Attachment A

“FLOW-DOWN” CLAUSES APPLICABLE TO PURCHASE ORDERS INVOLVING FUNDS FROM A FEDERAL GRANT

If the Agreement or Order involves the use of funds from a Federal government grant or cooperative agreement—or funds from a subcontract at any tier relating to a Federal government grant or cooperative agreement—the following clauses from the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (“Uniform Guidance”), Appendix II are incorporated into and form a part of the terms and conditions of the Agreement or Order. The full text of the Uniform Guidance may be found at 2 C.F.R. Part 200. Seller/Vendor agrees to flow down all applicable clauses from the Uniform Guidance to lower-tier subcontractors.

This Agreement/Order involves the use of federal funds. Agency/Department specific terms that apply are set forth below. Seller (also referred to as “Vendor”) agrees to comply with such terms and flow down all applicable clauses to lower-tier subcontractors.


2. **Davis Bacon Act, as amended (40 U.S.C. 3141—3148).** If the Order is in excess of $2000 and pertains to construction or repair, and further, if required by Federal program legislation, Seller shall comply with the Davis-Bacon Act (40 U.S.C. 3141 - 3144 and 3146-3148) and as supplemented by Department of Labor regulations (29 CFR part 5, “Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction”). Under this Act, Seller is required to pay wages to laborers and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor. In addition, Seller shall be required to pay wages not less than once a week.

3. **Copeland “Anti-Kickback” Act (40 U.S.C. 3145)** – If the Order is in excess of $2,000 and pertains to construction or repair, Seller shall comply with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides in part that Seller shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which it is otherwise entitled.

4. **Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708)** – If the Order is in excess of $100,000 and involves the employment of mechanics or laborers, Seller shall comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR part 5). Under 40 U.S.C. 3702 of the Act, Seller shall be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than 1½ times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic shall be
required to work in surroundings or under working conditions which are unsanitary, hazardous or
dangerous. These requirements do not apply to the purchases of supplies or materials or articles
ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

5. **Rights to Inventions Made Under a Contract or Agreement** – If the Order is for the performance
of experimental, developmental, or research work, under a “funding agreement” under 37 CFR
401.2(a) Seller shall provide for the rights of the Federal Government and Harvard in any resulting
invention in accordance with 37 CFR part 401, “Rights to Inventions Made by Nonprofit
Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative
Agreements,” and comply with the requirements of 37 CFR part 401 and any implementing
regulations issued by the awarding agency.

6. **Clean Air Act (42 U.S.C. 7401—7671q) and the Federal Water Pollution Control Act (33 U.S.C.
1251—1387), as amended** – If the Order is in excess of $150,000 Seller shall comply with all
applicable standards, Orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401—
7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251—1387). Violations
shall be reported to the Federal awarding agency and the Regional Office of the Environmental
Protection Agency (EPA).

7. **Energy Policy and Conservation Act (42 U.S.C. 6201)** – Seller agrees to comply with all
mandatory standards and policies relating to energy efficiency which are contained in the state energy
conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C.
6201).

8. **Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)** – If the Order is for $100,000 or more, Seller
and its subcontractors shall file the certification required by this statute and associated regulations.
Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay
any person or organization for influencing or attempting to influence an officer or employee of any
agency, a member of Congress, officer or employee of Congress, or an employee of a member of
Congress in connection with obtaining any Federal contract, grant or any other award covered by 31
U.S.C. 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in
connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to
Harvard.

9. **Debarment, Exclusion, Suspension, and Ineligibility (E.O.s 12549 and 12689)** – Seller represents
and warrants that it is not listed on the governmentwide Excluded Parties List System in the System
for Award Management (SAM) in accordance with OMB guidelines at 2 CFR 180 that implement
E.O.s 12549 and 12689, “Debarment and Suspension.” This list contains the names of parties
debarred, suspended, or otherwise excluded by agencies, and contractors declared ineligible under
statutory or regulatory authority other than E.O. 12549.

The Seller must comply with 2 C.F.R. pt 180, subpart C and 2 C.F.R. pt 3000, subpart C, and must
include a requirement to comply with these regulations in any lower tier covered transaction it enters
into.

Seller shall have an ongoing duty during the term of this Agreement to disclose to Harvard any
occurrence that would prevent Seller from making certifications contained above on an ongoing basis.
Such disclosure shall be made in writing to Harvard within five (5) business days of when Seller
discovers or reasonably believes there is a likelihood of such occurrence.
This certification is a material representation of fact relief upon by Harvard. If it is later determined that the Seller did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R pt. 3000, subpart C, in addition to remedies available to Harvard, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

10. **Compliance with Federal Agency Requirements**—Seller shall comply with the all requirements applicable to contractors providing routine goods and/or services set forth in the agency specific terms and policies available at Supplemental Regulations: Federal Agencies and their Procurement Regulation Website. Select the applicable funding source weblink for additional information.

11. **Procurement of Recovered Materials (2 CFR part 200.322)** – A non-federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. If applicable, Seller shall comply with the requirements of section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

12. **Contracting with Small and Minority Businesses, Women's Business Enterprises, and Labor Surplus Area Firms** (2 CFR 200.321) Seller shall, in accordance with 2 CFR 200.321 – Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms, take affirmative steps to include minority business, women’s business enterprises, and labor surplus area firm by:
   a. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
   b. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
   c. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
   d. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and
   e. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

11. **Domestic preferences for procurements (2 CFR 200.322).** As appropriate and to the extent consistent with law, the Seller should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this Order.

   For purposes of this section:
i. “Produced in the United States” means, for iron and steel products, that all manufacturing processes from the initial melting stage through the application of coatings, occurred in the United States.

ii. “Manufactured products” means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

12. Prohibition on certain telecommunications and video surveillance services or equipment (2 CFR 200.216). Seller shall not obligate or expend funding provided under this Order to:

   i. Procure or obtain;

   ii. Extend or renew a contract to procure or obtain; or

   iii. Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

       a. For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

       b. Telecommunications or video surveillance services provided by such entities or using such equipment.

       c. Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

MANDATORY DFAR CLAUSES INCORPORATED BY REFERENCE APPLICABLE TO DEPARTMENT OF DEFENSE FUNDED ORDERS

1. Compliance with DoD Requirements –Seller shall comply with all procurement requirements, laws, and regulations referenced and required to flow down to Seller in the then current DoD Research and Development (R&D) General Terms and Conditions, including but not limited to those referenced in “Part 4: Procurement” and PROC Article III of the DoD Research and Development (R&D) General Terms and Conditions, as supplemented by applicable Addenda and Agency Specific Requirements. All such terms may be found at: https://www.onr.navy.mil/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions. Additional DoD requirements follow:

Seller agrees and understands that the United States Government shall have and seller hereby grants to Harvard and the Government a royalty-free, nonexclusive and irrevocable right to i) reproduce, publish, or otherwise use for Federal purposes any work that is subject to copyright and that the Seller develops or acquires ownership of, under this Order, and ii) authorize others to reproduce, publish, or otherwise use such work for Federal purposes. Further, Seller hereby grants the United States Government the right to i) Obtain, reproduce, publish, or otherwise use data produced under this
Order, and ii) Authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes.

Allowable Costs. In any cost-type Order, Seller shall only charge costs that are allowable under the cost principles that FMS Article III of the DoD Research and Development (R&D) General Terms and Conditions identifies as applicable to the Seller’s type of entity, as supplemented by any award specific terms and conditions related to allowability of costs specific to the Order.

Fly America Act. Seller shall comply with applicable requirements of the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118, also known as the “Fly America Act”), as implemented at 41 CFR 103-10.131 through 301-10.143 for U.S. Government-financed international air travel of passengers, personal effects, and property, which requires the use of a U.S. Flag air carrier or be performed under a cost-sharing arrangement with a U.S. carrier, if such service is unavailable.

Cargo Preference for United States flag vessels. If the Order pertains to the shipment of equipment, material, or commodities by oceangoing vessels, Seller agrees to comply with the clause specified in Department of Transportation regulations at 46 CFR 381.7(b). If applicable, Seller agrees:

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.”

Prohibition on using funds under Grants and Cooperative Agreements with Entities that Require Certain Internal Confidentiality Agreements. Seller agrees to comply with the following:

a. Seller may not require Seller’s employees, contractors, or subrecipients seeking to report fraud, waste, or abuse to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting them from lawfully reporting that waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

b. Seller shall notify Seller’s employees, contractors, and subrecipients that the prohibitions and restrictions of any internal confidentiality agreements inconsistent with paragraph a. of this provision are no longer in effect.
c. The prohibition in paragraph 1.a. of this section does not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

d. If the Federal Government determines that you are not in compliance with this award provision it:

   ii. Will prohibit your use of funds under this award, in accordance with section 743 of Division E of the Consolidated and Further Continuing Resolution Appropriations Act, 2015 (Public Law 113-235) or any successor provision of law; and

   iii. May pursue other remedies available for your material failure to comply with award terms and conditions.

2. 252.204-7009 Limitations on the Use or Disclosure of Third-Party Contractor Reported Cyber Incident Information (Oct 2016) Applicable to Orders for services that include support for the Government’s activities related to safeguarding covered defense information and cyber incident reporting.

3. 252.204-7012 Safeguarding Covered Defense Information and Cyber Incident Reporting (Oct 2016) Applicable to Orders for operationally critical support or for which the supplier’s performance will involve covered defense information.


5. 252.211-7003 Item Unique Identification and Valuation (Mar 2016) Applicable to Orders where Harvard is acquiring any item for which item unique identification is required in accordance with paragraph (c)(1) of this clause.


7. 252.223-7008 Prohibition of Hexavalent Chromium (Jun 2013) Applicable to Orders for supplies, maintenance and repair services, or construction materials.

8. 252.225-7007 Prohibition on Acquisition of Certain Items from Communist Chinese Military Companies (Dec 2018).

9. 252.225-7009 Restriction on Acquisition of Certain Articles Containing Specialty Metals (Oct 2014) Paragraphs (a) through (e) are applicable to Orders for items containing specialty metals to ensure compliance of end products.


11. 252.227-7013 Rights in Technical Data – Noncommercial Items (Feb 2014) Applicable to Orders whenever any technical data for noncommercial items, or for commercial items developed in any part at Government expense, is to be obtained from a supplier for delivery to the Government under the sponsoring agreement.
12. 252.227-7014 Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation (FEB 2014) Applicable to Orders whenever any noncommercial computer software or computer software documentation is to be obtained from a supplier for delivery to the Government under the sponsoring agreement.

13. 252.227-7015 Technical Data – Commercial Items (Feb 2014) Applicable to Orders whenever any technical data related to commercial items developed in any part at private expense will be obtained from a supplier for delivery to the Government under the sponsoring agreement.

14. 252.227-7018 Rights in Noncommercial Technical Data and Computer Software – Small Business Innovation Research (SBIR) Program (Feb 2014) Applicable when any noncommercial technical data or computer software is to be obtained from a supplier for delivery to the Government under the sponsoring agreement.

15. 252.227-7019 Validation of Asserted Restrictions – Computer Software (SEP 2016) Applicable when supplier at any tier will be furnishing computer software to the Government in performance of the sponsoring agreement.

16. 252.227-7037 Validation of Restrictive Markings on Technical Data (Sep 2016).

17. 252.227-7038 Patent Rights – Ownership by the Contractor (Large Business) (Jun 2012) FAR 52.2227-11 shall be applicable for Orders for experimental, developmental, or research work to be performed by a small business concern or nonprofit organization, and this clause shall be applicable for all other Orders for experimental, developmental, or research work, unless a different patent rights clause is required by FAR 27.303.

18. 252.227-7037 Validation of Restrictive Markings on Technical Data (Sep 2016) Applicable to suppliers at any tier when requiring delivery of technical data.

19. 252.239-7010 Cloud Computing Services (Oct 2016) Applicable to Orders that involve or may involve cloud services.

20. 252.244-7000 Subcontracts for Commercial Items (Jun 2013).

21. 252.246-7003 Notification of Potential Safety Issues (Jun 2013) Applicable to Orders for (i) parts identified as critical safety items, (ii) systems and subsystems, assemblies, and subassemblies integral to a system, or (iii) repair, maintenance, logistics support, or overhaul services for systems and subsystems, assemblies, subassemblies, and parts integral to a system.

22. 252.246-7008 Sources of Electronic Parts (May 2018) Applicable to Orders for electronic parts or assemblies containing electronic parts, unless Orders is with the original manufacturer.

23. 252.247-7003 Pass-Through of Motor Carrier Fuel Surcharge Adjustment to the Cost Bearer (Jun 2013) Applicable to Orders with motor carriers, brokers, or freight forwarders.

24. 252.247-7023 Transportation of Supplies by Sea (Feb 2019).

CONFLICTS AMONG CLAUSES APPLICABLE TO THE ORDER

In the event of any conflict among the requirements of clauses applicable to the Order, the most stringent requirements of the clauses will apply.