**ISC2**<sup>®</sup> Your Future. Secured.

Mind the Gap: Cybersecurity Workforce and Skills in the EU

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Largest nonprofit membership association representing over 765k certified cybersecurity professionals



#### Work with businesses and governments to build certifications that meet market needs



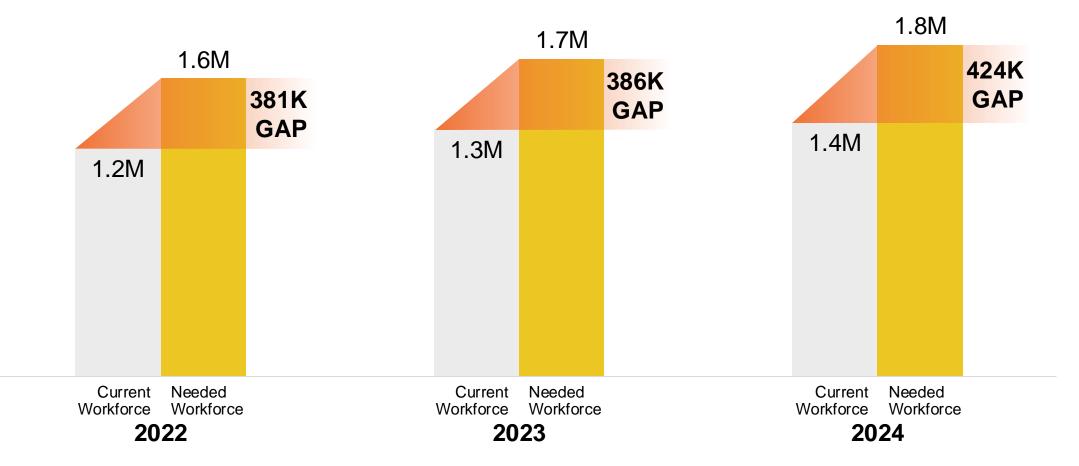
Provider of lifelong professional security education



#### **Global advocate** for

ethics, growth and success of the security profession

# Cybersecurity workforce size in the E.U. slowed while gap continues to increase



Source: 2022–2024 ISC2 Cybersecurity Workforce Studies. The ISC2 Cybersecurity Workforce Gap is an estimate of the number of people needed globally to adequately secure organizations. The Workforce Gap is not an estimate of open positions or cybersecurity jobs available.



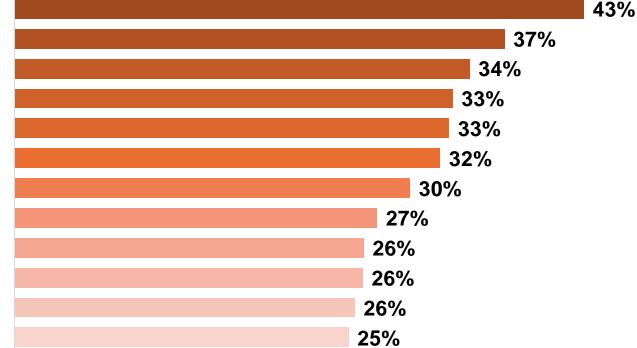
In the European Union,
555%

say that staffing shortages put their organizations at significant risk

# E.U. organizations are most lacking architects (needed to implement CRA, NIS2, and DORA)

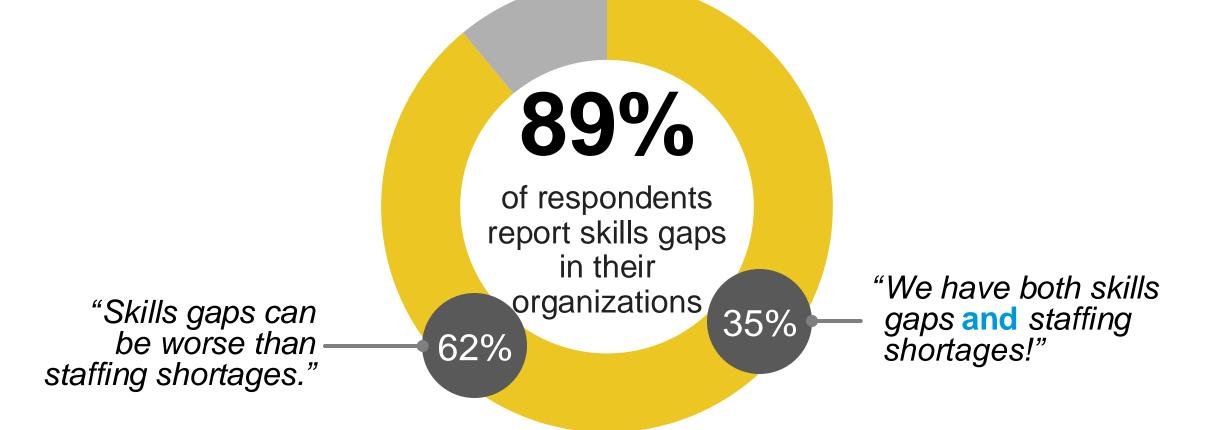
### In which of the following areas/roles is your organization lacking cybersecurity talent?

Cybersecurity architect Cybersecurity implementer Cyber incident responder Digital forensics investigator Cybersecurity risk manager Cyber threat intelligence specialist Penetration tester CISO Cyber legal, policy, and compliance officer Cybersecurity researcher Cybersecurity researcher Cybersecurity educator Cybersecurity auditor





# It's not only about people; the skills problem in the E.U. is quickly outpacing shortage concerns





#### Biggest challenges faced in the E.U. over the *past 12 months*

## Biggest challenges to come in the E.U. in the *next two years*

51%	Keeping up with changing regulatory requirements	46%
46%	Worker/skill shortages	46%
40%	Risks of emerging technologies	48%
37%	Cyber attacks as precursors, tactics, or retaliation in military conflicts	42%
36%	Adapting to risks from advances in employee computing technologies	40%
32%	Misinformation/disinformation sowing confusion about cyber risks	32%
29%	Insider threats	30%
24%	Addressing risks from an employee's home environment	20%
21%	Keeping up with environmental regulatory requirements	23%
19%	Addressing the impact of cyber insurance premium increases on security practices	18%
17%	Tension between tenured and junior security employees	16%



### Advocacy highlights in the E.U.

## Collaboration with ENISA

Permanent observer on ad hoc working group on the ECSF

ISC2 certifications have been mapped to the ECSF

90% of respondents find it relevant and over 50% plan to use for training, recruitment and building teams\*

### Policy and legislative

Submitted memos and engaged key stakeholders on the E.U. CRA to influence amendments

Provided detailed feedback on NIS2

Contributed to discussions on governing artificial intelligence

#### **Building skills**

Pledge with the E.U. Cyber Skills Academy to provide free Certified in Cybersecurity (CC) training and exams for 20,000

Exceeded goal by 4000 people six months ahead of schedule

Participants from across EU with 51% under 35 & 29% from non-white ethnic groups

Finalist for European Digital Skills Awards for our pledge

Source: 2024 ISC2 Artificial Intelligence Survey.



### Closing personnel and skills gaps in the E.U.

Prioritize training in key technical skills that businesses seek when hiring entry- and junior-level roles such as data security, cloud security and secure software development, including through apprenticeships that widen access to the profession.

Policy levers to upskill and build the cybersecurity workforce Focus on increasing the diversity of the industry by creating pathways into jobs and encouraging companies to set hiring, recruitment and advancement metrics and inclusion programs.

Offer skills-development opportunities to individuals with transferable skills from other disciplines and provide training in internationally recognized certifications as an important instrument for continuous skills improvement.

Harmonize skills frameworks to help identify the skills needed for specific roles and to ensure that any gaps are quantified and measured.