



# Redesigning Cybersecurity Conferences with Women in Mind, 2019

RESEARCH BY JANE  
FRANKLAND

# An Opportunity to Redress the Gender Balance and Shift the Perception of Cybersecurity Conferences Being Male-Dominated

Cybersecurity's struggle to make women standard rather than exception is evident in the lack of women who attend conferences. But that's not all. Many conference speaker line-ups across the globe – whether on the stage or on panels lack women.

Although many cybersecurity conference organisers report not being able to find women speakers or panellists, 91% of women claim they want to speak. Despite their appetite, less than half (43%) have ever spoken at an event and 39% of women report being a “lone woman” on expert panels.

Women are subjected to further inequalities at conferences too with many reporting inappropriate behaviour and sexual harassment. In 2019, the IN Security movement, led by Jane Frankland, did a ground-breaking, first of its kind study into what was going on for women who participated in cybersecurity conferences.

They analysed the experiences women had at cybersecurity conferences across the world and while many conference organisers have shown improvement in their inclusion and diversity efforts, significant changes are required to address the concerns raised by the women surveyed.

In this report you'll find:

- In-depth data outlining the experiences of women who have attended cybersecurity conferences around the globe.
- In-depth data on women who have had their thought leadership heard at cybersecurity conferences.
- Practical strategies for conference organisers and organisations who want to further their commitment toward inclusivity and women's representation in cybersecurity.

# Opening Letter

In the summer of 2018, the IN Security code of conduct was created for cybersecurity conference and event organisers. It came about because of three worrying and recurring trends I'd long been witnessing at cybersecurity conferences, namely few women were in attendance, few women were being featured as speakers or panellists, and more women were coming forward with anecdotes of inappropriate behaviour including sexually harassment or assault.

Wanting to put a stop to this, I gathered aid, wrote a code of conduct, and led a global campaign for appropriate behaviour at cybersecurity conferences. I knew that unless conference organisers offered a safe environment for women, they would not attend or return. Additionally, their voices would not be present and without women's representation, there would be wider implications for the industry as a whole.

Although I initially questioned whether data was required at the start of the campaign – to ascertain the extent of the problem – those who came to my aid felt it wasn't and that's why the code of conduct was purely executed. One year on, and after making its way to governments all over the world, being endorsed by major event organisations including Black Hat, (ISC)2, The Cyber Security Challenge, AustCyber and AISA, plus downloaded by over one hundred conference and event organisations, I realised I'd made a fundamental error. When I was asked by a journalist about the impact it had made, I realised I should have surveyed women at the start when the code of conduct was released. Data is essential. Without it, progress cannot be measured and corrective, progressive action implemented.

The data contained within this report has been gathered to lay solid foundations. It's here to create a baseline, to uncover the truth and discover what's really going on for women who attend and speak at cybersecurity conferences. As a truth seeker and someone who's committed to creating a safer, happier and more prosperous world, I want to understand why there's a disparity between the experiences of men and women. I want to uncover the causes, the impact, and what needs to be done to transform things for women. I am ambitious for inclusion and equality. I believe the mission I have for achieving this it is possible with your support.

From the data I've gathered **from 2,157 women across the world in cybersecurity in the summer of 2019**, it's clear conference organisers have an opportunity to make a difference in the way they select keynote speakers and panellists, better promote inclusion and diversity at their events, and offer enjoyable, safe experiences for all.

Organisations have a part to play, too. They have the opportunity to shift the perception of cybersecurity conferences as being male-dominated, and feature women's voices so they become standard not exception. As brands, sponsors and leaders, they have enormous influence and can level the playing field for women in cybersecurity. They have the power to decide who will represent their organisations as keynote speakers and panellists. Additionally, they can ensure women in their teams get equal access to the trainings, resources and support that come from cybersecurity conferences. And importantly that women are safe when they do so.

In reading this report, you may find yourself feeling shocked, outraged or unsurprised by just how many women have experienced inappropriate behaviour including sexual harassment at cybersecurity conferences. You may be excited by the numbers of women who want to deliver keynotes or participate in panels. You may also feel more optimistic for your future as research is now being done, tracked and shared. Whatever your reaction, I hope you will acknowledge that despite this research being focused on gender, it actually affords every human being in cybersecurity an opportunity. Whether someone is just starting out, leading a team, or organising an event, together as human beings, we can achieve a valuable, equitable experience for all people within our industry.

Finally, I'd like to invite you to join my mission and do this with me and my organisation. Together we call for change, lead the change, and be the change. Together we are better. Together we are stronger. Together we rise. As always, no shame, no blame, just better business.

Sincerely,

*Jane Frankland*

Jane Frankland,  
Founder of the IN Security movement



# Introduction

Every year, thousands of cybersecurity professionals attend industry events worldwide with many conferences, seminars, summits and round-tables offering influential keynote speakers and insights into our industry. All who attend have an opportunity to learn something new – a concept or business practice – so they can become more enriched, enlightened, efficient and effective in their jobs. No matter the type of event, attendees have a chance to hear from industry leaders, participate in workshops, ask questions and get them answered. Their experience is marked and totally different from that gained reading an article, listening to a podcast or watching a video.

In addition, event attendees have the opportunity to grow on a personal and professional level by networking with peers or leaders from different companies, backgrounds, countries, cultures and skillsets. Attendance often demonstrates a conscious effort to self-develop and a commitment to improving performance.

But no matter how beneficial these events are, for women they are

typically accompanied by inequalities, institutional unconscious biases and inappropriate behaviour. The media loves to report on them in cybersecurity, providing headlines that feature gender discrimination, sexual harassment, a toxic culture, perpetual appearances of “booth babes,” dubious presentations, and a lack of inclusion in the way of women’s rest rooms (#QueueForTheLoo). From the anecdotal stories, it’s clear that many women in cybersecurity do not feel welcomed and represented at these events. Unsurprisingly, their attendance is low, and their voices are absent.

In order to gain a more accurate picture of how women are actually represented at cybersecurity events, as well as their perception from those they attend, The IN Security movement conducted a ground-breaking, first-of-its kind, global data study which focused on women who attend cybersecurity conferences. We wanted to gather data on the behaviour that occurred at these events and conferences, the volume of women who wanted to speak at them, and what facilities women wanted when attending.

Between May and July 2019, we surveyed 2,157 women from the Americas, Europe, Africa, The Middle East, Asia and Oceania. We combined quantitative and qualitative techniques (mixed method research) to collect our answers. Our aim was to gain a richer and more comprehensive understanding of women's experiences at cybersecurity conferences and how they were influencing women's career attitudes and behaviours. This would enable us to independently examine women's representation and experiences at cybersecurity conferences, globally, and have data driven conversations.

We did this because improving the experience and representation of women can have a big impact. Our research aims to provide insight into that as well as advice for organisations who sponsor

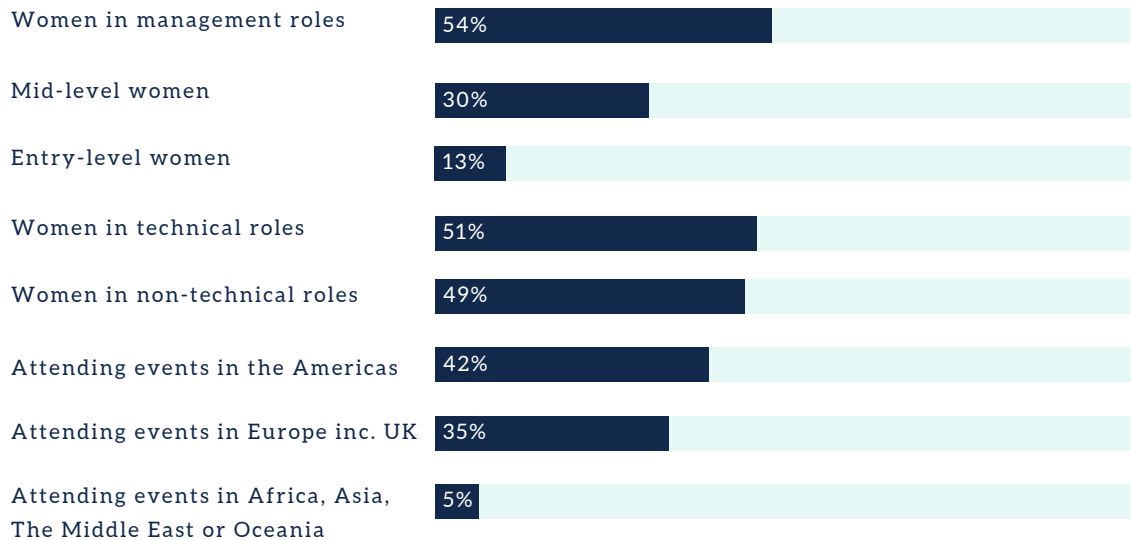
conferences and send their employees to them as attendees or speaker representatives. It covers changes to processes along with trainings.

Finally, and we want to make this crystal clear. The IN Security movement is not here to point fingers. We are here to provide insight and find answers to recurring problems that present themselves to women in cybersecurity. The profession offers wonderful opportunities, and we believe women can do better within it. We truly hope this report shines a light on the issues women face when attending or participating in cybersecurity conferences, and the changes that are needed. We hope it inspires other organisations to join our mission and fight for the right change alongside us.





# Survey Findings



The IN Security movement analysed three things:

1. Behaviour
2. Voices
3. Facilities

We wanted to include as many women from around the world as possible, and that's why we didn't stop until we had over 100 women from each region participating. All too often we hear mainly from women in North America, Australia and the UK. This affects patterns and skews results.

Additionally, we wanted women from numerous levels and roles. We succeeded. 54% of women surveyed

were in a management role, 30% identified themselves as being at an intermediate-level, and 13% at an entry-level. 51% identified as working in a technical role and 49% in a non-technical role.

The majority of women surveyed attended events in The Americas (42%) and Europe (35%) with equal percentages (5%) of women attending events in Africa, Asia, the Middle East and Oceania. 2% of women believed themselves to be conference "jet-setters."

# Behaviour

In this section, we asked about inappropriate behaviour including sexual harassment, and codes of conduct. We used Wikipedia's definition of sexual harassment:

*"Behaviour characterised by the making of unwelcome and inappropriate sexual remarks or physical advances in a workplace or other professional or social situation."*

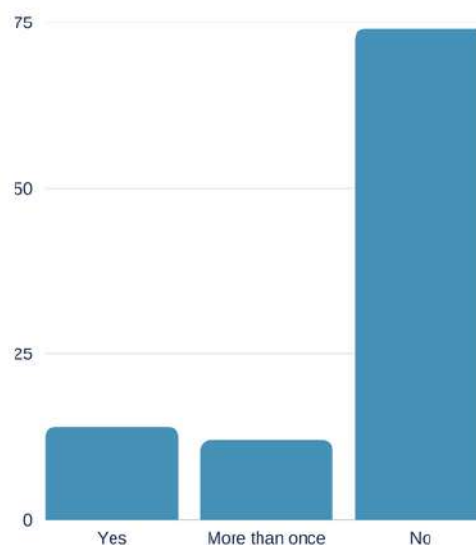
In light of the #MeToo movement, we noticed that many conference organisers have implemented a code of conduct which outlines an acceptable standard of behaviour.

Although being published on an conference organiser's website and sometimes in their brochures, our research found that these codes of conduct were often hard to find. As a result, they were falling short of promoting a more inclusive, accommodating experience for all attendees. Here's what we discovered.

Have you experienced sexual harassment at a cybersecurity conference?

26% women victims

Definition of sexual harassment is behaviour characterised by the making of unwelcome and inappropriate sexual remarks or physical advances in a workplace or other professional or social situation.





# Behaviour

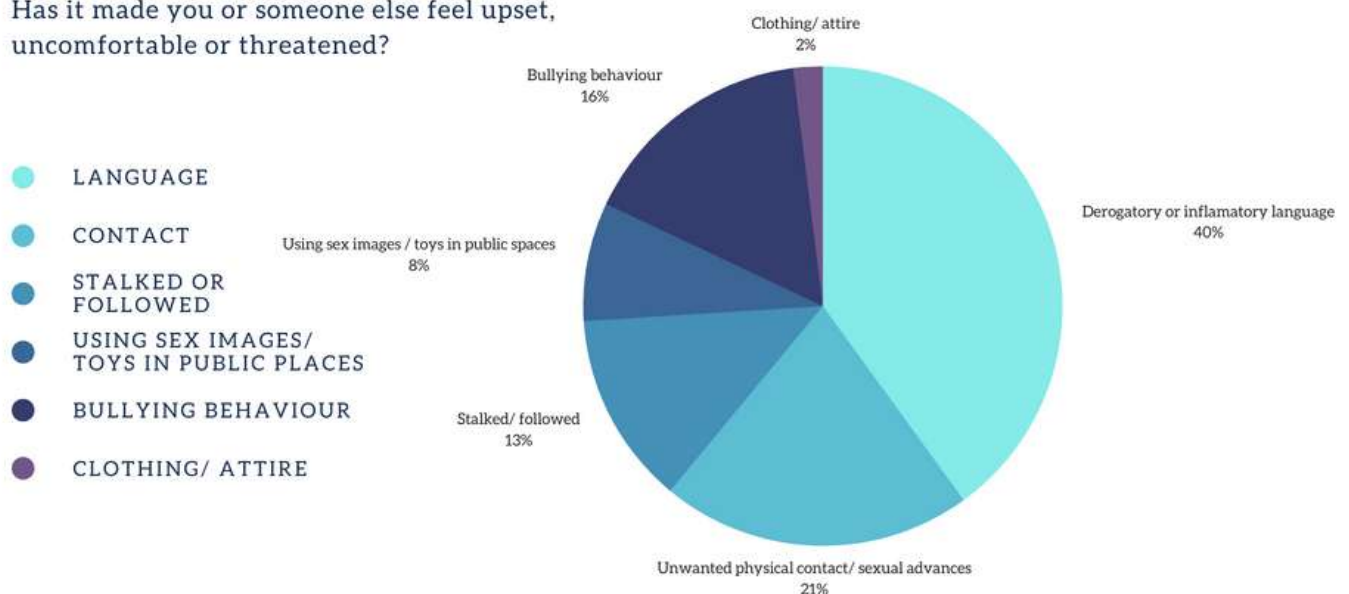
As you can see, more than one in four women (26%) attending a cybersecurity conference said they had experienced sexual harassment with 12% of women reporting it was on more than one occasion.

21% of women had unwanted physical contact, 13% of women had been stalked and 8% of women had witnessed sexual images or sex toys being used in public places at a conference.

When it came to witnessing inappropriate behaviour, at least 40% of women we surveyed said they had experienced derogatory, inflammatory or discriminatory language or comments at a conference.

## Witnessing Inappropriate Behaviour

Has it made you or someone else feel upset, uncomfortable or threatened?



# Behaviour

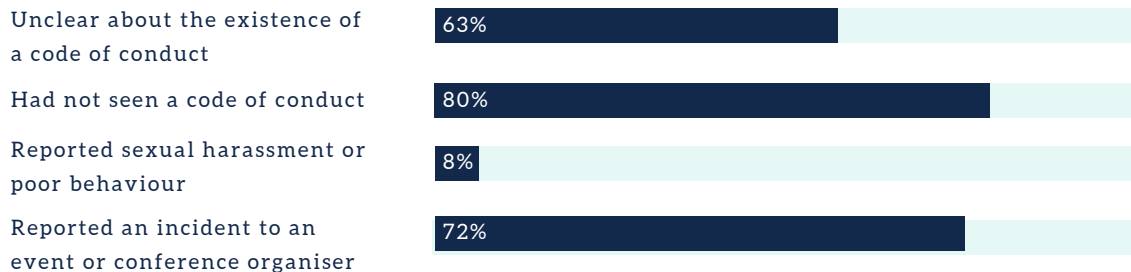
When women reported inappropriate behaviour or sexual harassment to a conference organiser, just under half said they were dissatisfied with how it was handled.

For women who had experienced sexual harassment at a conference, 16% said it was unlikely that they would attend again, with 40% saying it would depend on the conference.

When women were asked if they knew the rank of the sexual harasser, 35% of women reported they were executive or top level management; less than 1% were entry level.



# Code of Conduct



When it came to a code of conduct, 63% of women surveyed were unclear about the existence of a code of conduct at the conference they attended.

For women who had experienced sexual harassment, 80% said they had not seen a code of conduct in place.

Only 8% of women had reported sexual harassment or inappropriate behaviour. Of those, 72% had reported this to the conference organiser, 30% to their organisation, and almost 1% to the police.

When women reported sexual harassment or inappropriate behaviour to the conference organiser, the majority (44%) said they were not happy with how it was handled.

The main reasons for not reporting sexual harassment or inappropriate behaviour to a conference organiser were due to fears of being labelled as a “troublemaker” (45%) and the energy taken up to report it (45%) with 34% believing the offense was too petty. Only 40% of women who attend cybersecurity conferences feel very safe.

# Women's Voices

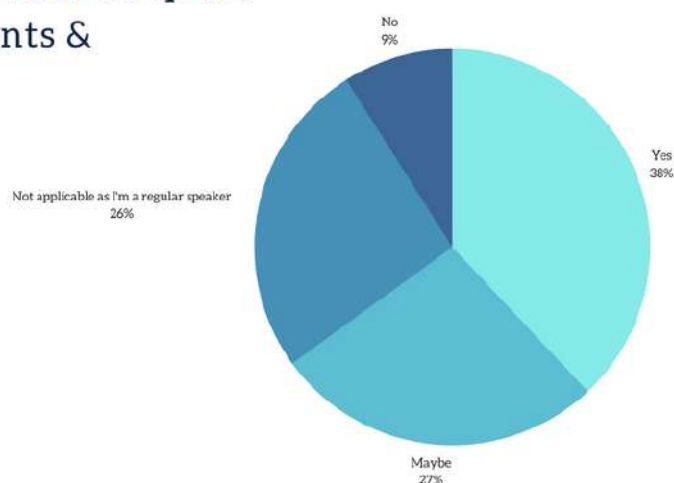
Bringing women's voices to cyber conferences is vital. It is an important platform and tool for career progression. It positions women as authorities, helping to normalise women being listened to, and in positions of power.

On average, just over 43% of women surveyed had spoken at a conference **with only 9% of women telling us they did not want to speak at a conference.**

Whether women are featured as keynotes, presenters, panellists or chairs, cybersecurity conference organisers have an opportunity to showcase a diverse range of opinions and gain thought provoking perspectives.

## Do women say they want to speak at cybersecurity events & conferences?

- YES
- MAYBE
- NOT APPLICABLE AS I'M A REGULAR SPEAKER
- NO



# Women's Voices

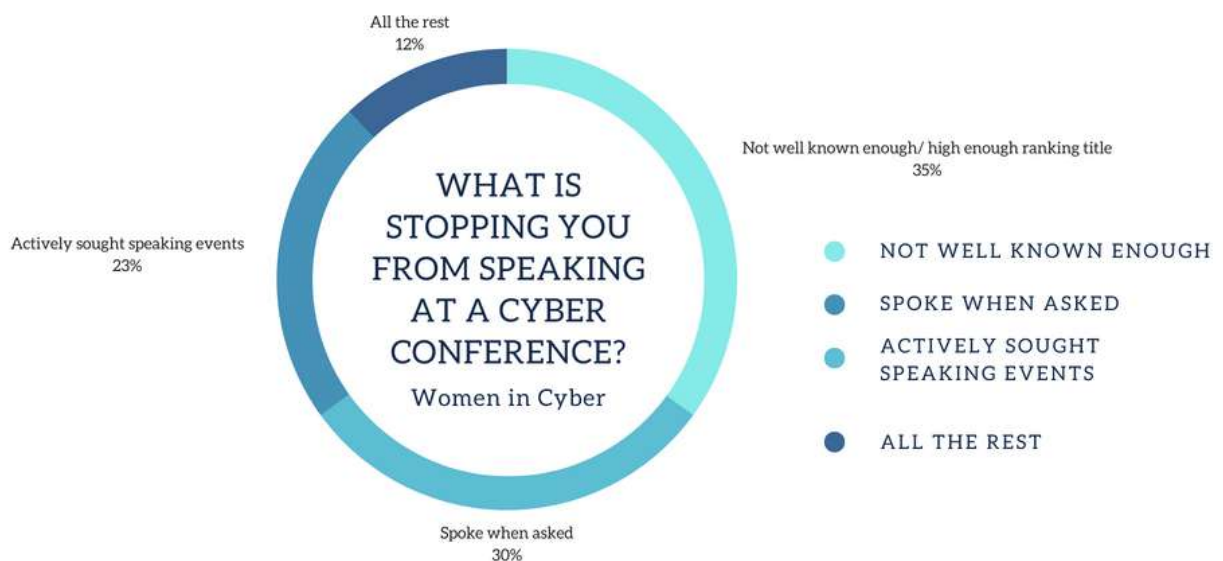
39% of women surveyed reported being the only woman on a panel with an additional 33% saying they were sometimes the only woman on a panel.

When women were asked to speak at a conference, the majority, 71%, said they were asked to speak about a specialism, rather than on gender diversity.

When women were asked what was stopping them from speaking at conferences, 35% said they were not well known enough or had a high enough ranking title that would have

been attractive to a conference organiser. 30% said they spoke when asked and 23% said they actively sought speaking opportunities.

12% amounted to all the rest and they cited reasons such as they didn't know the process, or they worked for a vendor and there was a conflict of interest with the event or conference sponsors, or they were approached to speak about subjects they were not subject matter experts in.



# Facilities

As we look for ways to create more diversity in cyber, it's crystal clear that cyber conferences are some of the places where women are being underserved. Women need better event facilities based on our survey findings and when we can change this by making women more visible, safer and more welcomed, we stand to gain a new generation of attendees, speakers and role models.

When women were asked what facilities would make it easier for them to attend cybersecurity conferences, 48% of women said they

wanted a reduced ticket price or subsidised ticket, 47% said they wanted meet ups with other women, 44% said they wanted their organisation to encourage them, and 37% said they wanted a conference streamed and recorded so they could catch up.

Women want interesting presentations, workshops, mentor matching, round table discussions and demos of cool tech. Hackathons, competitions and book signings ranked lower.

*Women in cyber want...*

**48%**

Reduced ticket prices or subsidised tickets

**47%**

Meet ups with other women

**44%**

Their company to encourage them to attend an event

**37%**

The cyber event streamed, so they could catch up



# Actions to Take

Our data clearly shows there's still work to be done for cybersecurity conference organisers who seek an inclusive environment especially for women. Organisations that send representatives to these conferences can make a big difference, too. By understanding their influence, it's time for them to take responsibility for their actions.

By leading and committing to measurable, transparent changes within their organisations they can

have a major impact on how women are represented at cybersecurity conferences, and on representation in the industry as a whole.

As we've mentioned before, our recommendations are not purely limited to women. They benefit all people and make participating in a cybersecurity conference, whether as a speaker or attendee, safer, more enjoyable and accessible.



# Code of Conduct

## Conference Organisers

As our data shows, unacceptable behaviour still occurs at cybersecurity conferences and events. This typically results in increased dissatisfaction and non-attendance by some groups, mainly women, who feel disenfranchised and threatened.

Occasionally, it results in police investigations and prosecutions. The purpose of a code of conduct is to get conference and event participants fully aligned on what constitutes acceptable behaviour and how unacceptable behaviour can be reported, and what will be done about it.

As our survey has made clear, well over half of women surveyed (63%) were unclear about the existence of a code of conduct statement at conferences they have attended and 80% of women who had experienced sexual harassment had not seen one.

## Organisations

Even if a conference or event organiser has a code of conduct, an organisation attending can create their own. Much like a conference or event code of conduct, this would detail the standard of behaviour expected when attending or speaking at a conference or event and the penalties for not adhering to it. Having an internal code of conduct would enable an organisation to better protect the reputation of its brand and create the best environment for everyone. Should an organisation create an internal code of conduct it must:

- Make it clear to all employees who represent them as an attendee or speaker what is expected.
- Explain the consequences for inappropriate behaviour and discrimination at a conference or event.
- Enforce penalties for employees who breach the organisation's guidelines and disregard the code of conduct.
- Cont/

# Code of Conduct

Conference Organisers	Organisations
<p>Conference and event organisers must ensure they:</p> <ul style="list-style-type: none"><li>• Produce a code of conduct that communicates the standard of behaviour expected at their conference or event.</li><li>• Clearly communicate how to report inappropriate behaviour and discrimination.</li><li>• Clearly explain the consequences for any inappropriate behaviour including sexual harassment or assault.</li><li>• Clearly explain how the conference or event organiser handles and responds to unacceptable behaviour.</li><li>• Ensure their code of conduct on is clear and easy to find on their conference or event website and in their conference or event brochure.</li></ul>	<ul style="list-style-type: none"><li>• Outline what their employees should do if they witness inappropriate behaviour including sexual harassment, assault and discrimination. Progressive organisations make it a dismissible offence for non-reporting.</li></ul>

# Training

## Conference Organisers

In addition to the code of conduct, event and conference organisers must ensure that training is given to all their staff on how to handle inappropriate behaviour, sexual harassment or assault.

This needs to be managed with incidents being tracked and reported to the necessary authorities. Event and conference organisers may also choose to publicise the progress they make on their website.

## Organisations

Our data shows that the lack of women speaking at cybersecurity events and conferences is not because women lack confidence or are reluctant to have their voices heard. Rather, it's because women are unsure how to build their personal brand and present.

Organisations can help more women prepare and improve their public speaking skills by:

- Putting women through personal branding, public speaking and presentation training.
- Creating a mentorship program which supports a new group of women to speak on behalf of their organisation.
- Educating leaders on unconscious bias.

# Speaker or Equality Riders

## Conference Organisers

A speaker or equality rider can do wonders for inclusion, equity and diversity. By establishing a rider, a conference organiser can lay out a set of criteria that determines a speakers' participation. It enables them to affirm their values and showcase that a lack of inclusivity, diversity and equity is unacceptable. A good rider would be about:

- Publicly committing to being inclusive across all parts of the event or conference.
- Gathering speaker demographics and ensuring the data is easily accessible.
- Designing panels so they are not all homogenous (e.g., all male or all women and white).
- Offering needs-based financial support (e.g., free or discounted tickets, travel scholarships, full scholarships etc.) for speakers who cannot afford to pay their own way. Money should not be a barrier for participation. No one should feel excluded.

## Organisations

If an organisation is truly committed to improving inclusivity and diversity it means taking a critical look at everything it does and participates in. By establishing a speaker or equality rider – a set of criteria that determines organisation participation in a conference – organisations can reaffirm their values and show event organisers that a lack of inclusivity, diversity and equity is unacceptable. Criteria can include:

- Committing to sending equal numbers of men and women to represent their organisation as speakers and panellists.
- Not participating in panels that do not include equal numbers of women or people of colour.
- Not sending employees to conferences that do not visibly promote inclusivity and a code of conduct in line with the organisation's values.
- Reconsidering vendor "after-show parties" that promote alcohol and sexist or non-inclusive themes.
- Cont/

# Speaker or Equality Riders

Conference Organisers	Organisations
<ul style="list-style-type: none"><li>• Creating meeting places for minority set groups to connect and find each other more easily.</li><li>• Creating and managing a code of conduct that event and conference participants (speakers, attendees, and the conference organiser's committee/ board) have to accept and is well publicised, documented and easy to find.</li><li>• Producing an accessible, inclusive and welcoming conference which considers all diversity and inclusion aspects, e.g., real-time captioning, visible pronouns, gender neutral event swag, childcare facilities and other caregiving support.</li></ul>	<ul style="list-style-type: none"><li>• Sponsoring a conference that demonstrate a commitment to being meaningfully inclusive across all parts of their event and that they are committed to high standards of behaviour and experiences.</li><li>• Incorporating conference attendance into a personal development program or training allowance.</li><li>• Allowing employees who present at a conference time off to prepare for keynotes, presentation and panels</li><li>• Paying for any materials or technology necessary to present at a conference.</li></ul>



# Marketing

## Conference Organisers

A conference organiser has an opportunity to set themselves apart from others by marketing an inclusive and diverse event. Effective marketing displays a desire to make a positive contribution to the gender diversity issue. It sends a very clear message to your organisation and can have a powerful effect on internal culture. This can boost employee engagement, morale and raise awareness amongst your employees.

It can give a sense of purpose, involvement and corporate pride amongst employees at being associated with something that makes a positive difference in their world. It invokes a more caring image of your brand with all associated stakeholders, be they clients, new recruits, partners or investors, too. It communicates something beyond price, product or service and gives them a reason for picking your organisation over others.

## Organisation

- Sponsoring conference that demonstrate a commitment to being meaningfully inclusive across all parts of their conference are committed to high standards of behaviour and experiences second to none.
- Incorporating conference attendance into a personal development program or training allowance.
- Allowing employees who present at a conference time off to prepare for keynotes, presentation and panels.
- Paying for any materials or technology necessary to present at a conference.

# Conclusion

Cybersecurity's success and evolution hinges on attracting and retaining more women. Industry conferences play a crucial role in this. It is clear from the data that conference organisers have much work to do if women are to benefit from their conferences as much as men. Now is the time to demand conferences include a diverse line-up of speakers. No longer must conference organisers be excused for gender discrimination and inappropriate behaviour, or conference sponsors for "after show parties" that result in sexual harassment or assault. Women must be safe when attending.

Organisations participating in cybersecurity conferences have a responsibility to act. They must do better. They must demand change rather than turn a blind eye. Our data shows the scale and speed that is necessary. Women want to attend and speak at conferences. And they want to be safe when they do so. It is not acceptable for women to be

assaulted, demeaned or dragged through law courts having to substantiate claims. Organisations must do better to address these challenges and speed up their own internal change rather than waiting for conference organisers to carry the burden. Proactive, thoughtful strategies can be deployed to make cybersecurity conferences and events more valuable and inclusive, creating a better environment for everyone.

## Additional Resources

- IN Security code of conduct and action kit (for event organisers) – <https://jane-frankland.com/in-security>
- The Cyber Helpline - <https://www.thecyberhelpline.com>
- Respect In Security - <https://respectinsecurity.org/>
- The Cybersmile Foundation and Action Kit - <https://www.cybersmile.org/advice-help/category/who-to-call>
- Speaker Riders - <https://opennews.org/projects/speaker-rider>

# Next Steps

## DON'T UNDERESTIMATE THE RIPPLE EFFECT YOU CAN MAKE

The actions you commit to matter and can have far reaching effects, just like a pebble being dropped into an ocean. Imagine what it would feel like to know that you have helped to make women standard in cyber and create a safer, happier and more prosperous world for you and your loved ones to live in.

# 1.

## CONSIDER

### CONSIDER YOUR ACTIONS

Work through the recommendations we have listed in our report, not by yourself but as a group of conference organisers or as an organisation who is participating in conferences.

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# 2.

## COMMIT

### COMMIT TO YOUR ACTION/S

Commit to your actions, make sure the relevant parties understand them and publicise them whenever you can.

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# 3.

## IMPACT

### IMPACT THE WORLD

Benefit from getting more women to cybersecurity conferences, hearing from them, and designing cybersecurity conferences that are more inclusive and impactful.

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We believe the world  
will only be safer,  
happier and more  
prosperous when there  
are more women in male  
dominated industries.  
That's why our goal is to  
strengthen cyber space  
by empowering and  
mobilising a gender  
diverse cyber workforce.



# About the IN Security Movement

The IN Security movement has been going since 2017. It follows on from Jane Frankland's book, IN Security, and is an initiative whereby global change agents in cybersecurity come together to take action on gender diversity and inclusion.

This requires an innovative, inclusive approach that mobilises all people. Additionally, it acknowledges that men, women and anyone in between genders in cybersecurity can achieve more together by being the sum of the parts.

The IN Security movement believes that the only way we can make cyber space more secure is by growing and enabling diverse talents in cybersecurity.

This requires solidarity, pulling together, and using each other's energy and ideas. It means empowerment and changing the narrative, too.

## Join the IN Security movement

To join the IN Security movement and tribe, go to:

<https://bit.ly/INSecurityTribe>

## Partner with us

To work with us as an active partner, email our founder, Jane Frankland, at: [hello@jane-frankland.com](mailto:hello@jane-frankland.com).

# Acknowledgements

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- Georgia Crossland, then user experience researcher at Meta.

Finally, thank you if you participated in our research. Thank you for taking the time to read this report. And, thank you for joining us on our mission!