S2MARTS 22-16 Microelectronics Commons Question and Answer NSTXL.org Submits

#	Questions and Answers
1	**In your response to our earlier question, you indicated there were 4 separate budgeting activities. Where do I find more information about each of these Budget Activities? Thank you.**
	The Techical Guidance attachment of the RFS provides links to the reference for Budget Activity descriptions.
2	**I submitted a registration to pitch the Cadence's capabilities during the Core Pitch Days on "Commons". This is a 15-minute presentation. I have not received any confirmation or acknowledgment. Am I going to receive a confirmation or acknowledgment?. Do you have my request in your records? Please advise.**
	NSTXL reached out via email and provided data
3	**Is it still possible to register as a Core?II-VI Inc. Has significant foundry and device fabrication capabilities in the US (and worldwide). Leaders at those divisions have reached out to me to see if there is still a way to participate as a Core.**
	All Microelectronic Commons information is posted at: https://nstxl.org/opportunity/microelectronics-me-commons/
4	**Page 6 of the RFS states "In addition to Hubs, a Microelectronics Commons-wide research infrastructure with the below technical objectives: a) Identifies and develops a 5-Year Intellectual Property (IP) infrastructure that would be accessible to all Hub leads and Hub membership.b) Identifies and develops a 5-Year Electronic Design Automation (EDA) tools infrastructure that would be accessible to all Hub leads and Hub membership."Can you provide additional context to these statements? Does NSXTL desire a Hub entity to propose a model to include all required IP and EDA tools over the five-year period? Alternatively, should individual Hubs propose an IP and EDA model exclusively for its participants needs with each participant gaining access to the IP and EDA tools through the lead Hub or a Government defined authority?**
	This section of the RFS is not for "a Hub entity to propose a model to include all required IP and EDA tools …". Hubs must identify all resources needed for successful microelectronics prototyping in the area(s) of technical expertise they choose to focus on. This section of the RFS is for IP and EDA vendors to separately propose a Commons-wide infrastructure for these tools.
5	**Can you give a more detailed description of "Commercial Leap-Ahead Technologies" or a list of possible technology areas in that category?**
	The Request for Soultions and Technical Area Guidance when posted will define Commerical Leap-Ahead Technologies. All Microelectronic Commons information is posted at: https://nstxl.org/opportunity/microelectronics-me-commons/
6	**Regarding the Microelectronics Commons RFS just released, we notice a change in project sponsor, with NSWC Crane now listed as the sponsor versus the OSDR&E Microelectronics Program, is this a typo?** **OSDR&E was listed in all prior announcements, virtual industry day, on the revised OSDR&E Microelectronics Program Org Chart, as well as currently listed on the Coming Soon Notice on this NSTXL website, and on the OSDR&E ME Commons website: https://www.cto.mail/ct/microelectronics/commons/.** **If it wasn't a typo, we believe the Government may want to correct the Commons RFS to reflect OSDR&E as the project sponsor for several reasons. It is important to clearly show this is a DoD-wide initiative, led by OSD with Tri-Service involvement, so nobody perceives this is just for or led by one service. Also, we understand that OSDR&E is sponsoring/providing the funding directly for this program. Finally, DIB companies have different stakeholders and approvals required for Single-Service led efforts versus OSD/DoD-wide efforts. This may seem minor but it will help to ensure the program is branded, accepted, and adopted by all of DoD. Of course, NSWC Crane is the contracting activity which is accurate in the RFS and has strong technical involvement in the program.**
	Yes, this was a typo and should read OSD R&E Microelectonics Program as indicated in prior releases.
7	**The current RFS requires amendment to address the following issues:** **A. EQUITABLE ACCESS** **Some candidate Regional Hub proposers may have the foresight to itemize all EDA enablement resources needed in their proposal, while most may not entirely know in advance what needs they will encounter once established→ Have's and Have-not's** **B. SECURITY** **B.1. EXPORT CONTROL - As regional Hub performers, universities are not comprehensively capable of gating access only to U.S. Persons or to comply with Export Control.** **B.2. INFRASTRUCTURE – Regional Hubs are unlikely structured to manage common physical and digital Infrastructure for projects, with consistent security protocols across their Subs.** **C. EFFICIENCY** **C.1. COST - EDA and Cloud Infrastructure requirements are common, but disaggregated, would incur significant Pricing variability when provided at Hub or Project level.** **C.2. CONTRACTING – New license Agreement terms with 25-40 non-traditional entities** **C.3. ENVIRONMENT - Incremental or alternate EDA tooling, Services or Data Center requirements** **The ME Commons Hub and Core topology would benefit from a shared infrastructure composed of extensible multi-vendor EDA and Cloud that addresses all of the above issues.**
	In addition to Hub solutions, the Request for Solutions seeks solutions for a Microelectronics Commons-wide research infrastructure of IP and EDA tools. That section of the RFS provides the opportunity for vendors to provide solutions to a shared infrastructure, which may be composed of capabilities from multiple vendors, as you have outline. Specifically on security, security requirements will be determined on a per-project basis.

8 | The following questions came into discussion that I could not find a definitive answer in the RFS. I would appreciate it if I could get your insights on the following items.

On proposal planning/writing:
* For the projects described in the Candidate Prototype Projects proposal, how long is the duration for each project?
* Is there a limit on or suggested number of the number of hub members?
* Is there a limit on or suggested number of the number of participating university professors?
* Is the IP agreement due upon proposal submission?

On budgeting:
* What is the maximum dollar amount that each Hub can request for this first proposal?
* Should the budget for this Hub proposal include the budgets for the Candidate Prototype Projects, even though these are still to be competed in later years?
* Are subaward or fee for service agreements due at the time of proposal submission?
* Should the proposal have separate budget items for the hub itself and the proposed seed projects?
* Is no cost extension allowed?

Duration of projects is up to 60 months. There is no limit on the number of hub members or participating faculty members. The hub model, including all hub model requirements, is due at time of award. Maximum award amount for individual awards is $100M. The budget for Hub proposals should not include the budgets for candidate prototype projects; however, a ROM for those projects is requested within the RFS. Hub members and their roles are due at time of proposal submission; the full hub model with all requirements are due at time of award. Yes, the solution should have separate budget items for the Hub itself and a separate ROM for the candidate projects. Regarding "no cost extension", if referring to the closing date of the RFS, the Government does not anticipate an extension at this time.

9 | (1) What is the nature of the regional hubs? Do they have to be located geographically in a specific region, or could they involve any institutions national wide?
(2) Should a regional hub be led by an academia organization (University) or better led by a company?
(3) To what degree should a hub concentrate on a particular focus area vs. including multiple focus areas? i.e., what is the right balance between breadth and depth?
(4) Do Hub proposals need to reach out to potential cores to have them integrated into the proposal?
(5) Will DoD consider merging hub proposals at the decision stage, or will funding only be for proposers on the selected proposal?

Questions 1-4 were previously answered in Q&A from the Commons Virtual Awareness Day. The Commons Awarenss Day Q&A is accessible by clicking "View Q&A Responses" under "Awareness Day" at https://nstxl.org/opportunity/microelectronics-me-commons/. For Question 5, teaming recommendations may be made at multiple stages during the solution evaluation phase of the project.

10 | To submit a proposal for a hub in relation to the ME Commons RFS, is there a separate process that we need to follow to formally register as a hub, or just submitting the proposal by Feb 28 will make the submission automatically eligible as a hub?

There is not separate process to submit as a Hub. Submit the proposal by Feb 28, 2023 prior to 1200 EST to be eligilbe as a Hub.