

# Re-Establishing the UK on the Global Cyber Stage

UK Cyber Team Impact Report 2024-2026



# Program Purpose & Vision

## Mission

The UK Cyber Team initiative was established to identify, develop, and support the United Kingdom's most promising emerging cyber talent aged 18–25. Delivered by SANS in partnership with the Department for Science, Innovation and Technology (DSIT), the programme combined national competition, advanced training, expert coaching, and international deployment to prepare participants to represent the UK on the global cyber stage.

Through immersive Capture the Flag (CTF) competitions, world-class instruction, and sustained industry engagement, the programme equipped participants with the technical expertise, teamwork, and professional confidence required to progress into high-impact cyber careers.

Beyond individual outcomes, the initiative strengthened the UK's national cyber capability by creating a structured pathway for elite cyber talent and re-establishing the UK's presence within international cyber competition.

## Problem Addressed

The UK cybersecurity sector faced a persistent skills shortage, with demand for highly skilled practitioners continuing to outpace supply. While a range of initiatives existed to introduce young people to cyber security, there was no dedicated national pathway for advanced talent capable of bridging the gap between education, industry, and elite international competition.

At the same time, the UK lacked representation at major international cyber competitions, limiting visibility of national capability and opportunities for young talent to benchmark against global peers. Structural barriers, including limited access to advanced training, industry networks, and high-pressure competitive environments, further constrained progression for many capable individuals.

The programme responded to these challenges by creating a national, merit-based competition and development pathway that identified top talent at scale, supported progression through targeted training and wellbeing initiatives, and enabled the UK to re-establish its presence within the international cyber competition community.

## Strategic Goal

The programme was guided by four core strategic goals:

1. Strengthen national cyber capability: By identifying and developing elite young cyber talent capable of competing internationally and progressing into critical cybersecurity roles.
2. Create a clear progression pathway for advanced talent: Bridging the gap between education, industry, and international competition through structured training, coaching, and exposure.
3. Re-establish the UK on the international cyber competition stage: Enabling participation in leading events such as the European Cyber Security Challenge and building long-term international partnerships.

Success was measured not only through competition results and certifications, but through sustained engagement, progression, and the creation of a scalable model for future national cyber talent development.



# Programme Partner

## Department for Science, Innovation and Technology (DSIT)

The UK Cyber Team programme was delivered in partnership with the Department for Science, Innovation and Technology (DSIT), which leads the UK Government's work to strengthen the nation's position as a global science and technology leader.

As part of its responsibility for delivering the National Cyber Strategy (2022–2030), DSIT worked to shape the strategic intent and national alignment of the UK Cyber Team programme. The partnership ensured the programme aligned closely with UK cyber skills priorities, while providing a clear route

for engagement with government, industry, and international stakeholders. DSIT's role helped position the UK Cyber Team as a nationally recognised initiative, contributing to workforce development objectives and supporting the UK's re-entry to the international cyber competition community.

Through collaboration with SANS and industry partners, DSIT helped establish the UK Cyber Team as a nationally recognised initiative, supporting the UK's return to international cyber competitions and reinforcing the government's commitment to developing world-class cyber capability.



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# National Selection and Team Formation (March 2024 – March 2025)



## Round One: Online CTF (BootUp!)

### Participants & Completion

1,310 applications were received  
467 participants competed online  
309 participants completed at least one challenge

### Format

Round One was a 24-hour online CTF designed to be accessible to participants with a wide range of experience. Challenges covered key cyber disciplines, including web exploitation, forensics, cryptography, reverse engineering, and network analysis. Participants could attempt challenges in any order and were supported by an active online community.

### Performance Highlights

Top participants solved the vast majority of available challenges, demonstrating strong technical depth across multiple disciplines.  
90% of surveyed participants said they would take part again

### What We Learned

Round One successfully engaged a large and diverse group of young people from across the UK. It demonstrated that an open, inclusive format can surface high-potential talent while encouraging collaboration, curiosity, and confidence.



## Round Two: Extended Online CTF

### Participants & Completion

186 participants engaged.  
153 participants completed all available challenges

### Format

Round Two ran flexibly over six weeks, allowing participants to complete a 48-hour CTF at a time that suited them. Leaderboards were removed to encourage learning and development, and participants could access personalised dashboards to support improvement.

### Performance Highlights

Strong engagement despite academic and seasonal pressures  
High completion rates reflected motivation and commitment

### What We Learned

Round Two reinforced that development matters as much as selection. The flexible format helped participants build skills, address gaps, and grow in confidence - while still providing valuable insight to support final team selection.



## Round Three: Live Final

### Participants & Completion

199 finalists competed in person  
Supported by 27 assessors from 24 organisations  
198 participants completed the live competition

### Format

The Live Final was delivered as a high-energy, esports-style event. Participants worked in teams to solve a narrative-driven CTF while being observed for technical, teamwork, communication and leadership skills.

### Performance Highlights

Participant satisfaction rated 4.6 out of 5  
92% of supporting organisations expressed interest in future involvement

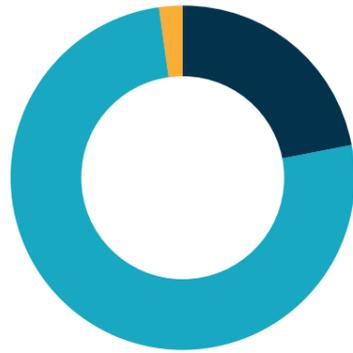
### What We Learned

Alongside technical problem-solving, assessors observed how participants communicated, collaborated, and responded under pressure. Skills such as teamwork, leadership, adaptability, and clear decision-making were evaluated in real time, alongside technical execution. By combining structured technical assessment with observation of soft skills, the programme was able to select a Team that was not only technically strong but also capable of working cohesively, communicating effectively, and supporting one another in high-pressure competition environments. This approach ensured the final team reflected the balance of skills required at an international level.

# Competition Demographics

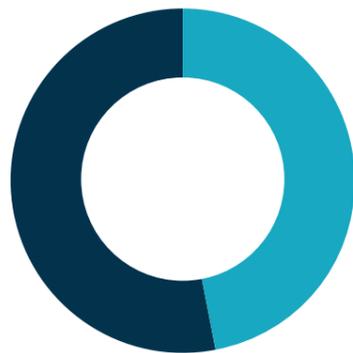
## Applicant Demographics (National Competition)

Total applications received: 1,310



### Gender

- 22% female
- 76% male
- 2% non-binary / prefer not to say



### Ethnicity

- 47% of applicants identified as being from minority ethnic backgrounds
- 53% identified as White British or White Other



### Age

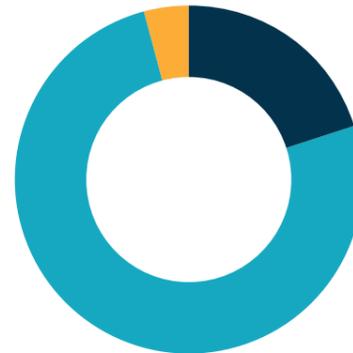
- 64% aged 18-21
- 36% aged 22-25

### Geographic Reach

- Applications received from all regions of the UK, including England, Scotland, Wales, and Northern Ireland
- Strong representation from both urban and non-urban areas, reflecting national reach

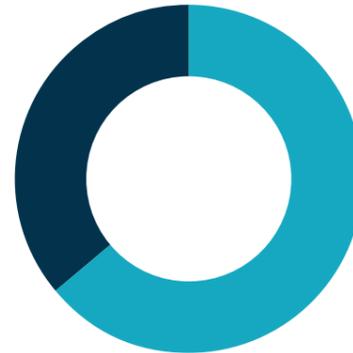
## Live Final Demographics (Top 200 Invited Participants)

Participants at Live Final: 199



### Gender

- 20% female
- 76% male
- 4% non-binary / prefer not to say



### Ethnicity

- 36% identified as being from minority ethnic backgrounds



### Age

- 62% aged 18-21
- 38% aged 22-25

The Live Final demographic profile demonstrated that diversity was maintained through competitive progression, even as technical thresholds increased.

# Strengthening Talent, Community and Competitive Readiness

## Supporting Health and Wellbeing

Wellbeing was embedded throughout Phase One to support participant performance in high-pressure environments. A range of initiatives were delivered to promote physical, mental, and emotional wellbeing, including self-help resources, expert-led webinars, drop-in clinics, and the Walk or Wheel into Wellbeing Challenge.

At the Live Final, this support was extended into the physical event environment. Dedicated breakout and sensory spaces were provided to give participants access to quiet, low-stimulus areas throughout the competition. In addition, on-site wellbeing practitioners, Holly Foxcroft and Nikki Webb, were present to offer informal support, guidance, and reassurance during the event. This combination of planned resources and in-person support helped create a supportive, inclusive environment, enabling participants to manage nerves, maintain focus, and perform at their best.

### Impact:

- Over 10.5 million steps recorded
- Improved self-reported physical and mental wellbeing
- Participants reported sustaining positive habits beyond the programme

## National Reach and Engagement

Phase One of the UK Cyber Team programme reached young cyber talent from across the UK and created a shared learning environment that extended beyond competition participation.

### Reach and participation

- 1,310 applications received over a six-week period
- Participation from all UK regions, ensuring national representation
- 467 participants gained experience competing in a national online CTF

### Participant experience and community

- Exposure to structured CTF competition, often for the first time
- Opportunities to collaborate and problem-solve with like-minded peers
- Experience working in high-pressure, time-bound technical environments
- Development of early peer networks within the UK cyber community

### Engagement and visibility

- Nearly 50,000 social media impressions generated across programme activity
- Thousands of engagements, driven largely by participant-generated content
- High levels of positive sentiment reflecting pride in participation and community involvement

# How SANS and the UK Cyber Team Competition Helped Emily Bridge Transform Her Cyber Skills, Confidence, and Career Path

A first-hand look at how SANS Institute and the UK Cyber Team Competition initiative unlocks talent, develops skills, and builds future cybersecurity leaders.

This case study highlights Emily Bridge's experience, from the first qualifying round to the Live Final, and how the program helped her build confidence, sharpen her skills, and build a future in cybersecurity.

## Learning at Every Stage

In Round 1, a timed, online qualifier focused on foundational cybersecurity knowledge, Emily was able to see where she stood and where she needed to improve. "I looked back at the challenge categories where I struggled and made sure to revisit them in preparation for the next rounds," she said. These challenges pushed her to get serious about building her technical baseline knowledge.

Round 2 consisted of a more advanced team competition unconstrained by a timeclock. Emily described it as a turning point. "With no live leaderboard, there was less pressure, and I feel that I performed better." She learned to communicate under pressure, think critically, and adapt quickly, all of which were skills that carried into later rounds.

## Competing in the Live Final

The Live Final in Birmingham brought together over 250 attendees for a full day of hands-on challenges. The environment was intense but motivating. "I had an amazing time meeting cyber enthusiasts from all over the UK. Everyone was each other's cheerleader," she said. Emily stood out not just for her technical ability but also for her teamwork and resilience, qualities that helped her win a spot in the UK Cyber Team Competition.

"Definitely the scavenger hunt on induction night! It got us communicating and allowed us to understand the team dynamics and how we work best."

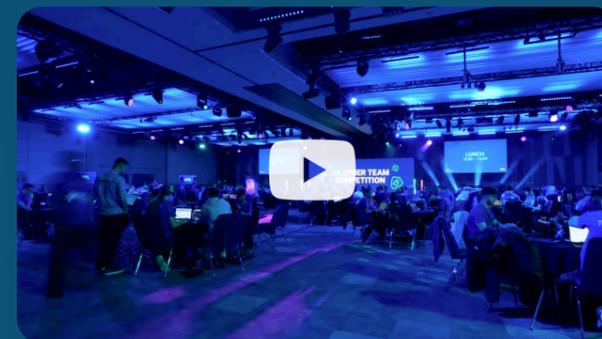
## Career Impact

"We got to connect with the sponsors and learn about their opportunities. I also appreciated that SANS held one on one recruitment sessions to discuss career options and provide career advice."

**"If this competition ran again, I would 100% apply."**



Emily Bridge



Watch the official highlights video to experience the energy, talent and national impact of the UK Cyber Team Competition first-hand.

# The UK Cyber Team

## Selecting the Team

The final UK Cyber Team was selected by a panel representing DSIT, SANS, and programme partners, drawing on performance data and observations from across the competition. Selection was informed not only by technical results, but also by the structured soft-skills assessment conducted during the Live Final, where participants were observed working in team-based, high-pressure scenarios.

Selection considerations included:

- Technical capability across multiple cyber disciplines, demonstrated throughout the competition
- Teamwork, communication, and leadership, assessed through in-person observation during the Live Final
- Ability to collaborate under pressure, adapt to changing challenges, and support team

members

- Diversity and national representation, ensuring the team reflected a broad cross-section of UK talent
- Eligibility for international competition, including age balance and competition requirements

This approach ensured the selected team combined strong technical expertise with the interpersonal and collaborative skills required to perform effectively at an international level.

The result is a team that reflects both excellence and inclusion, ready to represent the UK on the world stage.

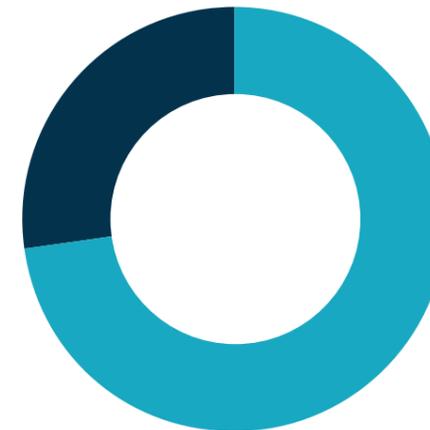


### Gender

- 37% female
- 60% male
- 3% non-binary

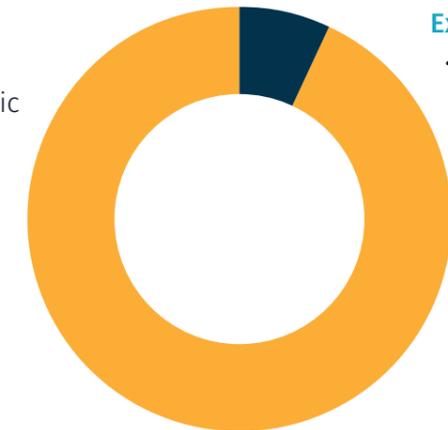
**30** members selected

**100%** accepted their place on the team



### Ethnicity

- 27% from minority ethnic backgrounds



### Experience

- 93% had previous CTF experience



# Training, Coaching, and International Competition

## (June 2025 – March 2026)

### Objectives

- Prepare the UK Cyber Team for elite international competition
- Deliver advanced, competition-aligned training
- Embed coaching, leadership, and wellbeing support
- Re-establish the UK's presence on the European cyber competition stage
- Lay foundations for long-term programme sustainability

### How Phase Two Worked

Phase Two followed a structured training and competition cycle, combining hybrid training, formal assessments, international practice CTFs, and coached competition deployment. Preparation was aligned closely to ECSC formats and expectations.

### Coaches: Experience and Impact

A dedicated coaching structure was introduced to support both technical and personal development. Three coaches were appointed through an open, merit-based process, selected for deep technical expertise, elite CTF experience, and mentoring capability.

Coaches translated training into competition readiness, supporting strategy and communication during live events. They also provided pastoral support during high-pressure periods. Their involvement directly contributed to performance, retention, and team cohesion.

### Practising at an International Level: Friendly CTFs

Between June and September 2025, the team participated in multiple international practice events:

- Team Italy National Qualifier: ECSC-style jeopardy exposure
- Enowars A/D CTF (19 July): 56th of 112 teams
- Team Ireland National Qualifier (9 August): 3rd and 7th overall
- International Scrimmage (30 August): 2nd overall (with USA, Ireland, Bulgaria)
- Compete with Team Europe (13–14 September): 10th overall
- FAUST A/D CTF (27 September): 43rd of 140 teams

Optional events included Snyk Fetch the Flag (3rd of 1,200 teams), demonstrating exceptional individual commitment.



### Training Undertaken

#### Soft Skills and Team Dynamics (Inzpire)

- Focus: Teamworking, communication, leadership, and performance under pressure
- Highlights: Psychological safety, role clarity, decision-making, workload management, and collaboration in competitive environments

#### Cloud Security and Identity (Simon Vernon)

- Focus: Cloud security fundamentals and identity management in competition-style scenarios
- Highlights: IAM misconfigurations, credential handling, federation concepts, cloud attack paths, and defensive controls

#### Digital Forensics and Incident Response (Kat Hedley)

- Focus: Forensic investigation and evidence analysis relevant to CTFs and real-world incidents
- Highlights: Disk image analysis, file recovery, artefact interpretation, timeline reconstruction, and forensic tooling

#### Active Directory Privilege Escalation (Jean-François Maes)

- Focus: AD exploitation techniques critical to competition environments
- Highlights: Advanced tooling and real-world attack paths

#### Attack/Defence Fundamentals (with Team Bulgaria)

- Focus: A/D mechanics, strategy, and coordination
- Highlights: International collaboration and ECSC alignment

#### Industry Training Day (NCC Group, Cheltenham)

- Focus: Advanced real-world challenges in AI, reverse engineering and hardware
- Highlights: Industry-led scenarios and team bonding

#### Malware Analysis (Xavier Mertens)

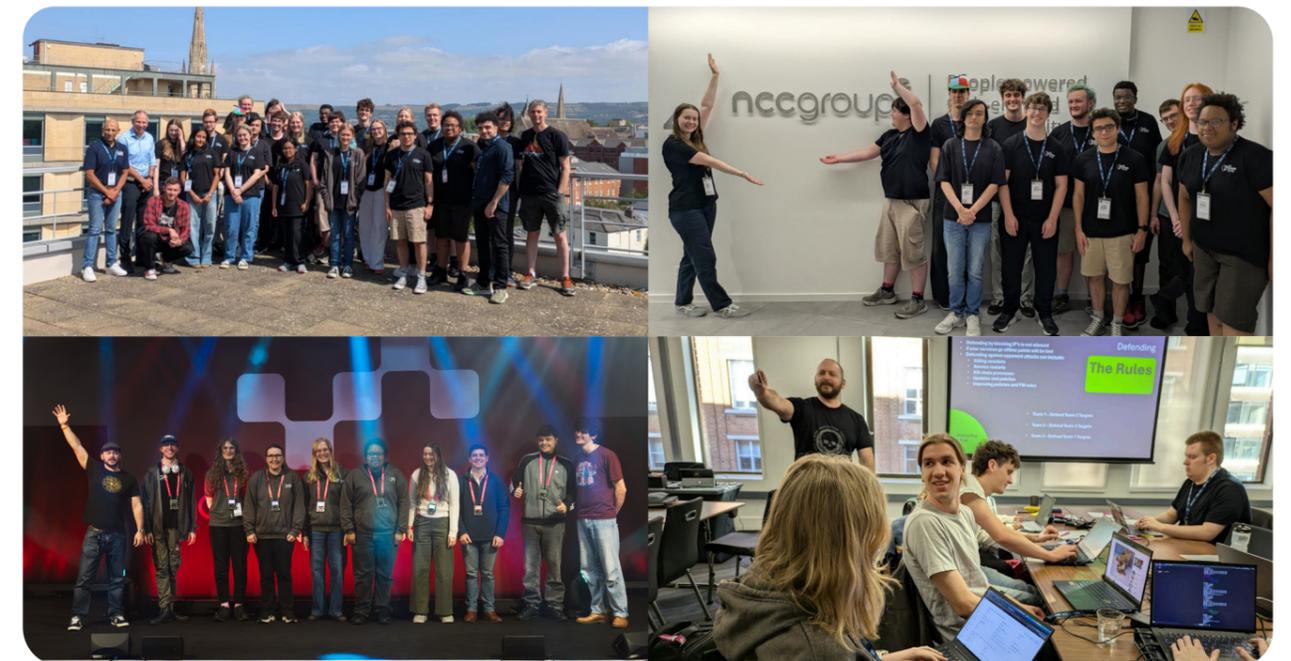
- Focus: Reverse engineering and live sample walkthroughs
- Highlights: Hands-on VM-based analysis

#### ECSC Bootcamp (Team Coaches)

- Focus: Team strategy, communication, ECSC readiness
- Highlights: Peer learning and final competition preparation

#### Attack/Defence Infrastructure & Tooling (Simon Vernon)

- Focus: Cloud-based attack-and-defence, and tool/service development
- Highlights: Communication, collaboration and reflection



# International Competition: Zero Days CTF Irish Colleges Cyber-Security Challenge (22 March 2025 | Dublin, Ireland)



ZeroDays

Watch the UK Cyber Team take on Zero Days CTF 2025 at Croke Park!

As part of their first international engagement, the UK Cyber Team travelled to Dublin in March 2025 to compete in the ZeroDays Irish Colleges Cyber-Security Challenge, one of Europe's most dynamic in-person (CTF) events. The ZeroDays CTF, held in the iconic Croke Park, brought together more than 300 participants across 128 teams from Ireland and beyond, showcasing a broad range of cybersecurity skills across web security, network exploitation, cryptography, reverse engineering, forensics, and more.

Rather than a single team entry, the UK Cyber Team fielded three sub-teams — UKCT Elite, UKCT Discovery, and UKCT Team 3 — each competing independently against a strong international field. This structure enabled tactical diversity, international benchmarking, and peer learning opportunities:

## Achievements & Results

- 2nd overall: UKCT Elite
- 4th overall: UKCT Discovery
- 11th overall: UKCT Team 3
- All three teams placed within the top 9% of the leaderboard

## Highlights

- The event provided a vibrant, hands-on competition environment that mirrored the pressures of high-stakes international CTFs.
- UK Cyber Team members engaged with peers from other national teams, including the event winners from Slovakia and close collaborators such as Team Ireland, laying the groundwork for future cross-border training and friendly competition.
- The team demonstrated strong cohesion, strategy execution, and adaptability across scenarios, earning respect from international competitors and enhancing their confidence heading into larger ECSC deployment.
- ZeroDays acted as a critical proving ground — validating training methods, identifying tactical strengths, and informing Phase Two preparation for more complex formats such as those at the European Cyber Security Challenge.



2nd Place: UKCT Elite



4th Place: UKCT Discovery



11th Place: UKCT Team 3



# International Competition: European Cyber Security Challenge (ECSC) (6–9 October 2025 | Warsaw, Poland)



**ECSC** 2025  
European Cybersecurity Challenge

Watch the UK Cyber Team take on the European Cybersecurity Challenge 2025 in Warsaw!

In October 2025, the UK Cyber Team made its highly anticipated return to the ECSC, Europe's premier youth cybersecurity competition, organised by the European Union Agency for Cybersecurity (ENISA). The event brought together over 38 national teams, each composed of top performers from their respective countries' CTF pipelines, to compete in four intense days of competition.

## Competition Format & Challenge Scope

- Jeopardy-style CTF: Teams solved a wide array of category-based challenges, including web exploitation, forensics, cryptography, mobile security, and reverse engineering.
- Attack/Defence CTF: Teams defended their own services while attacking others', requiring strategic coordination, real-time analysis, and team communication - skills emphasised throughout Phase Two training.

## Achievements & Results

- 20th place in the Jeopardy-style round
- 21st place in the Attack/Defence round
- 22nd overall out of 38 competing nations, a credible result for a newly formed team returning to the EU stage after several years' absence.

## Standout Highlights

- One Team member captured the **first flag of the entire competition within the first four minutes**, an exceptional achievement under high-pressure conditions and a morale-boosting moment for the delegation.
- The ECSC tested the full spectrum of cyber skills developed over Phase Two, including vulnerability research, exploit development, network analysis, and cross-team communication.
- Performance demonstrated competitive resilience and continuous progression across both formats despite the breadth and intensity of challenges.

## Broader Impact

- The team's presence at ECSC re-established the UK as a competitive nation on the European cybersecurity stage.
- International peers and assessors recognised the Team for its professionalism, collaborative spirit, and rapid development trajectory, key indicators of future success in the international ecosystem.





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# Championing Cybersecurity: The National UK Cyber Team's Journey at the European Cyber Security Challenge

**Ed Felix,**  
UK Cyber Team Coach & Principal Cyber and Resilience Consultant.



## Reflections on coaching, collaboration, and the pursuit of excellence in cybersecurity

From 6th to 10th October 2025, ten exceptional cyber enthusiasts proudly flew the flag for the United Kingdom in the European Cyber Security Challenge (ECSC), held this year in the vibrant setting of Poland.

Marking our return to Europe's most prestigious cybersecurity contest, this milestone was both historic and inspiring. The atmosphere was electric as our talented team, brimming with determination, represented their country with pride and an unbreakable team spirit.

Securing a commendable 22nd place, our team not only demonstrated remarkable skill and perseverance, but also laid the foundation for future British excellence to progress and one day win it with a diverse team. The energy and anticipation in the air were palpable, making each challenge a true showcase of British resilience and ingenuity.

Our team began its journey just a year ago. From 30 of the UK's top young cyber talents, ten were chosen for their exceptional skills to represent the nation at the 2025 European Cyber Security Challenge.

Their enthusiasm, expertise, and remarkable collaboration have set new standards in cybersecurity, qualities I also recognised during my time competing nationally in Sport and representing HMG.

These remarkable individuals truly exemplified the spirit of British cyber innovation, making history as they competed alongside the world's elite. The experience was electrifying, not only for the team, but for everyone involved in backing their journey. It was truly an honour to be selected from so many distinguished experts to lead the talented UK team.

Cybersecurity is a dynamic and demanding field, where every moment tests our preparation, resilience, and adaptability.

With the support of my colleagues at Beyond Blue Limited, I was able to dedicate myself fully to preparing the UK team for the challenges ahead.

Together, we concentrated not only on enhancing our technical capabilities, but also on fostering the core values and mindset necessary for success on the global stage.

## What is the ECSC: Europe's Premier Cyber Security Challenge.

The European Cyber Security Challenge is the continental championship of cybersecurity. Each year, top young talent (14-25) from across Europe represent their countries in a dynamic, high-pressure contest, blending technical skill with creativity and teamwork.

The event is a springboard for careers, a celebration of innovation, and a meeting point for the next generation of cyber defenders. Consider it the Olympics of cyber security. Were this is an individual event like Cycling. As a coach I would be the equivalent of Sir Dave Brailsford and therefore used his philosophy of installing core values.

The ECSC comprised two principal events: Jeopardy, a puzzle-based challenge akin to a digital treasure hunt, and Attack and Defend, where teams protected their own systems while attempting to breach others, a strategic contest reminiscent of a cyber-attack.



Our ECSC UK Cyber Team Coaches

Despite facing constraints in terms of resources and initial setbacks during training, where the team struggled to conquer certain tasks, perhaps owing to the challenges of remote collaboration, and experience of the challenges, everything changed when the competition began.

The transformation was remarkable; the team rose to the occasion, demonstrating outstanding teamwork under pressure. A defining moment came midway through the Attack and Defend challenge when we checked in with the captains. They remained composed, assuring us that the team was steadfastly following the game plan and on the verge of executing it successfully. I truly believe this visible shift was a direct result of the hidden core values, teamwork, resilience, and empowerment.

## Coaching Philosophy: Leadership, Teamwork, and Core Values

Using inspiration of Sir Dave Brailsford I needed to enhance the team not technically, but by strengthening their performance. I did this subtly and slowly, underlining six essential values: teamwork, humility, empowerment, resilience, courage, and transparency. The team are now ready to own them, and I want to showcase where they have used them in the competition.

**Teamwork:** Success in cybersecurity is never a solo effort. Our shared ethos emphasised collective achievement, and this was evident in the captain selection. Katy and Isaiah were picked not only on their technical abilities but also on the traits of being great leaders.

**Humility:** We encouraged openness to learning, regardless of rank or experience. The team embraced cross-disciplinary growth, consistently improving and adapting throughout training and competition.

**Empowerment:** Mistakes are part of growth. Rather than dictating solutions, I sought to empower each member to take ownership, make decisions, and learn from every experience. The captains were empowered to lead the team, and you can see that, whatever the challenge, the team was consistent across both events.

**Resilience:** The competition presented unexpected challenges. When systems faltered or tasks proved difficult, the team remained calm, communicated openly, and stuck to their game plan, demonstrating maturity under pressure. We talked about the success of quick wins, and I am so proud of the team for becoming the first to solve the "Steganowarmup" challenge in just four minutes, a testament to the preparation and collaboration of this challenge in training.

**Courage:** This year marked a transition for several team members into representing their country. They performed amazingly and thrived in the pressure, I am pleased they all want to fight for their position in the team and be more successful.

**Transparency:** Genuine collaboration flourished as team members shared ideas, supported one another, and built connections across international borders. I was so proud of the team making new friendships across the European community as they swapped merch with multiple nations. It is so important to know how to network technically and in human contact.

## Looking Forward

Reflecting on this experience, it is clear that our journey extended far beyond the confines of competition. It provided a platform to nurture emerging talent, cultivate leadership, and forge enduring relationships, both among our own team and with international peers, which will help improve the country's cybersecurity.

As coaches, we have been genuinely inspired by the dedication and spirit shown throughout, and we are determined to push the team to new heights.

**While we are at the start of the journey, we can't do it alone, and we need a diverse set of experts' sponsorship support to push the team to the next level.**

**If you're interested in supporting the team, please do get in touch:**  
[ukcyberteam@sans.org](mailto:ukcyberteam@sans.org)



Our ECSC UK Cyber Team



# A Special Thank You to the Programme Partners, Sponsors And Supporters

We Couldn't Have Achieved This Without You



UK Government



**BAE SYSTEMS**



**YOUNGMINDS**

The SANS logo consists of the word "SANS" in a bold, serif font. The letters are black and have a slightly distressed or textured appearance. The letters are closely spaced, with the 'S' and 'A' being particularly prominent.

**Cyber Programmes**  
Europe & The Middle East