program Official may or may not be the Contracting Officer depending on each agency's IAA business process.		
	Requesting Agency	Servicing Agency
Name	Arthur Lee	Tom Cleary
Title	Engineer	Engineer
Telephone Number	(301) 967-2008	(301) 975-8858
Fax Number		
Email Address	alee@cpsec.gov	thomas.cleary@nist.gov
SIGNATURE	<b>ALEE</b>	<i>[Signature]</i>
Date Signed	9/14/2018	
38. FUNDING OFFICIALS - The Funds Approving Officials, as identified by the Requesting Agency and Servicing Agency, certify that the funds are accurately cited and can be properly accounted for per the purposes set forth in the Order. The Requesting Agency Funding Official signs to obligate funds. The Servicing Agency Funding Official signs to start the work, and to bill, collect, and properly account for funds from the Requesting Agency, in accordance with the agreement.		
	Requesting Agency	Servicing Agency
Name	James Baker	Anthony Hamins
Title	Budget Officer	Division Chief
Telephone Number	(301) 504-7575	301-975-6598
Fax Number		
Email Address	jbaker@cpsec.gov	ahamins@nist.gov
SIGNATURE	<b>jbaker@cpsec.gov</b>	<i>[Signature]</i> for AH
Date Signed	9-18-18	

IAA Order

IAA Number CPSC-I-15-0022  
 GT&C # \_\_\_\_\_

Order # \_\_\_\_\_  
 Amendment/Mod # \_\_\_\_\_

Servicing Agency's Agreement  
 Tracking Number (Optional) 1505-733-06

CONTACT INFORMATION		
<b>FINANCE OFFICE Points of Contact (POCs)</b>		
The finance office points of contact must ensure that the payment (Requesting Agency), billing (Servicing Agency), and advance/accounting information are accurate and timely for this Order.		
<b>39.</b>	<b>Requesting Agency (Payment Office)</b>	<b>Servicing Agency (Billing Office)</b>
Name	Debbie Young	Patricia Jackson
Title	Payment Officer	Operations Manager, Finance Division
Office Address	CPSC Accounts Payable Br, AMZ-160 PO Box 25710, Oklahoma City, OK 73125	100 Bureau Drive, MS 1620 Gaithersburg, MD 20899
Telephone Number	(405) 954-7467	301-975-4653
Fax Number		
Email Address	9-AMC-AMZ-CPSC-Accounts-Payable@cp	patricia.jackson@nist.gov
Signature & Date (Optional)		
<b>40. ADDITIONAL Points of Contacts (POCs) (as determined by each Agency)</b>		
This may include CONTRACTING Office Points of Contact (POCs).		
	<b>Requesting Agency</b>	<b>Servicing Agency</b>
Name	Eddie Ahmad	Sharon Rinehart
Title	CPSC Contracting Officer	Administrative Officer
Office Address	4330 East West Highway, Rm 523 Bethesda, MD 20814-4408	100 Bureau Drive, MD 8502 Gaithersburg, MD 20899
Telephone Number	(301) 504-7884	301-975-5876
Fax Number	(978) 244-8840	
Email Address	eahmad@cpsc.gov	sharon.rinehart@nist.gov
Signature & Date (Optional)		
Name	Melissa Buford	Rayna Knowles
Title	Supervisory General Attorney	Group Leader, Accounts Receivable Group
Office Address	4330 East West Highway Bethesda, MD 20814	100 Bureau Drive, MS 1624 Gaithersburg, MD 20899
Telephone Number	301-504-7637	301-975-5183
Fax Number		301-975-2100
Email Address	muford@cpsc.gov	urayna.knowles@nist.gov
Signature & Date (Optional)		
Name		
Title		
Office Address		
Telephone Number		
Fax Number		
Email Address		
Signature & Date (Optional)		

**CPSC-I-15-0022**  
**Interagency Agreement**  
**between the**  
**U.S. Consumer Product Safety Commission (CPSC)**  
**and the**  
**National Institute of Standards and Technology (NIST)**

**I. TITLE**

Interagency Agreement (IAA) between the U.S. Consumer Product Safety Commission (CPSC) and the National Institute of Standards and Technology (NIST) for testing and analysis of smoke alarms/detectors.

The Consumer Product Safety Commission will reimburse funds to the National Institute of Standards and Technology for the purpose of accomplishing the work as set forth in the Statement of Work.

**II. PURPOSE AND OBJECTIVE**

The purpose of the project is to quantify the performance of commercially-available smoke alarms and detectors, to UL 217, 6<sup>th</sup> Edition, Single and Multiple Station Smoke Alarms fire tests and the polyurethane (PU) foam fire tests defined in UL's July 11, 2014 proposal to UL 217/UL 268. The ability of the smoke alarms and detectors to avoid nuisance alarm(s) will also be evaluated. The information will assist CPSC staff in formulating strategies to promote improvement of smoke alarm performance.

The following objectives will be met at the completion of the project:

1. Characterize smoke alarm and detector test samples using NIST FE/DE apparatus.
2. Construct UL 217 Fire Test Room.
3. Evaluate the performance of current smoke-alarm technology to the current UL 217 fire tests.
4. Evaluate the performance of current smoke-alarm technology to the proposed PU foam fire tests.
5. Evaluate the performance of current smoke-alarm technology to nuisance sources.
6. Fully characterize test detectors and alarms in a consistent manner to facilitate comparisons.
7. Make all of the data collected as widely accessible as possible.

**III. BACKGROUND**

According to National Fire Protection Association (NFPA), there were 1,240,000 fires reported in the U.S. during 2013. There were an estimated 487,500 structure fires reported to fire departments in 2013, a slight increase of 1.5%, from a year ago. Of the structure fires, 387,000 were residential fires, accounting for 79.4% of all structure fires, and a slight increase of 1.6% from a year ago. Fires in the home (one- and two-family homes, including manufactured homes and apartments) resulted in 2,755 civilian deaths, an increase of 15.7% from a year ago. Home fire deaths account for 85% of all civilian deaths.

According to a telephone survey, 96-97% of US households have at least one smoke alarm, yet in 2007-2011, smoke alarms were present in only three-quarters (73%) of all reported home

fires and operated in half (52%) of all reported home fires. The death rate per 100 reported fires was twice as high in homes without a working smoke alarm (1.18 deaths per 100 fires) as it was in home fires with this protection (0.53 deaths per 100 fires).

In 2014, UL proposed two new fire tests for UL 217, Single and Multiple Station Smoke Alarms (UL 217). The fire tests were smoldering and flaming PU foam. The proposal was defeated by the UL 217 Standards Technical Panel (STP). The proposal was resubmitted to UL 217 with revisions to the success criteria thresholds for the same smoldering and flaming PU foam tests. The proposals again were defeated.

#### IV. STATEMENT OF WORK

The purpose of this Interagency Agreement is to have NIST conduct performance testing of current smoke alarms and detectors according to Sections 44 to 46 of UL 217. The performance tests will also include the proposed smoldering and flaming PU foam tests and nuisance sources.

In NIST's Large Scale Fire Facilities, NIST will construct a test room as specified in UL 217 Paragraph 44.6. The alarm responses and smoke properties (aerosol properties, combustion gases, heat, velocity, and video signatures) will be measured and recorded. The tests will characterize the test conditions at the alarms by collecting at a minimum concentrations of CO, CO<sub>2</sub>, O<sub>2</sub>, and HCN, smoke obscuration, temperature, humidity, smoke particle size and concentration. NIST will monitor and record the alarm status of current smoke alarms and detectors that use ionization, photoelectric, dual sensor, and multi-sensors.

Also, NIST will use test nuisance sources in the test room to monitor and record the alarm status of current smoke alarms and detectors that use ionization, photoelectric, dual sensor, and multi-sensors.

NIST will write a report on the comprehensive data set of fire and nuisance signatures of current smoke alarms and detectors. NIST agrees to furnish all necessary personnel, materials, services, and facilities to complete the objectives list in Section II.

The contemplated work consists of a series of tasks for which approximate budgets have been assigned as shown below. NIST reserves the right to make adjustments as needed in the distribution of resources as long as the total cost of the project is not increased and the project objectives are all met.

#### Task

#### Schedule

##### **1. Acquire test detectors/alarms and conduct detector baseline calibration.**

Months 1-2

The NIST project staff will investigate and collect a set of test alarms that are representative of the range of products currently sold. All test alarms will be initially characterized in NIST's FE/DE apparatus to provide baseline data. Appropriate modifications may be made to the test alarms to facilitate the acquisition of useful data but any modified alarms will be calibrated against unmodified devices to assure the modifications do not affect performance.

\$15k

- 2. Construct UL 217 fire test room** Month 3  
 Test room will be constructed in accordance with UL 217 Paragraph 44.6 to allow similar testing.  
 \$20k
- 3. Evaluate performance to the current UL 217 fire tests.** Month 4  
 Smoke alarms and detectors acquired and modified (as necessary) in accordance with Task 1 will be evaluated to current UL 217 test Fires in Sections 44 to 46. Test alarms exposed to fire tests will be re-checked in the FE/DE between major tests to assure that such exposure did not alter the operational characteristics.  
 \$30k
- 4. Evaluate performance to the proposed PU foam fire tests.** Months 5-6  
 Smoke alarms and detectors acquired and modified (as necessary) in accordance with Task 1 will be evaluated to the proposed PU Foam Fire Test as outlined in the UL's July 11, 2014 proposal to UL 217/UL 268. Test alarms exposed to fire tests will be re-checked in the FE/DE between major tests to assure that such exposure did not alter the operational characteristics.  
 \$ 45k
- 5. Evaluate the performance of current smoke-alarm technology to nuisance sources.** Month 7  
 Smoke alarms and detectors acquired and modified (as necessary) in accordance with Task 1 will be evaluated to the proposed nuisance tests as outlined in the UL proposal (TBD).  
 \$20k
- 6. Fully characterize test detectors and alarms for comparisons.** Month 8  
 Fully compare and analyze the data between smoke alarm samples and detector samples to type of fire tests and nuisance tests.  
 \$10k
- 7. Make all of the data collected as widely accessible as possible.** Months 9-10  
 Analyze data, model and prepare and write final test report. The data will be made available on a public web site for download.  
 \$40k

**V. DURATION OF AGREEMENT (Period of Performance)**

The period of performance shall begin on the date of last signature and shall not extend beyond ten (10) months. This agreement may be modified by mutual consent of CPSC and NIST.

**VI. CONSULTATION**

NIST will provide written reports and oral briefings to the CPSC staff and other sponsors as set forth below.

- Monthly progress reports including, but not limited to, project status, funding status, schedule, and logistic status.
- Data access in electronic form in several formats.
- Representative photographs and videos of the tests.

- NIST will produce a final technical report including, but not limited to, test setup, test data, data analysis, conclusions, and recommendations. The report shall be reviewed by each agency before being released to the public.

#### VII. GOVERNMENT-PROVIDED MATERIALS/EQUIPMENT

- CPSC-furnished equipment/materials: None
- NIST-furnished equipment/materials: Test equipment, testing facility, instrumentation, test samples, and consumables needed to meet the objectives.
- Disposition of Equipment: As appropriate by NIST disposal procedures

#### VIII. GOVERNMENT AND PROVIDED LABOR

- CPSC labor:  
CPSC staff will work jointly with NIST designing the testing matrix and selecting the smoke alarm and detector samples.
- NIST labor:  
NIST staff will conduct the testing, analysis, and reporting.

#### IX. CONFIDENTIALITY REQUIREMENTS

- All information reported to or otherwise obtained by the Commission or its agents under the Consumer Product Safety Act (CPSA) (and shared with or provided to NIST), which information contains or relates to a trade secret or other matter referred to in section 1905 of title 18, United States Code, or subject to section 552(b)(4) of title 5, United States Code, shall be held in confidence and kept secret by NIST personnel.
- To the extent permitted by law, including the Freedom of Information Act, NIST agrees not to release the identity of the manufacturer of the product being tested (example: smoke alarms, heat detectors, sprinklers heads) encompassed by the subject of this IAA without the written consent of CPSC's Office of General Counsel.
- All documents and other materials developed pursuant to this IAA shall have appropriate disclaimers to indicate the work was performed pursuant to the IAA by NIST; that the materials are the views of the staff or members (present or previous at time of dissemination) of NIST; that, although they may have been developed in conjunction with CPSC staff and sponsors, the materials do not necessarily represent the views of the United States Consumer Product Safety Commission and other sponsors.

#### X. DELIVERY OF PERFORMANCE

- Testing - To be completed within 7 months after effective date of IAA.
- Delivery of final report - Within 3 months after completion of the testing period.
- Progress reports after the completion of each Task – Within 30 days of completion of the task
- Test data in several formats – Within 3 months of completion of the testing period.