

January 2, 2019

Samantha Deshombres  
Chief of the Regulatory Coordination Division  
Office of Policy and Strategy  
U.S. Citizenship and Immigration Services  
U.S. Department of Homeland Security  
20 Massachusetts Avenue, NW  
Washington, DC 20529

RE: Registration Requirement for Petitioners Seeking to File H-1B Petitions on  
Behalf of Cap-Subject Aliens  
(DHS Docket Number – USCIS-2008-0014)  
(RIN 1615-AB71)

Dear Chief Deshombres,

The Semiconductor Industry Association (SIA)<sup>1</sup> appreciates the opportunity to comment to USCIS on the above-captioned proposal on a new registration requirement for H-1B petitions. SIA is the trade association representing the semiconductor industry in the United States. SIA member companies are engaged in the research, design, and manufacture of semiconductors. Semiconductors are a key enabling technology for information technology and communications, health care, transportation, energy, and military systems integral to our national security. The U.S. is the global leader in the semiconductor industry, and continued U.S. leadership in semiconductor technology is essential to America's continued global economic and technology leadership and national security.

A talented and educated workforce is essential to the success of the semiconductor industry in the U.S., and a well-functioning and efficient immigration system for high-skilled immigrants – including H-1B visas – is critical to the industry's ability to attract and retain the best and brightest employees from around the world. The Commerce Department's National Institute of Standards and Technology (NIST) earlier this year issued a request for information on the "Current and Future Workforce Needs to Support a Strong Domestic Semiconductor Industry," and the preamble clearly articulates the importance of a strong semiconductor workforce:

President Trump's National Security Strategy, released in December of 2017, specifically highlights the importance of emerging technologies to economic growth and security, including advances in data science, encryption, autonomous technologies, new materials, advanced computing technologies, and artificial intelligence—all of which are powered by and dependent upon continued advances in semiconductor technology. Maintaining the

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<sup>1</sup> More information about SIA and the semiconductor industry is available at [www.semiconductors.org](http://www.semiconductors.org).

technological edge of the United States in this critical industry area requires a robust domestic workforce.<sup>2</sup>

One element of the success of the semiconductor industry is the ability to attract and employ the best and brightest from around the world. For the industry in the U.S. to maintain its leadership, it must have access to highly educated scientists and engineers, typically with advanced degrees, and many of these talented individuals are foreign nationals. As a result, SIA supports the prioritization of foreign nationals graduating from U.S. institutions with advanced degrees in the H-1B visa lottery, but we are concerned with the pre-registration requirements set forth in the notice.

### 1. SIA Supports the Prioritization of Foreign Students with Advanced Degrees

SIA supports the move to a more merit-based priority system for the H-1B lottery and to prioritize graduates from U.S. universities with MS and PhD degrees in conducting the lottery. The process of designing and manufacturing advanced semiconductors is highly complex, and the industry relies on highly-educated workers with advanced degrees to perform this work in order to compete in the global marketplace. Many of the scientific and engineering positions in the semiconductor industry require an advanced degree, and a bachelor's degree is often insufficient.

SIA member companies experience challenges finding enough qualified U.S. workers with the advanced graduate level education, skills, and expertise needed to compete for the design and manufacture of advanced semiconductors. These skills include expertise in technical areas such as artificial intelligence/machine learning, advanced silicon design, advanced manufacturing engineering and process development, software architecture, and quantum computing, and firmware engineering. Technical positions in the semiconductor industry include Design Engineers at the Master's and PhD levels in fields such as Electrical and Computer Engineering, Process Engineers at the Master's and PhD levels in fields such as Chemical or Materials Engineering, and Software Engineers at the Master's and PhD levels in fields such as Computer Science or Computer Engineering.

Unfortunately, there is a lack of sufficient supply of U.S. nationals with the advanced education, skills and expertise required for high skilled semiconductor positions. The problem is demonstrated by U.S. university graduation statistics. Today, about half of the graduate students in the physical sciences in U.S. universities are foreign nationals, and that percentage increases the higher the degree and the more prestigious the school. The most recent data from the National Center for Education Statistics (NCES) Integrated Post-Secondary Education Data System (IPEDS) underscores the lack of U.S. workers who choose to pursue advanced degrees in key engineering areas:

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<sup>2</sup> 83 Fed. Reg. 32842 (July 16, 2018)

2016 National Center for Education Statistics (NCES) Integrated Post-Secondary Education Data System (IPEDS)		All Graduates	
Discipline		Master's degree	Doctor's degree
<b>Computer Science/Information Technology</b>	Nonresident Total	29,231	1,386
	Percent Foreign Nationals	63.0%	56.5%
	Total Graduates	46,419	2,415
<b>Electrical, Electronics and Communications Engineering/ Computer Engineering/Microelectronics</b>	Nonresident Total	10,651	1,537
	Percent Foreign Nationals	75.8%	68.9%
	Total Graduates	14,048	2,231
<b>Material Science/Material Engineering</b>	Nonresident Total	762	506
	Percent Foreign Nationals	50.2	52.0%
	Total Graduates	1,517	973

Figure 1 – advanced degrees awarded to foreign nationals (available at <https://nces.ed.gov/ipeds/>)

A recent report by Stuart Anderson of the National Foundation for American Policy, “The Importance of International Students to American Science and Engineering” (2017),<sup>3</sup> relies on different data sets, including the National Science Foundation’s Survey of Graduate Students and Post-Doctorates, to further document the scarcity of U.S. worker graduate students in STEM fields.

Given this landscape, in order to remain globally competitive and encourage these innovative jobs remain in the U.S., it is imperative that the semiconductor industry have access to foreign nationals studying in these advanced fields at U.S. colleges and universities. SIA supports the plans of USCIS to change the selection process for cap-subject H-1B petitions so that the lottery will yield more beneficiaries who have earned a U.S. master’s or higher from U.S. institutions.

While SIA supports this element of the proposal, we emphasize that this in no way detracts from the importance of recruiting and retaining highly-educated individuals from non-U.S. universities. The competitiveness of semiconductor companies in the U.S.

<sup>3</sup> <http://nfap.com/wp-content/uploads/2017/10/The-Importance-of-International-Students.NFAP-Policy-Brief.October-20171.pdf>.

hinges on our ability to attract and retain the “best and brightest” from around the world. Scientists and engineers educated at non-U.S. universities have made – and will continue to make – immense contributions to the semiconductor industry in the U.S. and globally, and it is imperative that the industry maintain access to these talented individuals from around the world. The competition for talent is global, and U.S. immigration policy must reflect this reality.

## 2. SIA Opposes the Rushed Implementation of Pre-Registration Requirements Set Forth in the Notice

While SIA supports the concept of pre-registration, SIA opposes the effort to implement a new pre-registration requirement effective for filings that would otherwise be submitted the first week of April 2019. SIA is concerned that these changes will disrupt the efficient and sound administration of the H-1B process in the coming year. The registration process should be delayed until FY2021 to allow for time to address concerns and properly test a registration system.

USCIS is currently months behind in adjudicating positions from this past year, and it is difficult to imagine how the agency will be able to implement a dramatically new system and complete all outstanding FY2019 adjudications concurrently and within the next three months. Moreover, many SIA member companies already have invested a substantial amount of time and effort preparing petitions for filing for the FY2020 cap season, including the analysis, document collection, and other requirements (e.g., prevailing wage determinations). Simply put, the imposition of brand-new pre-registration requirements would necessitate a huge commitment of financial and capital resources to modify these petitions and processes. This is impractical for large filers and will inject additional uncertainty and considerable expense into an already complex system. There is no value to the public of proceeding with a new pre-registration requirement for FY2020 cap-subject cases, and adopting this new requirement with such little advance notice, no advanced planning, little information about what information would be filed during pre-registration and no opportunity to test the system for technical problems would be incredibly misguided, to say the very least.

The notice indicates that the agency is aware it may be unable to implement the pre-registration process in time for FY2020. Accordingly, the proposal states that “DHS may elect to finalize and implement changes to the selection process independently from the new H-1B registration process, or before such registration process is implemented.” We call on DHS to adopt this approach and elect to defer implementing the H-1B registration process for FY2020 cap-subject petitions and implement the process in the FY2021 lottery.

## 3. The Time Frame for the Lottery and Submission of Selected Petitions is Insufficient to Prepare Petitions and Obtain a Timely Decision by USCIS

SIA is further concerned about the amount of time petitioners would have to submit petitions after the lottery results are announced. The proposed rule would grant

petitioners “at least 60 days to properly file a completed H-1B cap-subject petition for the named beneficiary. USCIS would notify all petitioners with selected registrations that the petitioner is eligible to file an H-1B cap-subject petition on behalf of the named beneficiary within the designated filing period.” Many SIA member companies historically submit a large number of H-1B petitions, and this 60-day timeframe is insufficient to prepare its petitions.

Preparing H-1B cap-subject cases typically takes four to five months for high volume SIA member companies. As noted above, many of our members are well into planning and preparing for the FY2020 lottery. Even accounting for a 50% selection rate, preparing 1000 petitions in 60 days would be a logistical challenge, requiring a member company prepare all 2000 cases in order to be ready to file the selected petitions. Having companies prepare all of their petitions due to the brief filing window would defeat the objective of the registration process – to eliminate wasted preparation work.

An additional concern with the 60-day filing window is that USCIS would not receive petitions until approximately June 1, 2019. Based on processing times for current cap-subject petitions that were submitted April 1, 2018, it is unlikely that USCIS would be able to adjudicate all H-1B cap-subject petitions in a timely manner, assuming they are filed between June 1 and October 1, 2019.

While this concern could be mitigated if USCIS allowed for premium processing for cap-subject petitions, this would come at a significant cost (\$1,410.00 per petition) to petitioners, and SIA member companies are reluctant to rely on premium processing as a sole solution.

Prompt adjudication of H-1B petitions is of concern to all beneficiaries and petitioners. It is additionally concerning for students in F-1 status who rely on “cap gap” authorization. Assuming USCIS cannot adjudicate all cap-subject petitions by the October 1, 2019, beneficiaries relying on cap gap would lose work authorization for an indefinite period of time after September 30 until the beneficiary’s individual case is adjudicated.<sup>4</sup>

SIA suggests that (1) the lottery be held in February and possibly January and (2) allow a substantial window to submit petitions after April 1. Having a longer lead up time to April 1 will allow petitioners to file more petitions closer to April 1 and create a steady stream of petitions to review through the cut-off date on June 1. By having a smoother workload spread out over a few months USCIS should be able to better manage adjudication resources. Moreover, running the lottery two weeks before April 1 and only having 60 days to file will invariably result in most H-1B petitions being filed close to June 1 effectively robbing USCIS of April and May to adjudicate petitions exacerbating the number of petitions not adjudicated before October 1.

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<sup>4</sup> Although not part of the NPRM, SIA encourages DHS to consider modifying the cap gap regulation to grant work authorization until the H-1B is approved. Work authorization ends on September 30, 2019 under the current system cap gap even if the H-1B petitions is not approved by then.

4. Allowing Employers to Submit Beneficiaries' Names in Bulk, Rather than Individually, Serves the NPRM's Objective of Promoting Efficiency.

SIA proposes allowing petitioners to submit all of its beneficiaries in one submission rather than individually as outlined in the NPRM. It is counterproductive to create a manual process requiring data entry by hand of 1000s of beneficiaries if the objective of pre-registration is to eliminate the burden of preparing petitions. Adding a bulk submission process in addition to the manual individual entry process strikes an appropriate balance between larger filers and individual filers.

Assuming DHS views manual single entry as a means to reduce fraud, SIA respectfully suggests that a manual data entry system simply punishes larger users. SIA suggests that DHS use audits to detect patterns of abuse instead of a crude tool such as manual data entry.

5. Adding Attestation Requirements to Validate the Existence of a True, Bona Fide Job for Each Lottery Submission will Help Prevent Efforts to "Game" the System.

SIA member companies hire high skilled professionals who possess the qualifications and skills to serve in specific roles where there is a skill shortage of qualified U.S. Workers. Each H-1B petition is specific to a need at the member company. The beneficiaries of our member's petitions are not interchangeable workers.

SIA fears that some petitioners may flood the new registration system with eligible but interchangeable beneficiaries. Some employers may need large numbers of entry level professionals to meet client demands. These employers could register thousands of interchangeable potential beneficiaries with the goal of having a small number of lottery winners satisfy their respective contractual requirements. For example, an employer may only need five entry level software engineers. This employer might end up registering 20 software engineers because it does not care which employees get selected as long as it obtains the coveted five H-1B slots.

In contrast, SIA member companies cannot, and would not, make up 20 beneficiaries with the goal of having at least five selected. SIA companies have specific needs for technology skills that are hard to find. When our members hire a foreign worker that meets those needs that worker is targeted to fill the need and cannot be arbitrarily swapped out for another lucky beneficiary selected in the lottery. If a specific beneficiary is not selected, our members' needs go unfulfilled.

The NPRM notes the possibility of investigations if the Service detects patterns of abuse; however, the proposed rule fails to make clear what enforcement mechanisms will be used to preserve the integrity of the registration system. To avoid the risk of gaming the system, SIA encourages DHS to implement strong attestation requirements forcing a petitioner to affirmatively declare that there is a bona fide and true job

opportunity for each entry submitted and that the petitioner would be in a position to fill all of its H-1B petitions if they were all selected in the H-1B lottery.<sup>5</sup>

6. Allow Petitioners to Correct Non-Material Errors in Any Successful Pre-Registration Submission at the Time of Filing the H-1B Petition.

Non-material typographical or other errors may occur on a lottery pre-registration submission. For example, it is conceivable that a beneficiary's name may be misspelled. Assuming the individual's pre-registration is selected in the lottery, SIA encourages USICS to allow an employer to fix errors that are non-material to whether a beneficiary should have won the lottery provided the continuity of the beneficiary's identity is clear. It is appropriate for USCIS to permit an employer to correct these non-material errors at the time of filing the H-1B petition.

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SIA supports the proposal to give prioritization to foreign nationals with advanced degrees, but we request that DHS delay implementation of a new pre-registration system until the FY2021 lottery.

SIA appreciates the opportunity to provide our comments on this important proposal.

Sincerely,



David Isaacs  
Vice President, Government Affairs

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<sup>5</sup> SIA further suggests that DHS include exceptions to the filing requirement for employees who leave employment or other bona fide reasons preventing submission of an H-1B should be included.