

# CYBER|IRELAND

IRELAND'S CYBER SECURITY CLUSTER

[www.CyberIreland.ie](http://www.CyberIreland.ie) @CyberIreland



# Global Cybersecurity Market Opportunity

## Irish Market



Services	€147M
Products	€232M
Internal	€83M
<u>Total</u>	<u>€462M</u>
CAGR	~12%

Global Cost of Cyber Crime = \$6TN

Cost per breach = \$3.6M  
Cost per record = \$141

## Global Cybersecurity Market Opportunity

2018 = \$124BN\*  
2023 = \$300BN  
CAGR ~ 12%\*  
\*Gartner

## Global Market Share Opportunity



1% = \$3BN  
1% = 36,000 jobs  
= €900M payroll

**Cyber Security Capital of Europe!**

# Why Cyber Security? To Enable

## Our SMEs



**98%** Irish firms **50%**  
private workforce



- **30%** sell online (#2 EU)
- **17%** sell online cross border (#1 EU)



## Our ASSETS, (In)Tangible

- **CNI** (~70)
- **IP**



## Our DIGITALLY INTENSIVE SECTORS

- **212,000** workers
- **€30 Bn** GVA
- **26%** of our exports
- **46** data centres (€7Bn since 2010)
- **6,500** in cyber sector\*



## Our DIGITAL FRONTRUNNER STATUS

- **#7** and **D9** country in EU



## Our DIGITAL OPPORTUNITY

- **+€27 Bn** and **140,000**  
net jobs to economy

# Why Ireland for Cyber Security?



# Cyber Security Ecosystem – MNCs – not a blank sheet



# Education & Research Landscape



Cybercrime & Fraud Analysis



Software for Analytics & Security



Network Analysis & Data Analytics

Networking Services & Security



Privacy & Cyber Security Market Opportunities



M2M Security



Cyber Security Education & Research



Cyber Security Research



National Cyber Security Cluster

## Rollout of major cyber skills training initiative (CSI) 2018-2021

- + 5,000 additional people trained in cyber security skills
- + Helping 4,000 companies to address the cyber security skills gap
- + Industry-driven modules in Network security, Cloud security, Application security, BCM, Penetration testing and Malware
- + Cyber security Bachelors and Masters Degrees

## Cyber Security embedded in education system with:

- + 4 undergraduate degree courses in cyber security
- + 16 postgraduate degree courses with modules in cyber security
- + 8 postgraduate degree courses in cyber security



# Cyber Ireland Development Timeline

**April 2017** – Industry Forum in CIT to address key challenges for the sector

**February 2019** – Stakeholder Engagement: 3 Cluster Workshops

**November 2018** – IDA seed investment & Launch of Initiative

**May 2019** – Official Launch of Cluster Organisation, with Strategy & Board



# Our Objectives:



**Addressing  
Talent & Skills  
Needs**



**Enhancing  
RD&I**



**Networking &  
Collaboration**



**Promotion &  
Branding**



**Liaise with  
Government**



**International Focus**

# Cluster Board- Industry



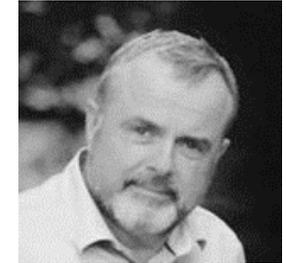
**Paul Walsh (Chair)**  
VP Engineering Services,  
McAfee



**Jacky Fox (Vice-Chair)**  
MD& Security Lead  
Accenture



**David Coffey**  
VP of Engineering, Enterprise Security  
Forcepoint



**Pat Larkin**  
CEO  
Ward Solutions



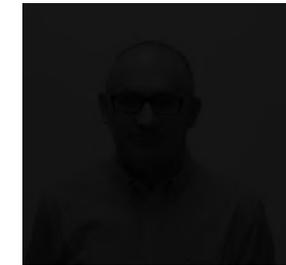
**Carmel Sommers**  
Technology for Good Manager  
IBM



**Joanne O' Connor**  
Cyber Security Training &  
Education Officer ,HPE



**Shane Walsh**  
Ireland Country Head,  
JRI America



**Paul Ryan**  
Senior Director Engineering  
Operations, Qualcomm

# Cluster Board – Academia & Government



**Michael Loftus**

Head of Engineer & Sciences,  
Cork Institute of Technology



**Cheryl Baker**

Director - UCD Centre for Cybersecurity &  
Cybercrime Investigation



**Dr Thomas Newe**

Senior Lecturer,  
University of Limerick



**Dr Richard Browne**

Director,  
Ireland's National Cyber Security Centre



**Ronan Lenihan**

Technology Group Manager - Europe  
IDA Ireland



**Martin Corkery**

Regional Director  
Enterprise Ireland

# Cyber Ireland Members

Map interface showing layer controls:

- ☰ Add layer    👤 Share    👁 Preview
- Cyber Security    ⋮
  - ▼ Uniform style
  - 🏠 All items (39)
- ICT & Software    ⋮
  - ▼ Uniform style
  - 📺 All items (21)
- Professional Services    ⋮
  - ▼ Uniform style
  - 📺 All items (8)
- Academia    ⋮
  - ▼ Uniform style
  - 📺 All items (6)



# Talent & Skills- Cyber Ireland Career Portal

## Courses

A Cyber Security Course (ISACA)

[Prospectus](#) [Related work roles](#)

Cyber Security Awareness And Prevention

[Prospectus](#) [Related work roles](#)

Cybersecurity Diploma

[Prospectus](#) [Related work roles](#)

IT Systems Security

[Prospectus](#) [Related work roles](#)

A Cyber Security Course – Cyber Security Nexus csx (ISACA)

[Prospectus](#) [Related work roles](#)

Cyber Security Awareness And Prevention

[Prospectus](#) [Related work roles](#)

Cybersecurity Diploma

[Prospectus](#) [Related work roles](#)

IT Systems Security

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Cyber Security Awareness And Prevention

[Prospectus](#) [Related work roles](#)

Cybersecurity Diploma

[Prospectus](#) [Related work roles](#)

IT Systems Security

[Prospectus](#) [Related work roles](#)



## Online Dashboard will Comprise 3 Sections:

1. Mapping all courses in Ireland for a Career in Cyber
2. NICE Career Framework – Information on 52 Cyber Security Roles
3. Job Posting Forum For Cyber Security Jobs





Filters Topic: Cyber Security Type: Course Clear x

C  
SCH

**Cryptography - Schools Cyber Security...**  
by Australian Computing Academy AU 7-12 Free

Learn the techniques and code to start you on your way to becoming a cyber security expert!

COURSE	MODULES
	4
PROBLEMS	38

Beginners School-aged only Cyber Security Python

[Details](#) [Start >](#)

**Information Privacy and Security - Sch...**  
by Australian Computing Academy AU 7-12 Free

Get sleuthing and learn about cyber security!

COURSE	MODULES
	4
PROBLEMS	42

Beginners School-aged only Cyber Security

[Details](#) [Start >](#)

**NEW**  
**Network Security - Schools Cyber Sec...**  
by Australian Computing Academy AU 7-12 Free

Learn the techniques and code to start you on your way to becoming a cyber security expert!

COURSE	MODULES
	4
PROBLEMS	33

Intermediate School-aged only Python BBC microbit  
Cyber Security

[Details](#) [Start >](#)

**NEW**  
**Web Application Security - Schools Cy...**  
by Australian Computing Academy AU 7-12 Free

Learn the tools and techniques to start you on your way to becoming a cyber security expert!

COURSE	MODULES
	4
PROBLEMS	55

Beginners School-aged only Cyber Security

[Details](#) [Start >](#)



# Cyber Security RD&I

## **Objective – To support cross-sectoral Research & Development in the cyber security domain**

- Cyber Security R&D Landscape Study Launched – Industry & Academia
  - To provide the state-of-the-art perspective on current cyber research activity in Ireland.
  - Are you conducting R&D?
  - Take the survey at: <https://www.surveymonkey.com/r/MLWYZV2>
- Cyber Security R&D Landscape Workshop/Event
  - Results presented at a workshop to bring together experts and researchers from industry and academia to discuss and promote a common understanding of how research can support innovation in the cyber domain.
- Engage with national funding bodies on R&D Supports
- Support EU R&D collaboration/opportunities for members through delivering an EU funding awareness raising workshop & establish Cybersecurity EU R&D Working Group

# Networking & Collaboration

1. National promotion of cyber security cluster & expertise
2. Three Regional Cyber Ireland Chapters to organise local events
3. Organisation of a national cyber security conference
4. Supporting existing Cyber Security Conferences



# Internationalisation

Promoting Ireland as a leading location for Cyber Security

## 1. Connect with international Cyber Security Organisations & Clusters

1. Northern Europe Cyber Clusters
2. Member of Global EPIC
3. Study Visit to Midlands Cyber UK



## 2. Support Irish cyber security SMEs to internationalise.

1. Map SMEs Sector & Competencies
2. Soft-Landing Initiatives in Target Regions
3. Funding & Innovation Supports



## 3. Support a Cyber Security start-up eco-system

1. Financing for start-ups
2. MNC & start-up Matchmaking



# Challenges

- Changing Mindset
- Different needs & goals of Members
- Role of the Cluster
- Short-term vs Long-term
  - Initiatives
  - Funding





## How to get involved:

- Stay up to date on Cyber Ireland activities and news by [Signing-up](#) to the [Newsletter](#)
- Become a [Member](#) of Cyber Ireland
- Web: [www.CyberIreland.ie](http://www.CyberIreland.ie)
- [@CyberIreland](#) 



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