



NOTICE OF INTENT TO AWARD

This Funding Announcement is not a request for applications. This announcement is to provide public notice of the U.S. Geological Survey's intention to fund the following project activities without full and open competition.

ABSTRACT	
Funding Announcement	USGS-18-FA-0034
Project Title	Research and development of mobile imaging geophysical methods for subsurface characterization and monitoring
Recipient	Aarhus University
Anticipated Federal Amount	\$35,262
Cost Share	\$0
Total Anticipated Award Amount	\$90,000
New Award or Continuation?	New
Anticipated Period of Performance	15 Feb 2018 – 14 Feb 2023
Award Instrument	Cooperative agreement
CFDA # and Title	15.808 - U.S. Geological Survey – Research and Data Collection
USGS Point of Contact	Dr. John W. Lane

OVERVIEW

The USGS and Aarhus University will collaborate on research into, or involving, mobile geophysical methods for (1) characterization of and monitoring of porous media and fractured rock aquifers; (2) monitoring groundwater remediation and understanding the 'geophysical footprint' of contaminant degradation; and, (3) evaluating risk to national civil infrastructure. The specific objectives of the proposed agreement are to conduct collaborative research and testing of novel instrumentation and field methods in order to foster closer ties between academia and the USGS. These objectives will be achieved through both short-term collaborative research and longer-term sharing of expertise and equipment.

RECIPIENT INVOLVEMENT

Aarhus University will supply the developmental towed Time-Domain Electromagnetic (tTEM) system. Aarhus University will assemble and operate the equipment. Aarhus University and USGS will jointly process, analyze, and interpret the data and utilize lessons learned from the field surveys to refine data collection and analysis protocols.

USGS INVOLVEMENT

Substantial involvement on the part USGS is anticipated for the successful completion of the objectives to be funded by this award. In particular, USGS will be responsible for the following:

The USGS will be substantially involved in this project. The project will be carried out in close partnership with USGS researchers during field data collection and analysis of the results. USGS will provide field sites, permissions as needed, miscellaneous field supplies, and personnel to assist with system operation. USGS will also provide geophysical results and other data previously collected at the field sites.

SINGLE-SOURCE JUSTIFICATION

DEPARTMENT OF THE INTERIOR SINGLE SOURCE POLICY REQUIREMENTS
Department of the Interior Policy (505 DM 2) requires a written justification which explains why competition is not practicable for each single-source award. The justification must address one or more of the following criteria as well as discussion of the program legislative history, unique capabilities of the proposed recipient, and cost-sharing contribution offered by the proposed recipient, as applicable.
In order for an assistance award to be made without competition, the award must satisfy one or more of the following criteria: (1) Unsolicited Proposal – The proposed award is the result of an unsolicited assistance application which represents a unique or innovative idea, method, or approach which is not the subject of a current or planned contract or assistance award, but which is deemed advantageous to the program objectives; (2) Continuation – The activity to be funded is necessary to the satisfactory completion of, or is a continuation of an activity presently being funded, and for which competition would have a significant adverse effect on the continuity or completion of the activity; (3) Legislative intent – The language in the applicable authorizing legislation or legislative history clearly indicates Congress' intent to restrict the award to a particular recipient of purpose;

- (4) Unique Qualifications – The applicant is uniquely qualified to perform the activity based upon a variety of demonstrable factors such as location, property ownership, voluntary support capacity, cost-sharing ability if applicable, technical expertise, or other such unique qualifications;
- (5) Emergencies – Program/award where there is insufficient time available (due to a compelling and unusual urgency, or substantial danger to health or safety) for adequate competitive procedures to be followed.
- (6) Cooperative Agreements - USGS Unique Authority cited at 43 U.S.C. 36d (Federal, State, and academic partners) or DOI Authority cited at 43 U.S.C. 1457b (not-for-profit organizations).

USGS did not solicit full and open competition for this award based the following criteria:

(4) UNIQUE QUALIFICATIONS

Single Source Justification Description:

Aarhus University is uniquely qualified to conduct research and development of mobile imaging geophysical methods for subsurface characterization and monitoring as evidenced by ongoing projects and recent publications in this area. In particular, Aarhus University is a world leader in airborne geophysics, responsible for major advances in the development airborne Time-domain Electromagnetic (SKYTEM) instrumentation, which was used as the basis for the development of the tTEM (Towed TEM) instrument.

STATUTORY AUTHORITY

§ 43 USC 36d. Cooperative agreements. Notwithstanding the provisions of the Federal Grant and Cooperative Agreement Act of 1977 (31 U.S.C. 6301–6308), the United States Geological Survey is authorized to continue existing, and on and after November 10, 2003, to enter into new cooperative agreements directed towards a particular cooperator, in support of joint research and data collection activities with Federal, State, and academic partners funded by appropriations herein, including those that provide for space in cooperator facilities.