



UNbreakable Romania is the most complex education program for high school and university students in the country.

Through its activities, UNbreakable provides an x-ray and visualisation of the level of cybersecurity skills nationally.

UNbreakable's mission is to provide young cybersecurity enthusiasts with the most varied resources, both theoretical and practical, so useful for developing the skills needed to become good cybersecurity specialists. In addition to an intensive learning environment, the initiative also provides a competitive, testing virtual space that encourages collaboration and knowledge sharing.

This way, UNbreakable plays an important role in bridging the cybersecurity workforce gap both locally and internationally.

## HOW DOES UNBREAKABLE ROMANIA WORK?

### BOOTCAMP (ONLINE)

Participants receive access to theoretical and practical resources to get familiar with the competition format and methodology, and also with basic cybersecurity concepts. They can also get in touch with mentors (industry experts and community alumni), participate in webinars and solve challenges in their dedicated space on the CyberEDU educational platform.

### INDIVIDUAL COMPETITION (ONLINE)

Participants will compete for 48 hours. The main objective is to solve as many cybersecurity challenges as possible and send the maximum number of "flags" to reach the top of the leaderboard. At this stage, participants evaluate their technical skills and performance on an individual level to see what areas in their knowledge need improvement.

### TEAM COMPETITION (ONLINE)

In cybersecurity, soft skills - such as communication and teamwork - are just as important as technical skills. This phase gives participants the chance to form teams of up to 3 members with complementary knowledge and later solve as many challenges as possible from different areas of cyber security in the timespan of 48 hours.

### NEW! THE UNR FINAL - TEAM COMPETITION (ON SITE)

In order to offer participants an authentic competitive experience and for them to have the opportunity to meet and interact directly with young people who share the same passion for cybersecurity, the 2024 edition of UNbreakable Romania has also introduced a FINAL stage in the form of an on site team competition. Only the top 15 teams (from both HIGH SCHOOL + UNIVERSITY categories) from the online team competition qualify for the UNbreakable Romania final.

## WHY UNBREAKABLE ROMANIA?

*There is a real need for more and more professionals to train in the field of cybersecurity, given the workforce shortage and the evolution in the number of cyber attacks. We are happy to see that UNbreakable Romania is attracting increasingly talented young people every year.*

**CRISTIAN PAȚACHIA-SULTĂNOIU**  
Development & Innovation Manager, Orange Romania

*Events like UNbreakable represent a major boost to the careers of future cybersecurity specialists. It's an opportunity for them to develop capabilities specific to the cyber area.*

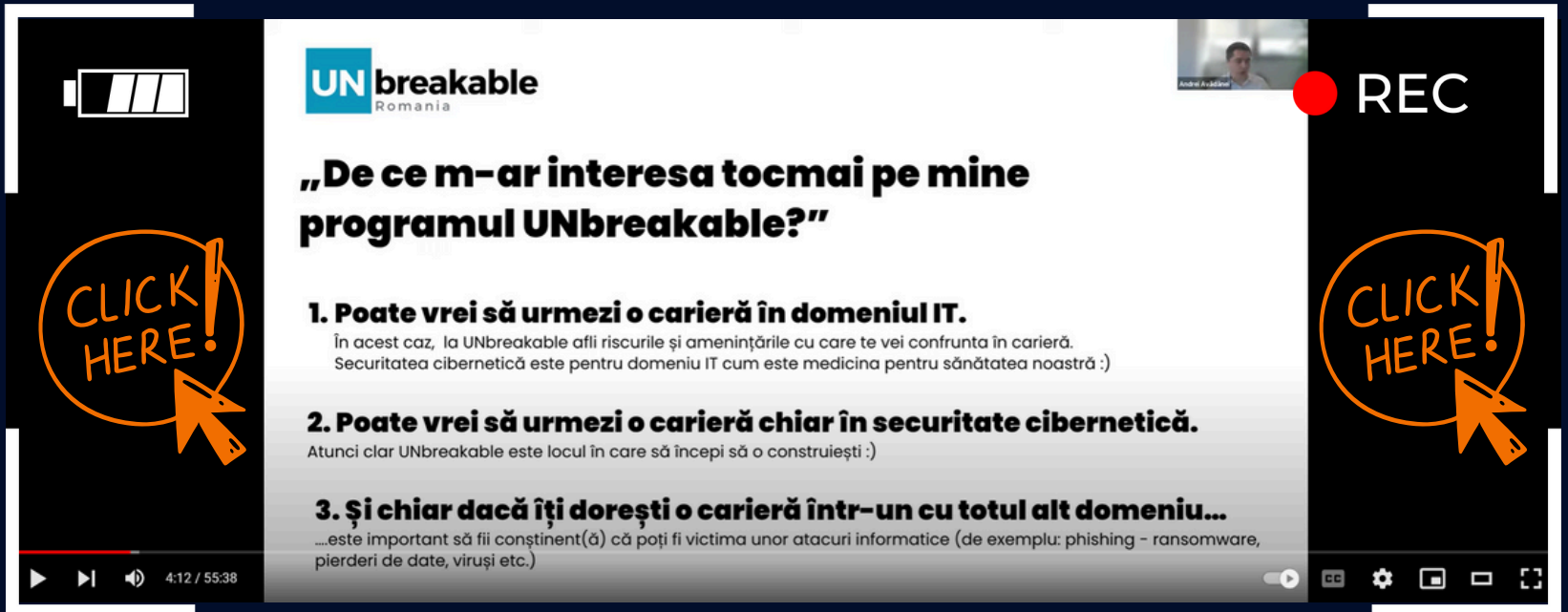
**CEZAR GLĂVAN**  
Cyber Security Specialist, Cyberint National Centre

*This competition has proven its viability over time, growing in both quantity and quality. The skills that are tested in this competition [...] allow participants to face the latest challenges in the digital area.*

**CORNEL ARGINT**  
Senior Cybersecurity Manager - General Strategy,  
National Directorate for Cybersecurity

# 2024 BOOTCAMP

## KICK OFF BOOTCAMP



**1,400** registered participants

**150** challenges

**20** mentors

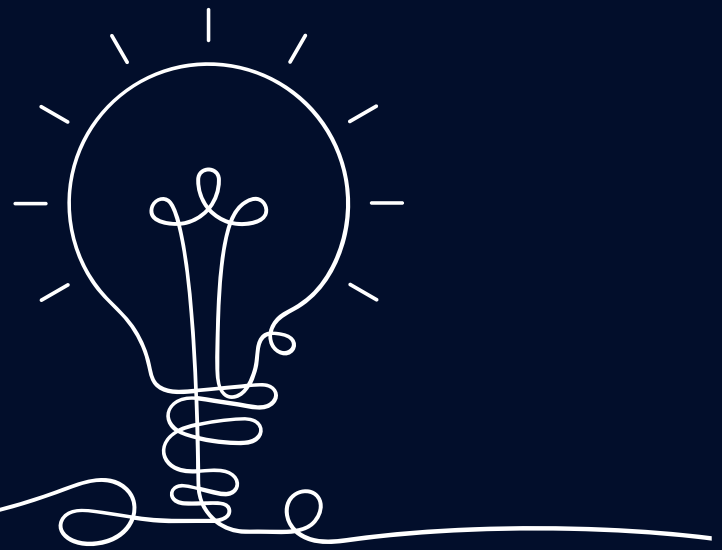
**17** webinars

## WEBINAR TOPICS

- Live Demo (downloader-v1, nondiff-backdoor, schematics) [\(link\)](#).
- Introduction to CTFs: an overview into Forensics, Pwn and Reverse Engineering [\(link\)](#).
- Understanding Computer Science - from the electron to your exploit [\(link\)](#).
- Criptography - Fundamental concepts [\(link\)](#).
- Cybersecurity in the networks of the future [\(link\)](#).
- Breaking PHP challenges at UNbreakable [\(link\)](#).
- Live Demo (dacian, alien-console, pyfuscation, dizzy, crossed-pil) [\(link\)](#).
- Reducing the image size and attack surface in containers [\(link\)](#).
- Resilience in the age of disinformation and cyber bullying. Fundamental concepts about hybrid warfare [\(link\)](#).
- Live Demo (ninjas are cool, dumb-discord, file-crawler) [\(link\)](#).
- Career Talk - Developing a career in cybersecurity [\(link\)](#).
- Introduction to web security for CTFs [\(link\)](#).
- Hack the Box - Live Demo [\(link\)](#).
- Introduction to Elasticsearch [\(link\)](#).
- Challenges in smart home security [\(link\)](#).
- Techniques and tools for the protection of sensitive data [\(link\)](#).
- The 'Siguranța Online' project

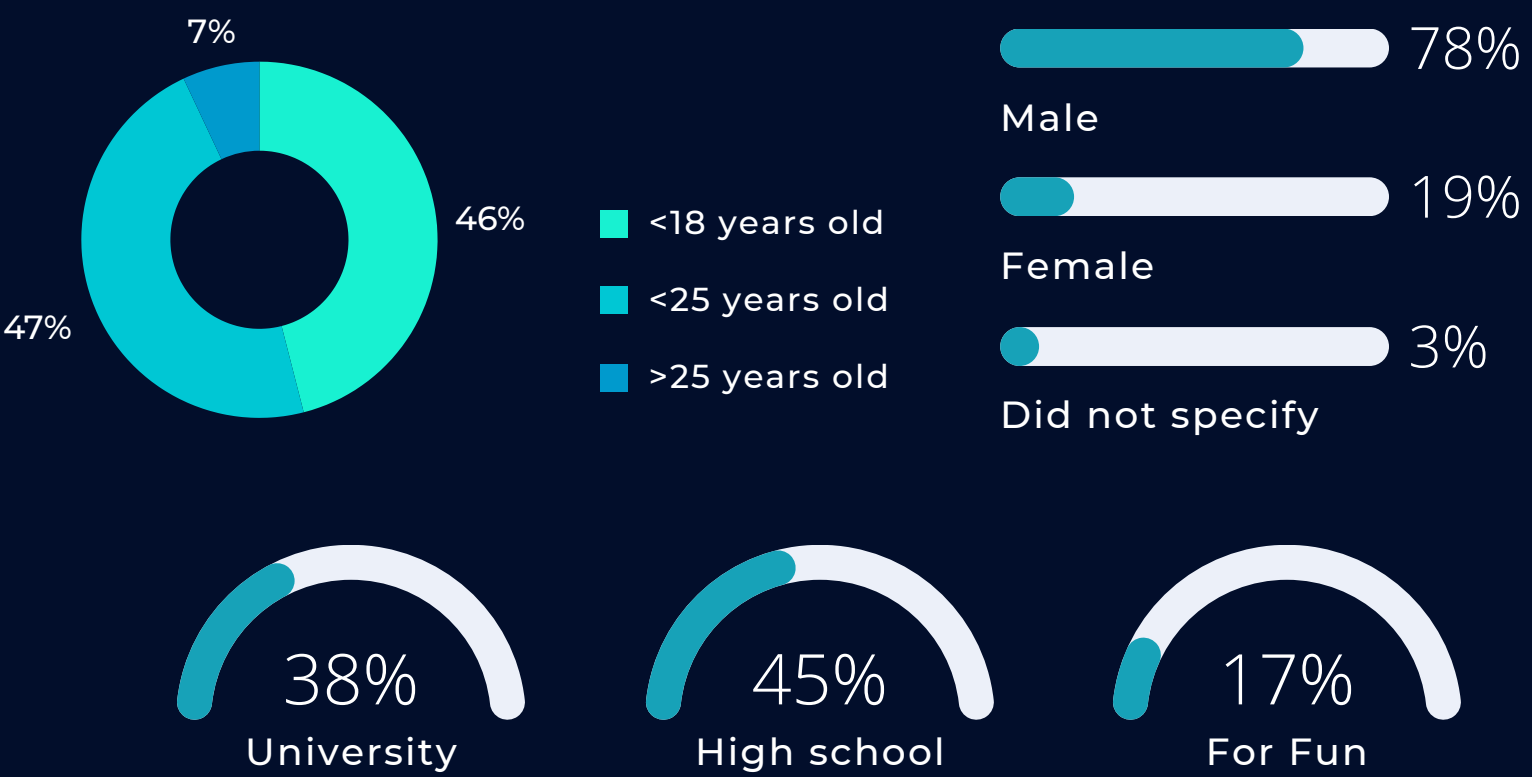
# 2024 INDIVIDUAL COMPETITION

**192 high schools**  
**31 universities**  
**41 counties**  
**20 challenges**



## PARTICIPANTS' DISTRIBUTION

**TOTAL PARTICIPANTS: 839**



## RESULTS

### COUNTIES - TOP 5

<b>4709 points</b> București	<b>4209 points</b> Cluj Botoșani Vâlcea	<b>3964 points</b> Timiș	<b>3414 points</b> Galați	<b>3374 points</b> Sălaj
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### UNIVERSITIES - TOP 5

<b>4209 points</b> Universitatea Tehnică din Cluj-Napoca
<b>3744 points</b> Academia Tehnică Militară din București
<b>3266 points</b> Universitatea Tehnică Gheorge Asachi Iași
<b>3251 points</b> Universitatea Babeș - Bolyai Cluj-Napoca
<b>2274 points</b> Universitatea Transilvania din Brașov

### HIGH SCHOOLS - TOP 5

<b>4709 points</b> Colegiul Național de Informatică Tudor Vianu
<b>4209 points</b> Colegiul Național Mihai Viteazul
<b>3359 points</b> Complexul Educațional Laude-Reut
<b>2396 points</b> Colegiul Național "Constantin Carabella" Târgoviște
<b>2020 points</b> Liceul Teoretic "Callatis" Mangalia

# 2024 INDIVIDUAL COMPETITION - FUN FACTS -

1

All challenges from the individual competition were solved by the player mcsky, a high school student at Colegiul Național de Informatică „Tudor Vianu” in București.



2



mcsky was also the fastest player in the individual competition, ranking first with a total of 4709 points.

3

Of the 839 young people registered for the individual competition, 83% are not yet employed.



4



Of the 839 young people who entered the individual competition, 78% want to receive internship offers.

5

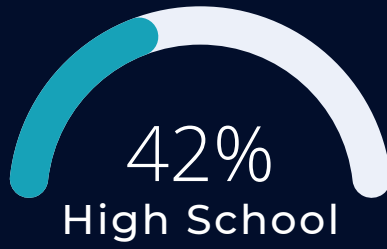
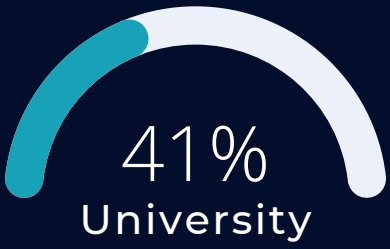
Of the 839 young people who entered the individual competition, 76% competed at UNbreakable for the first time.



# 2024 TEAM COMPETITION

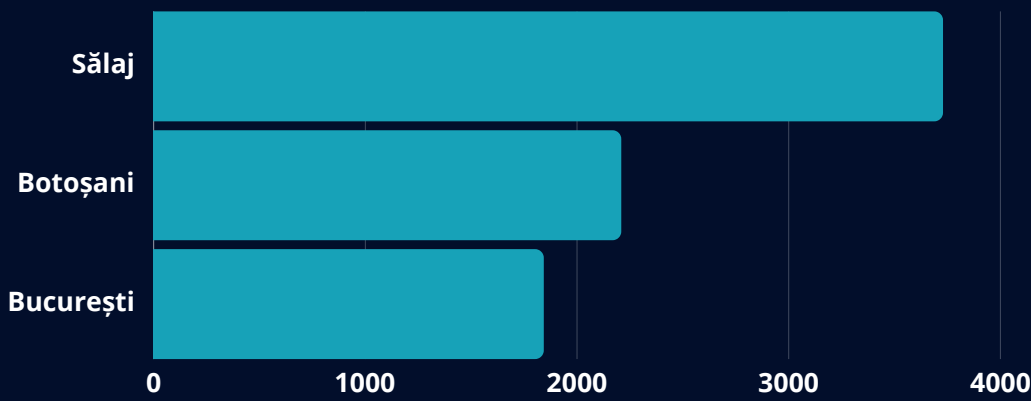
## TEAM DISTRIBUTION

**TOTAL TEAMS: 117**

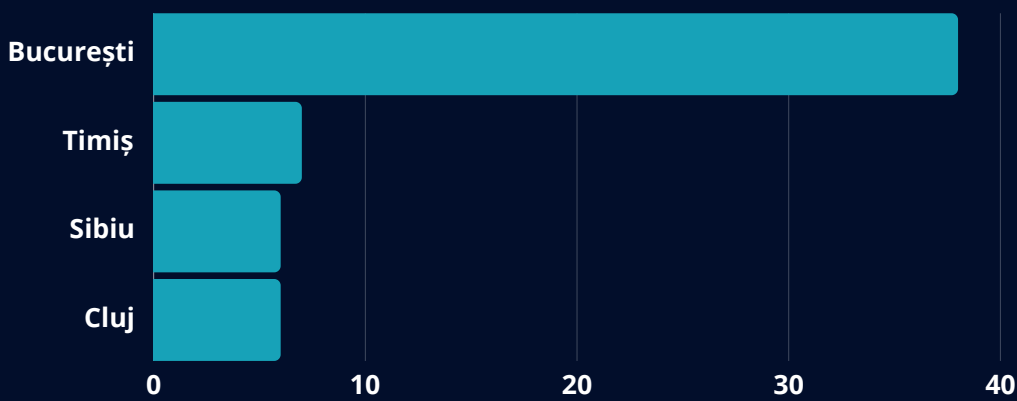


## RESULTS

### TOP COUNTIES BY POINTS AVERAGE



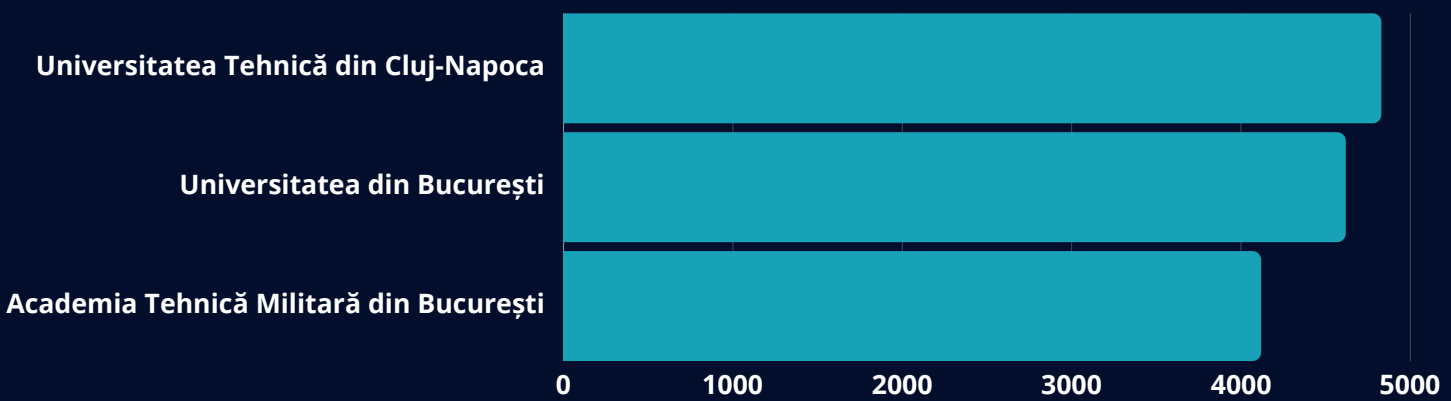
### TOP COUNTIES BY NUMBER OF TEAMS



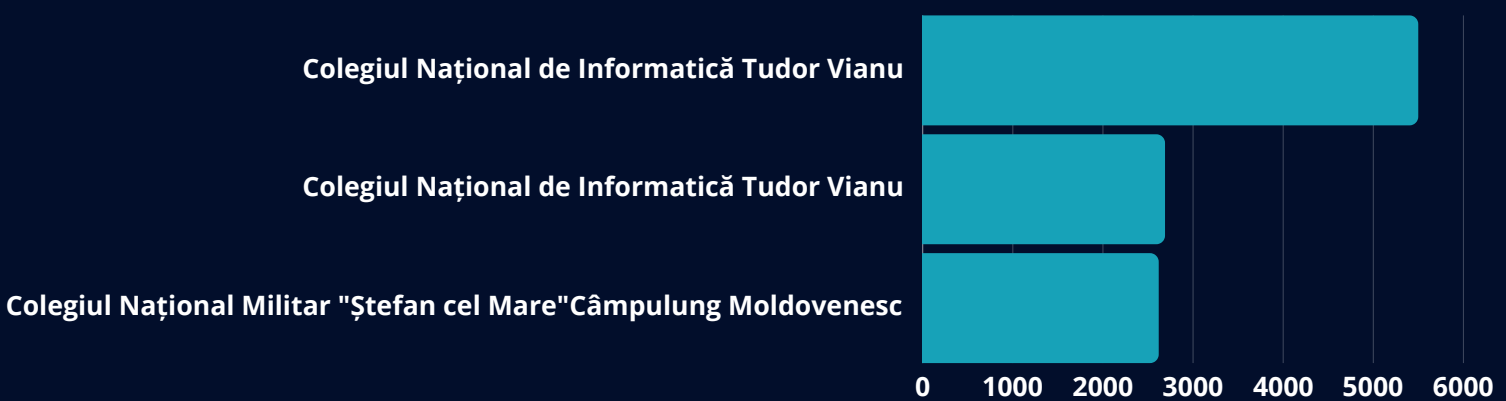
### EDUCATION INSTITUTIONS WITH THE HIGHEST NUMBER OF TEAMS

- 12 TEAMS** Universitatea Politehnica București
- 8 TEAMS** Academia Forțelor Terestre Nicolae Bălcescu din Sibiu
- 6 TEAMS** Academia Tehnică Militară din București
- 6 TEAMS** Colegiul Național Mihai Viteazul
- 5 TEAMS** Universitatea din București
- 4 TEAMS** Universitatea de Vest din Timișoara
- 4 TEAMS** Colegiul Național Militar "Dimitrie Cantemir", Breaza
- 3 TEAMS** Colegiul Național de Informatică Tudor Vianu
- 3 TEAMS** Colegiul Național „Emanuil Gojdu”, Oradea

### TOP 3 UNIVERSITY TEAMS WITH THE HIGHEST SCORE



### TOP 3 HIGH SCHOOL TEAMS WITH THE HIGHEST SCORE





# 2024 TEAM COMPETITION - FUN FACTS -

1

The 2024 edition of UNbreakable Romania saw the highest number of teams registering for the online team competition - 117, a 37% increase from 2023.



2



At the end of the team competition, there were a total of 7465 unsuccessful attempts, 7 times more compared to 2023.

3

At the end of the team competition, there was a total of 1262 correct answers, almost 3 times more compared to 2023.



4



MiniMcStein was the fastest team and also the team that solved all the challenges in the online team competition.

5

Of the 117 teams that registered, 90 teams solved at least one of the challenges proposed for the competition, compared to 55 teams in 2023.





**NEW**

**UN breakable**  
Romania

**2024**

# UNBREAKABLE - THE FINAL

## TEAM DISTRIBUTION

**14 TEAMS CONFIRMED THEIR PARTICIPATION @ #UNR2024 FINAL**  
**TOTAL PARTICIPANTS: 40**

### HIGH SCHOOL

MiniMcStein - București

Criptanii - Constanța

MMR - București

n0qtr - Prahova

CNMMSM 2 - Suceava

wild-lotus - Argeș

### UNIVERSITY

Solar Titans - Cluj

.hidden - Bucuresti

Military Powerpuff - București

Team name - București

Fetitele Powerpuff - Timiș

Team - Sălaj

Asus 11 - București

IJP - București





# 2024

## UNBREAKABLE - THE FINAL

### - FUN FACTS -

1

Participants in the 2024 final competed in other editions of the program in the past. The maximum number of entries was 4 out of 7 possible editions.



2



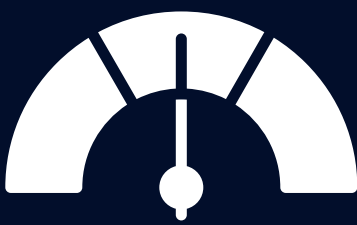
At the UNbreakable Romania 2024 final, all participating teams scored points in the proposed challenges.

3

Out of a total of 14 proposed challenges, 4 were not solved at all by the participants.



4



The teams solved challenges from various difficulty categories as follows: medium - 55 times, easy - 4 times, and hard - 8 times.

5

At the end of the competition there were 19906 wrong attempts and 146 correct answers.





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**WITH THE SUPPORT OF**



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DIRECTORATUL NAȚIONAL DE SECURITATE CIBERNETICĂ



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EURO-ATLANTIC RESILIENCE CENTRE



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