Michigan Economic Development Corporation (MEDC)/
Michigan Defense Center (MDC)
Cyber Range Hub Site
Qualification Process, Selection Process and Guidelines
Region's 6&1

A.   Background

Michigan's Cybersecurity Initiative is the world's first comprehensive state-level approach to cyber, improving the state's defenses and fostering rapidly growing cyber talent and business environments. Michigan is a national leader in cybersecurity and is ranked 3rd for cybersecurity growth potential according to *Business Facilities'* 13th annual rankings report. As a part of the Michigan Economic Development Corporation's (MEDC) Michigan Defense Center (MDC) focus in finding solutions to prevent and respond to cyber threats with a focus on building a strong "cyber ecosystem" of partners in both the public and private sectors. The MEDC/MDC is seeking to identify organizations to provide a site to host and operate a Merit Network, Michigan Cyber Range Hub. (MCR Hub) MCR Hubs are magnet sites in the community for IT security training, testing and certification. The primary focus for the hub is cyber security training, hosting exercises cyber classes.

Occupations in cybersecurity are in exponentially high demand in both the government and private sectors across the nation. It is the fastest growing sector of the IT jobs market. Key industries for cybersecurity include automotive, defense, law enforcement, energy, healthcare, finance, and agriculture, meaning the industry is diversified and resilient from fluctuations in any one industry.

Applicants may partner with other institutions, industry and/or private sector organizations to supply a complete solution. If your response contains proposed services or hosting applications from multiple providers, all responding parties must be clearly identified and a synopsis of the partner relationship as well as the party that will serve as the prime institution/contact/site for the Hub must be detailed. The purpose of this document is to identify potential cyber range hub host sites

B.   Scope of Work

Cyber Range Overview

The Michigan Cyber Range is the nation's largest, unclassified cyber range, a secure platform for students and cyber security professionals to prepare for real-world situations through classes and live exercises. The Cyber Range program is comprised of three pillars, teaching, testing, and training.

TEACH: Provide access to lab-based experiential learning and certification for all compliance requirements and frameworks, including NIST, NICE, NSA, DoD 8570, HiTrust, FFIEC, PCI, CJIS and CSA. This is accomplished by offering more than 40 industry certifications from EC Council, ISC2, ISACA, CompTIA, and Mile2.

TEST: Engage, support and attract surrounding industries and entrepreneurs to provide cost effective and scalable access to software, systems and penetration testing. Merit's Secure Sandbox platform provides an air gapped test bed for capabilities such as product testing, virtual classroom space, and more.

TRAIN: Host live security attack and defense exercises to benchmark skills across the spectrum, from K-20 to public, private, defense and military sectors. Merit's Alphaville virtual city represents a sense of "place" for practitioners to practice realistic hands on exercises in a "secure" and safe environment completely independent of your production network.

A Cyber Range Hub is a magnet site for your community that brings people, schools and employers together to be part of the cybersecurity ecosystem. Hub sites are used to host events, exercises and training classes. Companies can access virtual infrastructure for product development, testing and demonstration. Statewide hubs operate as a physical extension of the Michigan Cyber Range (MCR), the nation's largest unclassified cyber range. Hubs offer more than forty industry-recognized certifications, exercises and workshops aimed at qualifying individuals for positions and contracts in cybersecurity fields.

Cyber Range Technical Components

Cyber Range Hub Connections

Cyber Range Hubs are extension range locations of the Michigan Cyber Range. A hub enables an organization to have a direct, private network connection to the Michigan Cyber Range utilizing Merit's equipment at the hub's connection end point. The connection speed will be provisioned at 100 Mbps as a direct connection to the cyber range sites only. Workstations utilizing the cyber hub connection to the Michigan Cyber Range will not have access to commodity internet with this connection.

Merit Network Connectivity (Cyber Hub Connection) Costs covered under this funding opportunity:

Cost estimates have been established with assistance from Merit Network to cover private network connections at cyber range hub sites. These costs consist of one time connection costs and ongoing connection costs (minimum 3 year agreement starting on the date of connection). This connection routes traffic from the hub site only to the Michigan Cyber Range private cloud and not to commodity internet. **The MEDC funding under this site selection will cover year one of the 3 year agreement.** Cyber Range host sites are expected to be self-sustaining and revenue generating after year one. Site will have access to business and operational support by Merit Network.

Questions about Merit Connection costs should be directed to Jameka Williams: jamekaw@merit.edu

Secure Sandboxes

The Merit Secure Sandbox service provides users with a flexible, secure, virtual environment that can be used for cybersecurity education, training exercises, and software testing. The Sandbox is located in the Merit Cloud and simulates a real-world networked environment with virtual machines that act as web servers, mail servers and other types of machines. Within the sandbox preconfigured virtual machines can be loaded or users can build their own virtual machines. Access is provided through a web browser or VMware's View client from any location, but is a direct connection within the cyber hub without the use or need for commodity internet. This is an important note as one major feature of the secure sandbox environment is that the machines within are isolated and not connected to the internet. Thus activity taking place within the environment is isolated not only from the internet but also from the organization's production environment.

C.   Site Requirements

Host Site:

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- Must be a non-profit, academic, research institution or community facing public organization.
- Should dedicate one full-time, professional for operation functions or dedicate staffing at an appropriate level to achieve proposed objectives
- Eligible sites must be equipped with a currently functioning connection to the Merit Network or have the ability to be readily connected via a circuit to Merit's infrastructure
- Hub sites must commit to training a defined number of individuals and serving a defined number of businesses within the parameters of the Michigan Cyber Range (this number must be defined in the proposal).
- Host sites must contractually commit to a three-year agreement for the Cyber Hub Connection and Secure Sandbox service. This may be beyond the funding source parameters so the organization's plans for sustainability and self-sufficiency will be thoroughly analyzed during the evaluation process.
- Technical requirements:
  o Current internet connection to Merit Network or ability to easily connect
  o Fiber connection to a Merit Partner that will facilitate use of a circuit to connect to Merit infrastructure
  o Ability to facilitate and manage networking/connection needed to connect to Merit equipment at the lab site

D.   Project Qualifications

- Location must be within Prosperity Region 6 or 1
  o Region 6 – Shiawassee, Genesee, Lapeer, St. Clair, Tuscola, Sanilac, Huron
  o Region 1 – Gogebic, Ontonagon, Houghton, Keweenaw, Baraga, Iron, Marquette, Dickinson, Menominee, Delta, Alger, Schoolcraft, Luce, Mackinac, Chippewa
- Must adhere to MEDC and Merit branding.
- Submit reports as requested by MEDC via Merit Network.
- Must outline organizational ties to defense industry and how this hub will provide defense industry integration and support.
- Applicants responding to this document must provide a business plan that lays out a clear description of their current programs related to cyber security and, in conjunction, their visions for future programs involving the cyber range hubs and secure sandboxes and will propose a business plan for the hub detailing proposed operations, plan for sustainability beyond MEDC funding, and should discuss revenue models that will lead to proposed sustainability.
- Cyber range hub must be up and running within the first six months after award of contract.
- Non-Compete:
  o Host sites must agree to only provide training offered and approved by Merit or by Merit's approved curriculum partners.
  o Host sites will only provide training to education-related, government and non-profit organizations through this Merit program. Host sites may however provide training to all other sectors outside this Merit Program.

Additional items to be considered (in no particular order):

I.   Ability to accept the legal terms and financial responsibility associated with contract years outside funding source parameters.
II.   Private/Public Partnerships and matching funds.
III.   Legal considerations regarding proposed hub operations (e.g. Penetration testing agreements, liability regarding hub activities, etc)
IV.   Professional certification offerings from Merit MCR sites are required to run 5 certification classes per year, as well as 2 exercises

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V. Identification of an industry thrust area to be the hub's area of expertise; should not duplicate expertise of nearest hub. Examples: cyber-health, IoT, Industry, Aerospace, Maritime, Drones, Collaborative robotics; preference would be given to defense industry support.

VI. Economic Development

   1. Proposals will need to indicate the applicant's' ability to coordinate with MEDC to reach economic development goals and be an economic driver within the community. Examples of what should be considered (again in no particular order):

      a) Business Development
      b) Business Attraction
      c) Entrepreneurial Support
      d) STEAM program creation and collaboration with STEAM program in local k12 education system.
      e) Workforce/Talent Development
      f) College/University engagement
      g) Internship employment opportunities

E.   Project Deliverables

Site Performance Metrics
Host sites will provide semiannual metrics to include the following:

1. Number of enrollees into certificate programs.
2. Number of certifications issued.
3. Business development via product testing and/or hiring, of those using the hub for professional or business development.
4. Number of graduates.
5. Job placement data/statistics available.
6. Types of students (i.e. existing professionals, new to workforce, transitioning workforce, STEM/STEAM programs are highly encouraged).
7. Number and types of businesses (i.e. industry type and size standard) that have accessed the range to test/validate their technology.
8. Number of out-of-state business/individual participants that have leveraged asset.
9. Number of start-up, emerging technology firms, and University based tech transfer entities that have accessed the range.
10. Attend Merit hosted Collaboration meetings.
11. Run 5 certification classes per year, and 2 exercises facilitated by Hub.

F.   Statement of Qualification Format Instructions

To be considered, each applicant must submit a complete statement of qualification using the format specified below. Each section of the submission should be clearly identified with appropriate headings:

1. **Business Organization and History** – State the full name, address, and phone and facsimile number of your organization and, if applicable, the branch office or other subordinate element that will perform, or assist in performing, the work hereunder. Indicate whether it operates as an individual, partnership, or corporation; if as a corporation, include the state in which it is incorporated. If appropriate, the submission must state whether the organization is licensed to operate in the State of Michigan.

2. **Statement of the Need** – State in succinct terms your understanding of the need(s) presented.

3. **Narrative** – Include a narrative summary description of the proposed effort and of the services(s)/products(s) that will be delivered.

4. **Technical Work Plans** – Provide a detailed research outline and timelines for accomplishing the work.

5. **Prior Experience** – Describe the prior experience of your organization which you consider relevant to the successful accomplishment of the project. Include sufficient detail to demonstrate the relevance of such experience. Submissions should include, in this Section, descriptions of qualifying experience to include project descriptions, costs, and starting and completion dates of projects successfully completed; also include the name, address, and phone number of the responsible official of the client organization who may be contacted.

    Please note that the MEDC may evaluate the organizations prior performance with the MEDC, and prior performance information may be a factor in the qualifying a project.

6. **Project Staffing** – The applicant must be able to staff a project team which possesses talent and expertise in the field of the requirements of this request. Identify a Project Manager and staff assigned by name and title. Include biographies, experience and any other appropriate information regarding the work team's qualification for this initiative. Indicate staff turnover rates. Show where the project team will be physically located during the time they are engaged in the work. Indicate which of these individuals you consider key to the successful completion of the work. Indicate the amount of dedicated management time for the organization's Project Manager and other key individuals. Resumes of qualifications should be supplied for proposed project personnel.

    Please note that the MEDC further reserves the right to interview the key personnel assigned by the applicant to this project and to recommend reassignment of personnel deemed unsatisfactory.

7. **Subcontractors** – List all subcontractors that will be engaged to accomplish the project described in this request; include firm name and address, contact person and complete description of work to be subcontracted. Include descriptive information concerning subcontractor's organization and abilities. Also, the information provided in response to item 5, above, should include detailed information about each potential subcontractor.

8. **Project Authorized Expediter** – Include the name and telephone number of person(s) in your organization authorized to expedite any proposed questions or clarifications.

9. **Additional Information and Comments** – Include any other information that is believed to be pertinent, but not specifically asked for elsewhere.

G.   Process and Selection Criteria

a. Selection Criteria

Proposals will be evaluated based upon the selection process and criteria below. The responses must meet the requirements as stated in Section B and D.

Responses will be considered by a Joint Evaluation Committee (JEC) comprised of individuals selected by the MEDC. The JEC reserves the right to request additional information from any applicant.

Competence, Experience and Staffing Capacity – The statement of qualification response should indicate

the ability of the organization to meet the requirements of this request, especially the time constraints, quality, and recent similar projects. The response should indicate the competence of the personnel whom the organization intends to assign to the project, including education and experience, with particular reference to experience on similar projects and qualifications of applicant's Project Manager and the Project Manager's dedicated management time, as well as that of other key personnel working on this project.

		Weight
1.	Statement of Work	30
2.	Applicant Information	15
3.	Prior Experience	30
4.	Staffing/Team	15
5.	Financial Stability	10
	TOTAL	**100**

During the JEC's review, the responding applicant may be required to make oral presentations of their statement of qualifications to the JEC. These presentations provide an opportunity for applicants to clarify the statements. Only those statements of qualification receiving an overall score of *80 points or more* will be considered for placement on the prequalified list.

b. **Qualification Decision**

Once a decision is made, the responding applicant will be notified of the outcome. If a proposal is deemed qualified and a funding opportunity is secured, a contract between **Merit Network** and the responding organization will be drafted outlining the agreement. MEDC contracts with Merit Network to provide services, there will be **no contract** between the selected applicants and the MEDC in the selection process.

Note that the MEDC reserves the right to reject any and all statements of qualification, waive any errors or irregularities in the response process or in any statement of qualification, reduce the scope of the project, and rebid or negotiate any proposals regarding the revised project or defer or abandon the project.

H. Statement of Qualification Submission Instructions

Submit your statement of qualification to the MEDC via email to tennants@michigan.org Please ensure that the following information appears in the subject line of your email: "MEDC Cyber Range Hub Site Proposal" with Company Name, and "message 1 of 3" as appropriate if the response consists of multiple emails.

The statement of qualification must be signed physically or electronically by an authorized official of the organization.

To be considered, applicants must submit a complete response using the format provided by **July 13th, 2018.**

Please send any questions to tennants@michigan.org.

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