

# Artificial Intelligence Cyber Challenge (AIxCC)

# Rules

03/29/2024 Version 5

**Defense Advanced Research Projects Agency** Information Innovation Office



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# **Document Change Summary**

The AIxCC competition guidelines will be updated throughout the competition period (Fall 2023 – August 2025). Please check for updates regularly and send any questions or feedback to <u>rules-aixcc@darpa.mil</u>.

	Section	Description	Date
1	All	Initial Release	08/09/2023
2	1.4; 2.2	Schedule and Funded Track SBIR deadline extended to Oct. 3, 2023	09/01/2023
3	1; 1.3; 1.3.1; 1.3.2; 1.4; 2.1; 2.2; 2.3; 3.1.1; 3.2.4; 3.3.2; 3.5	Schedule clarifications; SBIR re-opened with new deadline; Updated Open-Source Requirements	10/26/2023
4	All; Appendix A	Updates, additional information, and clarifications to all Sections; Funded Track replaced by the Small Business Track, which includes the Small Business Track Competition (Appendix A); Open- Source Requirements	12/13/2023
5	1.3; 1.31; 1.5; 2.1; 2.1.1; 3.1; 3.1.1; 3.1.2; 3.1.3; 3.3; 3.4	Small Business Track, participation, and prize money clarifications; Schedule additions; ASC technical release updates	3/29/2024





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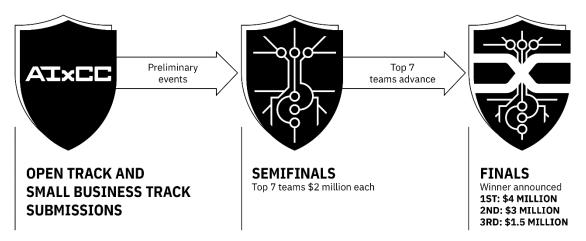


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# 1 Overview



#### 1.1 Terms and Conditions

These Terms and Conditions ("Terms") apply to the Defense Advanced Research Projects Agency (DARPA) AI Cyber Challenge (AIxCC). Please read these Terms carefully as they form a binding legal agreement between you and the Challenge Sponsor. As owner of this document, DARPA may revise the Terms at any time by posting an updated version to the Challenge Website without notice.

CHALLENGE SPONSOR: DARPA is sponsoring the AIxCC Challenge under the authority granted in 15 U.S. Code § 3719 - Prize competitions, America COMPETES.

CHALLENGE HOST "Challenge Website": https://aicyberchallenge.com/

YOU MAY NOT SUBMIT AN ENTRY TO A CHALLENGE UNLESS YOU AGREE TO THESE TERMS. YOUR SUBMISSION OF AN ENTRY IN THE AI CYBER CHALLENGE CONSTITUTES YOUR AGREEMENT TO THE CHALLENGE TERMS AND CONDITIONS.

Full terms and conditions can be found here: https://aicyberchallenge.com/terms-condition/





## 1.2 Background

In an increasingly interconnected world, software undergirds everything from financial systems to public utilities. As this code enables modern life and drives productivity, it also creates an expanding attack surface for malicious actors. But advances in modern technology provide a path towards addressing the cybersecurity dilemma. The past decade has seen the development of promising new AI-enabled capabilities. When used responsibly, this new technology has significant potential to help address key societal challenges, like cybersecurity.

The Artificial Intelligence Cyber Challenge (AIxCC) is a two-year competition asking the best and brightest in AI and cybersecurity to defend the software on which all Americans rely. AIxCC will ask competitors to design novel AI systems to secure this critical code and will award a cumulative \$29.5 million in prizes to Teams with the best systems, including up to \$7 million in prizes to small businesses to empower entrepreneurial innovation during the initial phase of AIxCC.

AIxCC will bring together leading AI companies that will work with DARPA to make their cutting-edge technology and expertise available for challenge competitors. These companies will collaborate with DARPA to enable competitors to develop state-of-the-art cybersecurity systems.

AIxCC is collaborating closely with the open-source community, to guide teams in creating AI systems capable of addressing vital cybersecurity issues, such as the security of critical infrastructure and software supply chains. Most software, and thus most of the code needing protection, is open-source software, often developed by community-driven volunteers. Further, open-source software comprises most of the code running on critical infrastructure in the United States today, including the electricity and telecommunications sectors.

AIxCC competitions will occur at one of the world's top cybersecurity conferences, DEF CON. The semifinal competition will be at DEF CON 2024, and the final competition at DEF CON 2025, where the top prize will be \$4 million.





#### 1.3 Structure

AIxCC will kick off in March 2024. AIxCC will consist of two main competition events:

- August 2024: AIxCC Semifinal Competition (ASC)
- August 2025: AIxCC Final Competition (AFC)

Prior to the ASC, AIxCC will allow two tracks for participation:

- o the Open Track and
- the Small Business Track.

To participate in the Small Business Track, eligible Teams will compete in the Small Business Track Competition through submission of a Concept White Paper. The Small Business Track will consist of up to seven (7) small businesses with winning papers who will receive Small Business Track prize money. DARPA intends to provide Small Business Track prize money to the winning small businesses prior to the ASC. Refer to Section 2.1 and Appendix A for further details. Open Track Teams will participate in AIxCC without Small Business Track prize money.

All Teams will compete in the ASC, regardless of track, and up to the seven (7) highest scoring Teams, regardless of track, will receive monetary prizes and advance to the AFC. These Teams will have outperformed the other Teams and exceeded a performance threshold.

Following the ASC, seven (7) finalist Teams will have one year to mature their technology. The finalist Teams will then compete in the AFC in August 2025.

The top three (3) scoring competitors in the AFC, having outperformed the other Teams and exceeded a performance threshold, will receive additional monetary prizes. DARPA plans to award prizes cumulatively totaling \$29.5 million during AIxCC.

Each AIxCC competition will feature challenges designed and evaluated by a team of subject matter experts. Teams will be given a large suite of challenges based on real-world critical open-source and critical infrastructure software. Teams will design AI-driven systems to find and fix vulnerabilities within these challenges.

AIxCC will partner with leaders in AI to make cutting edge AI technology available to competitors, such that competitors can leverage it within their solutions.

#### 1.3.1 Small Business Track Structure

The Small Business Track is comprised of the winners of the Small Business Track Competition. Between AIxCC Kickoff and the ASC, Small Business Track Teams will have the opportunity to participate in additional AIxCC events and demonstrate their technology to DARPA during a virtual site visit.

Refer to Appendix A for further details and schedule of the Small Business Track Competition.





#### 1.4 Prizes

All prizes are subject to the rules in Section 2.1 and Section 3.4. Small Business Track Prizes are subject to additional rules described in Appendix A, Section A.2.1.

#### 1.4.1 Small Business Track Competition Prizes

Up to seven (7) small businesses will each receive \$1 million in prize money following the Small Business Track Competition. The Small Business Track competition will occur per the schedule described in Section 1.5 and Appendix A, Section A.2. Small Business Track prizes are subject to additional rules in Appendix A, Section A.2.1.

#### 1.4.2 ASC Prizes

Up to seven (7) eligible top scoring Teams in the ASC will be awarded prizes of \$2 million each and will advance to the AFC.

#### 1.4.3 AFC Prizes

Up to three (3) eligible top scoring Teams in the AFC will be awarded prizes in the following amounts:

- 1st Place: \$4 million
- 2nd Place: \$3 million
- 3rd Place: \$1.5 million





## 1.5 Schedule

Milestone	Date	Details
AIxCC Announcement	August 9, 2023	AIxCC is officially announced.
Open Track Registration <b>Opens</b>	December 13, 2023	Refer to Section 2.3, "Team Registration"
Small Business Track Competition <b>Opens</b>	December 13, 2023	Refer to Section 2.3, "Team Registration" and "Appendix A: Small Business Track Competition"
Request for Comments on Scoring Algorithm and Exemplar Challenge Preview <b>Opens</b>	December 13, 2023	Refer to <u>https://aicyberchallenge.com/semifinals/</u> for additional information.
Small Business Track Competition <b>Closes</b>	January 15, 2024	Refer to Section 2.3, "Team Registration" and "Appendix A: Small Business Track Competition"
Request for Comments on Scoring Algorithm and Exemplar Challenge Preview <b>Closes</b>	January 15, 2024	Refer to <u>https://aicyberchallenge.com/semifinals/</u> for additional information.
Small Business Track Prize Winners Announced	March 11, 2024	Refer to "Appendix A: Small Business Track Competition"
Small Business Track Competition: Prizes Awarded	March 18, 2024	Small Business Track Competition: Prizes Awarded
AIxCC Kickoff Collaborator Resource Access Begins	March 29, 2024	AIxCC will make semifinals competition information available at: <u>https://aicyberchallenge.com/semifinals/</u> . Refer to Section 3.1.1, "AIxCC Kickoff"





Jenkins Exemplar Release	April 15, 2024	Exemplar CPV for Jenkins Challenge Project
Challenge Project Sandbox Opens	April 15, 2024	Sandbox for creating your own Challenge Projects
Open Track Registration Closes	April 30, 2024	
Exemplar Challenge #3 Release	May 15, 2024	New Exemplar CPV
CRS Evaluation Window	May 30, 2024 – July 8, 2024	Competitors will be able to submit their CRS and check if the submitted CRS can automatically solve the exemplar challenges.
Final Exemplar Challenge Release	June 14, 2024	Final Exemplar CPV before Semifinals
Cyber Reasoning Submission Portal <b>Closes</b>	July 15, 2024	
AIxCC Semifinal Competition (ASC)	August 8-11, 2024	DEF CON 2024 Refer to Section 3.1, "AIxCC Semifinal Competition (ASC)"
AIxCC Final Competition (AFC)	August 2025	DEF CON 2025 Refer to Section 3.2, "AIxCC Final Competition (AFC)"





# 2 Competing in AIxCC

#### 2.1 Tracks

DARPA provides two tracks for AIxCC Teams:

- Open Track
- Small Business Track

The Open Track is the default way teams will compete in AIxCC.

The Small Business Track will consist of up to seven (7) small businesses who score the highest in the Small Business Track Competition.

The Small Business Track Competition is limited to those Teams meeting the eligibility criteria listed in Appendix A, Section A.2.1. After the Small Business Track Competition concludes, all AIxCC Teams meeting eligibility criteria will compete in the ASC. The top seven (7) scoring Teams in the ASC that meet the eligibility requirements and conditions will be invited to compete in the AFC.

Rankings in the ASC and the AFC will be based on the same technical evaluation criteria and scoring mechanisms for all competitors, irrespective of track.

For further details on the Small Business Track Competition, including eligibility and registration requirements, refer to Appendix A.

#### 2.1.1 Small Business Track

For information on the Small Business Track, refer to Section 1.3 and Appendix A.

## 2.2 Eligibility<sup>1</sup>

An AIxCC Entrant (Team) is comprised of an Entrant Official (U.S. Entity<sup>2</sup> or Individual), a Team Leader (Individual) and an optional set of team members (Individuals). Teams may enter under an official affiliation (e.g., a university or corporation). Teams may also have an official set of sponsors. Affiliations and sponsors must be disclosed.

AIxCC is open to team members and individuals of all nationalities, ages, academic institutions, and business entities, subject to the caveats below:

• An Entrant may be an individual competing alone or a team representing an academic institution, business, or group of individuals. Each Entrant must include at least one U.S. citizen or permanent resident. Entrants may enter under an official affiliation (e.g., a

<sup>&</sup>lt;sup>1</sup> This section specifically refers to eligibility to participate in Competition events; eligibility to receive prizes is based on 15 U.S.C. § 3719.

<sup>&</sup>lt;sup>2</sup> Within this guidance, a U.S. Entity is defined as a private entity incorporated in and maintaining a primary place of business within the United States; see 15 U.S.C. § 3719(g)(3).





university or corporation). Entrants may also have an official set of sponsors. Affiliations and sponsors must be disclosed.

- Only one application per team shall be submitted.
- Each team must identify one Entrant Official and one Team Leader. The Entrant Official and the Team Leader may be the same individual. The Entrant Official must be a U.S. citizen or permanent resident and must speak English. The Entrant Official will serve as the official administrative point of contact for communications with the AIxCC Organizers. The Team Leader must speak English and will serve as the official technical point of contact for communications with the AIxCC Organizers.
- Each team is intended to be a wholly separate entity that does not share members/affiliations or sponsorship (financial interests) with any other team. Individuals cannot be members of multiple Teams. Teams may have one or more sponsors. Teams may not collaborate or share their technical approaches and solutions with other Teams. Teams who do not comply with these guidelines will be subject to disqualification.
- Teams consisting of individuals who were/are members of the same organization prior to AIxCC may be permitted to compete as long as the Teams do not collaborate and do not share organizational sponsorship. Organizations that form to compete in AIxCC may only field one team.
- An Entrant shall not be deemed ineligible because the Entrant used Federal facilities or consulted with Federal employees during the contest if the facilities and employees are made available to all individuals and entities participating in the contest on an equitable basis.
- All participants (any individuals who enter the contest) under 18 years of age require written authorization of a parent or guardian.
- For eligibility to win prizes, refer to Section 2.2.2, "Prize Eligibility" and Section Open-Source Requirement", and Appendix A, "Small Business Track Competition".





	AIxCC Entrant (Team)				
Entrant (Team)	Entrant Official	Team Leader	Team Member(s)	Sponsor(s)	Official Affiliation
Required	Required	Required	Optional	Optional	Optional
U.S. Entity,	Individual	Individual	Individual(s)	U.S. Entity	U.S. Entity
Individual, or				or	
Individuals				Individual(s)	
An Entrant	If the Entrant is a	The Team	All Team	Sponsors	Affiliations
may be an	U.S. Entity, the	Leader and	Members	must be	must be
individual	team must	Entrant Official	must be	disclosed.	disclosed
competing	identify an	may be the same	disclosed		
alone, or a team	Entrant Official	individual.	prior to the AIxCC		
representing	If the Entrant is	The Team	Semifinal		
an academic	an Individual,	Leader must	Competition		
institution,	Entrant Official	speak English.	(ASC).		
business, or	is the same	spean English	(1150).		
group of	individual	The Team			
individuals.		Leader will			
Each Entrant	An Entrant	serve as the			
must include	Official must be	official			
at least one	a U.S. citizen or	technical point			
U.S. citizen or	permanent	of contact for			
permanent	resident, and	communications			
resident.	must speak	with AIxCC.			
	English.				
AIxCC					
participation	This individual				
by minors	will serve as the				
requires	official				
authorization	administrative				
by a parent or	point of contact				
guardian.	for				
	communications				
	with AIxCC.				





The following individuals and organizations are <u>**not**</u> eligible to participate in AIxCC competitions:

- Official Government entities (from the U.S. or any other country) are not eligible to participate as Entrants, Sponsors, or Official Affiliates. Government employees (from the U.S. or any other country) acting within the scope of their employment are not eligible to participate as Entrants, Entrant Officials, Team Leaders, Team Members, or Sponsors.
- Individuals acting as AIxCC contest judges are not eligible to participate in AIxCC.
- Government Military members or Civilian employees may be eligible to participate if done so in their personal capacity and if the work performed for the contest is NOT related to their official government duties. Government members or employees should first consult their supervisors and designated agency ethics officials before participating in the contest. DARPA employees and support contractors, their spouses, dependents, and household members are not eligible to participate.
- Any personnel funded by DARPA to support AIxCC, or otherwise collaborating with DARPA in support of AIxCC, including individuals acting as challenge judges or in an evaluation capacity, are not eligible to participate. This group includes any Federally Funded Research and Development Center (FFRDC) or Government personnel whose scope of work includes supporting AIxCC.
- AIxCC Collaborators, entities that have entered into Cooperative Research and Development Agreement (CRADA) with DARPA for collaboration, support and/or advisement for AIxCC and their employees acting within the scope of their employment, are not eligible to participate as Entrants, Entrant Officials, Team Leaders, Team Members, or Sponsors.
- The Entrant Official and Team Leader cannot be listed on the U.S. Treasury Office of Foreign Assets Control Sanctions Programs.
- Individuals, organizations, or sponsors that are named in the Specially Designated Nationals list of the U.S. Department of Treasury are not eligible to participate.

Individuals should follow their parent organization's rules and regulations regarding outside activities.

DARPA reserves the right to disqualify a participant whose actions are deemed to violate the spirit of the competition for any reason, including but not limited to, the violation of relevant laws or regulations during participation in the Challenge.





#### 2.2.1 Small Business Track Competition Eligibility

For additional Small Business Track Competition eligibility requirements, refer to Appendix A, Section A.2.1.

#### 2.2.2 Prize Eligibility

The Government's obligation for prizes under AIxCC is subject to the availability of appropriated funds from which payment for prize purposes can be made. No legal liability on the part of the Government for any payment of prizes may arise unless appropriated funds are available to DARPA for such purposes. To be eligible for prizes, Teams must first be registered. The award process requires recipients to furnish information that may trace or identify recipients either individually or as an organization (e.g., Social Security Number or Tax Identification Number). The Entrant Official of each registered team is responsible for providing the award information necessary for prize disbursement. DARPA will reach out by email to the Entrant Official of each registered team to either confirm their vendor status or request the required forms. DARPA is not responsible for disbursement of prizes to any team members other than the primary contact/organization. Prizes will only be issued in U.S. dollars and require the bank of the prize recipient to accept U.S. dollars.

#### 2.3 Team Registration

To compete in AIxCC, all Teams must register via the competition website.

There is no fee for entry. Initial registration materials will be made available on the AIxCC website (<u>https://aicyberchallenge.com/</u>). Refer to Section 1.4 for registration open and close dates.

Incomplete registrations, including registrations that fail to satisfy the requirements outlined in the registration materials, will not be accepted. DARPA may disqualify any team that does not meet the requirements specified herein or in the registration materials available at <a href="https://aicyberchallenge.com/">https://aicyberchallenge.com/</a>).

All registered Teams will be entered into the Open Track by default. Eligible Teams submitted additional registration materials to compete in the Small Business Track Competition. Refer to Section 2.3.2 for further details.

#### 2.3.1 Registration Paper

To compete in the ASC, applicants must submit a Registration Paper that outlines the team's technical approach. The Registration Paper should include a discussion of the methodology and tools employed, the expected results, and planned future directions after the ASC. This requirement aims to ensure that potential participants in the competition have a coherent and well-defined plan for their project, and that they can convey their ideas effectively.

For Registration Paper Guidelines, refer to https://aicyberchallenge.com/opentrack.





Registration Papers will not be scored, but papers that fail to satisfy the Registration Paper guidelines will not be accepted. DARPA may disqualify any team that does not meet the registration requirements,

Teams competing in the AIxCC Small Business Track Competition submitted a Small Business Track Concept White Paper in lieu of a Registration Paper. The Concept White Paper will also satisfy the requirements for the Registration Paper. Refer to Appendix A, Section A.2 for further guidance.

#### 2.3.2 Small Business Track Competition Registration

For details and requirements of the Small Business Track Competition Registration, refer to Appendix A, Section A.2.2.

#### 2.4 Disqualification

This competition brings together the best and brightest in AI and cybersecurity to defend the software relied upon by all Americans. All Teams are expected to conduct themselves professionally and fairly, keeping in mind that this Challenge is intended for the benefit of the public, industry, and consumers. To maintain the integrity and fairness of the Challenge, behaviors contrary to this objective, will not be tolerated, including but not limited to:

- Engaging in any denial-of-service (DoS) attacks against other competitors, such as packet flooding for network denial of service;
- Manipulating or tampering with the Challenge scoring infrastructure;
- Sabotage, tampering, misuse, attacks, or unauthorized use of the contest organizers' property, contest infrastructure, equipment, software, or any items related to the contest outside of the contest environment;
- Coercion or intimidation of any kind; and/or
- Cyber Reasoning Systems (CRSs) must be developed to find and fix vulnerabilities in challenges. If the CRS has other missions, please obtain prior written clearance from the AIxCC Organizers.

Any violations of the above may result in immediate disqualification from the competition. Exceptions related to the contest infrastructure will be examined on a case-by-case basis at the discretion of the AIxCC Organizers. DARPA reserves the right to disqualify a participant whose actions are deemed to violate the spirit of the competition for any reason, including but not limited to, the violation of relevant laws or regulations during participation in the Challenge.

Teams that fail to meet eligibility requirements, registration requirements or other requirements and conditions specified herein may be disqualified by DARPA.

Incomplete registrations, including registrations that fail to satisfy the requirements outlined in the registration materials, will not be accepted. DARPA may disqualify any team that does not





meet the requirements specified herein or in the registration materials available at <u>https://aicyberchallenge.com/</u>).

The AIxCC Organizers reserve the right to update these rules at any time before and during the contest to maintain the integrity and fairness of the competition. If Teams have concerns about their actions potentially leading to disqualification, please contact the Organizers at <u>AIxCC@darpa.mil</u> before each event.

#### 2.5 Judging and Review

For any AIxCC Competition reviewed by a judging panel of Government subject matter experts, the following applies: Once submissions have been received, all contestant names will be provided to the SMEs and judges, who will then certify that no conflicts of interest exist or will disclose any potential conflicts with any of the Teams. All judges will be required to sign nondisclosure agreements before gaining access to AIxCC submissions. Judges will not be eligible to participate in AIxCC.

AIxCC Team submissions may be reviewed by the AIxCC Organizers, including DARPA contractors, for official AIxCC purposes including technical evaluations. All reviewers will be required to sign nondisclosure agreements before gaining access to AIxCC submissions. AIxCC Organizers are not eligible to compete in the AIxCC. DARPA does not intend to disclose AIxCC submissions to any other third parties.





# 3 AIxCC Semifinal and Final Competitions

### 3.1 AIxCC Semifinal Competition (ASC)

The ASC will be held at DEF CON 32 in Las Vegas, Nevada in August 2024. Teams can experience the ASC virtually or in person. The ASC will determine which Teams may compete at the AIxCC Final Competition (AFC).

Documentation and guidance on the ASC can be found at <u>https://aicyberchallenge.com/semifinals/</u>.

#### 3.1.1 AIxCC Kickoff

The release of AIxCC competition documentation in March 2024 will serve as the official kickoff of AIxCC.

#### 3.1.2 Preparing for ASC

Competitors will have the opportunity to test their CRS using the exemplar challenges, which is similar in format to the ASC. Success in the preliminary testing events will not be evaluated as part of ASC scoring. The testing events provide an opportunity for competitors to gain an understanding of the format, procedure, and scoring mechanism to be used during the ASC. Preliminary events will be held in the late Spring and Summer of 2024.

#### 3.1.3 ASC Format

For information on ASC Procedures refer to https://aicyberchallenge.com/semifinals/.

#### 3.1.4 Guidelines for ASC Scoring

The ASC Procedures Guide and ASC Scoring Guide will be released in Spring 2024. Information on the ASC Scoring and Procedures will be released in December 2023 as a Request for Comment (RFC). Refer to <u>https://aicyberchallenge.com/semifinals/</u> for further information.

#### 3.1.5 Advancement to the AIxCC Final Competition (AFC)

DARPA will award the ASC prizes (refer to Section 1.4.2) and invite Teams to the AFC based on their score in the ASC. Up to seven (7) Teams will win \$2 million and advance to the AFC as Finalists.

To win an ASC prize and compete in the AFC as a finalist, Teams must:

- Have submitted a CRS accepted by DARPA, which achieved a top ranking, non-zero ASC score, including outperforming a baseline of the current state-of-the-art, publicly available technology for vulnerability discovery and remediation.
- Submit an ASC Technical Report accepted by DARPA, documenting their ASC CRS design.
- Continue to meet all eligibility requirements.





As a condition of accepting an ASC prize and invitation to compete in the AFC, Teams agree to:

- Submit all source code and artifacts needed to build and run their ASC CRS, to DARPA; and
- Release their ASC CRS submission, as well as their AFC CRS submission, as opensource following the AFC competition in August 2025. Refer to Section 3.4 for further information about open-source requirements.

# 3.2 AIxCC Final Competition (AFC)

The AIxCC Final Competition (AFC) is scheduled to be held at DEF CON 33 in Las Vegas, Nevada in August 2025. The AFC Procedures and Scoring Guide will be released in Fall 2024.

The AIxCC organizers reserve the right to update the AFC Procedures Guide and AFC Scoring Guide at any time before the contest to maintain the integrity and fairness of the competition.

#### 3.2.1 Competing in the AFC

To compete in the AFC, Teams must:

- Receive an invitation from DARPA following the ASC (refer to Section 3.1.5),
- Agree to release their ASC CRS and AFC CRS as open-source following the AFC. Refer to Section 3.1.5 and Section 3.4),
- Submit all source code and artifacts needed to build and run their AFC CRS, to DARPA, including a detailed plan to open-source their AFC CRS and ASC CRS following the AFC. For further detail, refer to Section 3.4.

#### 3.2.2 Winning AIxCC

DARPA will determine up to three (3) Teams to win final prizes based on their score in the AFC. To win prizes, the top three Teams must:

- Have submitted a CRS accepted by DARPA, which achieved a top ranking, non-zero AFC score, including outperforming a baseline of the current state-of-the-art, publicly available technology for vulnerability discovery and remediation.
- Submit an AFC Technical Report, documenting their AFC CRS design.
- Continue to meet all eligibility requirements and conditions, including those described in Section 3.2.1 and Section 3.4.





#### 3.3 Technical Resources

AIxCC is collaborating with companies in AI and cybersecurity to provide resources to Teams competing in AIxCC. Resource access will change depending on the stage of AIxCC. Teams on either track will have equal access to these resources. Collaborators are listed on the AIxCC website: <u>https://aicyberchallenge.com/collaborators/</u>.

## 3.4 Open-Source Requirement

As a condition of accepting the ASC and AFC prizes and competing in the AFC, Teams must agree to release their competition ASC CRS and AFC CRS as open-source software under a license approved by the Open Source Initiative (OSI) following the AFC in August 2025. This requirement only applies to Teams advancing past the ASC.

This open-source requirement is not a condition for Teams to accept prize money under the Small Business Track Competition. However, the open-source requirement will apply to all Teams, on both the Open Track and the Small Business Track as a condition of accepting ASC and AFC prize money and competing in the AFC.

Teams are only subject to the open-source requirement should they advance past the ASC.

All finalists must release their AFC CRS and ASC CRS as open-source within two (2) weeks of the completion of AFC in August 2025. Failure to do so may result in DARPA releasing a finalist's CRS as open-source.

The open-source requirement applies to all source code and artifacts, including, but not limited to, models, for the Cyber Reasoning System (CRS) generated for, and used as an entry in AIxCC. Pre-existing intellectual property (IP) that existed prior to the AIxCC kickoff date, or external, commercial products on which the CRS relies, are exempt from the open-source requirement. Teams are encouraged to mark any documents containing proprietary information accordingly.

Teams who fail to comply with the open-source requirement will be disqualified from participation in AIxCC.





# 4 Scope and Precedence

The rules outlined herein apply to all applicants and participants in the AIxCC. However, nothing in these rules, to include this document and any subsequent AIxCC rules documents, may be interpreted as modifying the statement of work or authorizing work outside the terms and conditions of any existing agreements or contracts with DARPA.

DARPA will release additional documents with rules updates, procedures, and other information for Teams. These additional documents carry the full authority of the rules in this document.

Additional documents to be released include the following, at a minimum:

AIxCC Documents:

- AIxCC Master Schedule
- AIxCC Extended Registration

AIxCC Semifinal Event (ASC) Documents:

- ASC Procedures Guide
- ASC Scoring Guide

AIxCC Final Event (AFC) Documents:

- AFC Procedures
- AFC Scoring Guide

All documents including this Rules document will be posted and updated on the AIxCC website <u>https://aicyberchallenge.com/</u>. All AIxCC documents including these Rules should be considered living documents, subject to update and clarification throughout the AIxCC program.





# 5 Acronyms

- AIxCC Artificial Intelligence Cyber Challenge
- AFC AIxCC Final Competition
- ASC AIxCC Semifinal Competition
- CP Challenge Project
- CRS Cyber Reasoning System
- DARPA Defense Advanced Research Project Agency







# Artificial Intelligence Cyber Challenge (AIxCC) Appendix A Small Business Track Competition





# Appendix A: Small Business Track Competition

## A.1 Overview

The Small Business Track of AIxCC replaces the Funded Track and is designed to empower innovation and enable small businesses to compete in AIxCC. DARPA will award up to seven (7) small businesses with prizes of \$1 million each. Teams that are eligible and registered to participate in the Small Business Track Competition will compete by submitting a Concept White Paper. Based on the scoring of these Concept White Paper, up to seven Teams with the highest scores will be awarded prize money.

#### A.1.1 Schedule

Milestone	Date	
Small Business Track Competition <b>Opens</b>	December 13, 2023	
Small Business Track Competition Closes	January 15, 2024	
Small Business Track Competition Prize Winners Announced	March 11, 2024	
Small Business Track Competition Prizes Awarded	March 18, 2024	





# A.2 Competing in the Small Business Track Competition

## A.2.1 Eligibility

An Entrant (Team) to the AIxCC Small Business Track Competition must satisfy all eligibility requirements defined in Section 2.2. In addition, an Entrant to the Small Business Track Competition is subject to the following eligibility requirements. An Entrant must be:

- A U.S. Entity, defined as a private entity incorporated in and maintaining a primary place of business within the United States; see 15 U.S.C. § 3719(g)(3).
- A small business in accordance with Small Business Administration guidance under 13 C.F.R. § 121.201; or any U.S. Entity that meets the requirements of 13 C.F.R. § 121.201 and agrees to register as a small business if eligible to participate in this competition.
- Within the size standard by North American Industry Classification System (NAICS) code 541715 as noted in 13 C.F.R. § 121.201 (<u>https://www.sba.gov/document/support-table-size-standards</u>).
- Registered in the System for Award Management (SAM) and have or obtain an active Commercial and Government Entity (CAGE) code (<u>https://cage.dla.mil/</u>); or agree to register in SAM and obtain an active CAGE code if eligible to participate in this competition.

For general eligibility requirements for AIxCC, refer to Section 2.2.

#### A.2.2 Registration

To compete in the AIxCC Small Business Track Competition, Teams must register as an AIxCC Team via https://aicyberchallenge.com, as described in Section 2.3.

A prospective AIxCC team that satisfies the eligibility requirements outlined in Section A.2.1 may apply to the AIxCC Small Business Track during AIxCC Team Registration.

Registrants will submit a Concept White Paper, which will be submitted via AIxCC Team Registration. For further information, refer to Section A.3.1.

Registered Teams not awarded in the AIxCC Small Business Track Competition will be placed in the Open Track of the competition and will be considered registered, provided they satisfy all applicable eligibility and registration requirements, as described in Section 2.2. The Concept White Paper will satisfy the Registration Paper requirement for the Open Track Registration (refer to Section 2.2.1). Teams are not required to participate in the Open Track and can email <u>aixcc@darpa.mil</u> if they do not plan to participate.





There is no fee for entry. Registration instructions will be made available on the AIxCC website (<u>https://aicyberchallenge.com/smallbusinesstrack</u>). Refer to Section 1.5 and Section A.1.1 for registration open and close dates.

Incomplete registrations, including registrations that fail to satisfy the requirements outlined in the registration materials, will not be accepted. DARPA may determine any team ineligible for the competition that does not meet the requirements specified herein.

# A.3 Concept White Paper Contest

The Small Business Track Competition invites all eligible small businesses (refer to Section A.2.1) to complete a concept paper outlining their knowledge, skills, capabilities and approach for this challenge. Submitted Concept White Papers will be reviewed by a panel of Government subject matter experts and judges. Based on the conclusions of the judging panel, DARPA will identify up to seven (7) winning Teams to participate in the AIxCC and receive \$1 million in prize money. These seven Teams will comprise the Small Business Track.

#### A.3.1 Concept White Paper Criteria

AIxCC Small Business Track Concept White Papers must be in two parts:

- Abstract: Competitors will write a one (1) page abstract that describes a technical concept Cyber Reasoning System (CRS) for the AIxCC.
- White Paper: Competitors will write a paper, of no more than twenty (20) pages, that discusses the following:
  - A justification of feasibility of their CRS concept. Papers are encouraged to include supporting evidence, such as:
    - Publicly available evidence
    - Past work
    - Research results
    - Other relevant supporting evidence
  - The technical approach for constructing their CRS for competing in AIxCC, including:
    - Specific objectives and metrics
    - Risks and mitigations
    - Technical plan for accomplishment of objectives
  - The open-source strategy for their CRS should their team advance past the ASC (in accordance with the Open-Source Requirement described in Section 3.4). This plan should:





- Identify a license approved by the Open-Source Initiative (OSI) under which their CRS would be released.
- Identify any part or dependency of their expected CRS which would be exempt from the Open-Source Requirement, described in Section 3.4, including pre-existing intellectual property (IP) that existed prior to the AIxCC kickoff date, or external, commercial products on which the CRS may rely.
- Identify any risks in their open-source strategy and describe mitigations.

#### A.3.2 Scoring Criteria

Concept White Paper submissions will be evaluated and ranked using the following scoring criteria:

- Abstract (10%)
- Concept White Paper (80%)
  - $\circ$  Justification of feasibility (35%)
  - Technical Approach -(35%)
  - Open-source strategy -(10%)

Proposal Quality and Completeness – (10%)

#### A.3.3 Judging

The Concept White Paper (refer to Section A.3.1) will be judged by a panel of Government subject matter experts (SMEs) and judges. Submissions will be evaluated and ranked using the Scoring Criteria in Section A.3.2.

Once entries have been received, all contestant names will be provided to the judges, who will then certify that no conflicts of interest exist or will disclose any potential conflicts with any of the Teams. All judges will be required to sign nondisclosure agreements before gaining access to AIxCC submissions.

AIxCC Team submissions may be reviewed by the AIxCC Organizers, including DARPA contractors, for official AIxCC purposes including technical evaluations. All reviewers will be required to sign nondisclosure agreements before gaining access to AIxCC submissions. AIxCC Organizers are not eligible to compete in the AIxCC. DARPA does not intend to disclose AIxCC submissions to any other third parties.