

Annual Report 2023/2024 – Member Society Report BCS The Chartered Institute for IT, United Kingdom

The purpose of this template is to provide guidance on what can be included in the report, and to achieve some degree of consistency in the various reports.

If any of the items listed are not relevant, then leave them out. At the same time if there is anything you would like to add, that is also okay.

Please indicate here whether your Member Society is willing to authorise all (or part of) this report to be published on the IFIP Website. As a **default we will assume that you allow the report to be published.**

Yes No

The report should be at least 1 page, but not longer than 5 pages.

BCS The Chartered Institute for IT, United Kingdom

Overview of Society

Society's vision/mission statement

Our purpose is rooted in our Royal Charter: "To promote and advance the education and practice of computing for the benefit of the public".

Our vision is for everyone in society to benefit from good IT; they need a profession that will champion and deliver access to the right technology, knowledge and skills required for all of us to be resilient and thrive in our digital world.

That vision requires a diverse and inclusive IT profession that truly represents all the needs of society. It needs to be plentiful in talent and demanding of itself the highest standards of professional competence, ethical thinking and practice. Only then can it truly make IT good, for everyone.

We are the UK's professional body for computing, with a global relevance and impact. We help make IT good for society through the incredible work and support of our members, volunteers, staff, partners and like-minded organisations who share our vision.

Link to Website

<https://www.bcs.org>

Which Technical Committee Working Groups do your members participate in?

There are UK representatives on all but three of the IFIP Technical Committees (TC2, TC6 and TC10), although there are representatives from the UK in the working groups in those technical committees. One of the Technical Committees currently has a UK chair, TC3, Education. A colleague from the UK is currently vice chair for TC9, ICT and Society.

In addition, Max Bramer, a member of BCS acts as honorary secretary for IFIP Board and an ex officio member, although Max will be stepping down at the September 2024 General Assembly.

Currently, there is no official process involving the BCS in the selection or election of colleagues from the UK to be the UK representative on the Technical Committees, although this remains something we are in the process of actioning. The purpose is to ensure a clear and fair process for representation, but also to ensure that work from the Technical Committees is fed back into the BCS committee structure and vice versa.

The UK hosted two significant Technical Committee Conferences this year in TC3 and in TC11. Reports from each have been submitted to IFIP already but summaries are included below.

IFIP TC3 has this year held a successful, largely onsite, OCCE 2024 conference, in Bournemouth, UK, on 27th February to 1st March 2024. This was the first time that it was possible for many TC3 members to get together onsite since the outbreak of the Covid-19 pandemic. The conference was a great success - thanks to the contributions of all those involved. The title of the conference, "Digitally Transformed Education: Are We There Yet?" generated a great deal of discussion and debate, led by the keynote speakers (Prof Kai Rannenberg, Julia Adamson MBE, Prof Deirdre Butler), the panel chairs with their members (Prof Alastair Irons, Dr Mary Webb), the 42 paper and 10 poster presentations, 2 symposia, 7 workshops and a doctoral consortium. We were grateful for the major contributions from the British Computer Society, and for the invaluable background work of the IPC chaired by Dr Christophe Reffay, and the LOC chaired by Dr Nicholas Mavengere. The conference was concerned not only with academic developments in the field of digital technologies, but also their implications for practice and policy. Not surprisingly perhaps, everyone felt by the end of the conference that there is a great deal to do in the future – we are not there yet in terms of transforming education through digital education. The lead editor, Dr Margaret Leahy, is finalising the presentation of papers for publication as a post-conference book by Springer.

For IFIP TC11 the IFIPSEC2024 took place in Edinburgh in June 2024. The official title of the conference was the 39th International Conference on ICT Systems Security and Privacy Protection. The conference had 68 active participants on site. 112 papers were submitted for consideration at the conference and 34 papers were published under copyright by Springer following the conference.

Key activities this year

How the new UK government can transform society with ethics, education and equity in technology

BCS has outlined three key tech priorities for Sir Keir Starmer's new UK government:

1. Anyone with a significant role in IT should prove their accountability by being professionally registered. This includes leaders who use technology in critical national infrastructure like health, defence and other public services.
2. Every child and adult must have access to a world class computing and digital literacy education; we need qualifications that reflect this.
3. Closing the diversity gap in information technology can solve many of its issues around trust, bias and safety – over 500,000 women are 'missing' from the profession in the UK.

In presenting these priorities, BCS has been widely sharing its view that the new UK government has a unique opportunity to take a positive view of AI and high stakes technologies, making sure they transform the lives of everyone in the UK.

It has been commenting that by setting high standards for those who direct and develop computing in areas like health, security and other vital public services, the UK can be an example to the world.

BCS believes this government should back Chartered status for technology professionals, setting the same expectations of competence and ethics as regulated fields like accountancy and medicine.

Then to secure the future, BCS wants to see the new UK government prioritise digital literacy and computing education in schools and to make tech careers appeal to a far broader group of people.

Living with AI and emerging technologies

With the rapid development and growing demand for the use of Artificial Intelligence (AI) there are new and serious challenges for the ethical use of these systems.

BCS believes it is right that the UK aims to play a leading role in developing, safe, trustworthy, responsible and sustainable AI, as demonstrated by the summit in November 2023 and the associated Bletchley Declaration.

BCS has since argued these objectives can only be achieved when:

- AI and other high stakes technology practitioners meet shared standards of accountability, ethics and competence, as licenced professionals
- Non-technical CEOs, leadership teams and governing boards making decisions on the resourcing and development of AI in their organisations, share in that accountability and have a greater understanding of the technical and ethical issues.

In response to these arguments and a survey of its member views on Ethics, BCS has published and widely prompted a paper on its recommendations to support the ethics and safe use of AI. The full paper can be found at <https://www.bcs.org/articles-opinion-and-research/living-with-ai-and-emerging-technologies-meeting-ethical-challenges-through-professional-standards/>

Events

BCS continues to run a wide and varied event programme, delivering over 400 events per year through our network of branches, international sections and special interest groups. Our full calendar of events can be accessed at <https://www.bcs.org/events/>

Professional Development

BCS continues to support the professional development of its members and the wider community of students, apprentices and professionals. In the last year it has awarded more than 25,000 professional certifications and more than 30,000 digital literacy exams. It has also assessed more than 27,000 digital apprentices since 2017.

Projects

Our activities are aligned to four strategic pillars.

- **Membership** - We promote and support the growing and diverse community of IT and digital professionals committed to making IT good for society

- **Inspiration** – We influence and improve computing education in all its forms to improve opportunities for young people, society and the economy
- **Progression** – We provide opportunities for learning and development to support people’s career progression and raise standards of competence in our profession
- **Influence** – We tackle the big issues facing our digital lives, connecting industry, education and government to shape and bring about impactful change on society and our profession

Social Responsibility

The BCS Code of Conduct serves as a unique and powerful endorsement of somebody’s integrity and as a code of ethics for IT professionals. Observed by every BCS member, it defines the characteristics we share as practitioners serious about building a responsible computing profession.

BCS members show their commitment to working in the public interest - they accept their professional duty. It's the very foundation of our profession, built upon every day by the competence, integrity and diversity of our members.

The BCS Codes of Conduct and Ethics align with the IFIP Code of Ethics

Thought leadership

BCS thought leadership and policy seeks to debate, promote and uphold the highest ethical standards and practices in a rapidly changing digital landscape. We are an influential voice in the tech sector, listened to by government, industry, and the wider society.

Discover more by browsing our articles, opinion and research here: <https://www.bcs.org/articles-opinion-and-research/>

Policy and influence, including Government engagement/projects

BCS policy continues to seek to uphold the highest ethical standards and practices in a rapidly changing digital landscape. We continue to be an influential voice in the UK tech sector, listened to by government, industry, and wider society.

BCS remains committed to four key themes that we as a professional body have been focussed on to ensure we are making IT good for society.

- Our digital lives should be in the hands of competent, ethical and accountable professionals;
- Greater diversity and inclusion in the IT profession benefit society;
- The digital divide is a modern measure of inequality; it can be closed by access to skills as well as technology;
- The world will achieve net zero more rapidly with support of digital and data technologies.

These themes are also supported by a particular focus in some really key domains for our profession and wider society:

Artificial intelligence (AI)

BCS wants to see the creation of a diverse ethical AI workforce, as we believe this is central to reducing machine learning bias. This has taken on a new urgency given the recent developments in generative AI. All senior members (employees and volunteers) of BCS have been encouraged to undertake AI and Ethics training.

Cyber security

As the professional body for information technology we are committed to making the digital world secure for everyone and the BCS is working with a range of agencies nationally and internationally to address cybersecurity challenges.

Education

We support the teaching of rigorous and relevant computer science across the academic spectrum, from primary schools to universities. The uptake of Computer Science GCSE, A-Level and degree is increasing and it is also worth noting that there has been significant movement on balancing gender diversity in CS Education.

Health and care

Digital health is undergoing rapid change. BCS is committed to supporting the establishment of regulated professional standards in this sector

Examples of some of the underpinning consultations and research that have supported our policy and influence in this last period are below. More information and a full list at

<https://www.bcs.org/policy-and-influence/consultations-and-research/>

- Response to the UK Government (DSIT) consultation on Code of Practice for Software Vendors
- Response to the UK Government (DSIT) consultation on Cyber Security of AI
- AI and digital in business life report
- Response to the UK Government (DHSC) consultation on information standards for health and adult social care in England
- Response to the UK Government's consultation on its Advanced British Standards proposals
- Response to the UK Government's draft Cyber security code of practice
- Response to the UK Government's consultation on cyber resilience of the UK's critical national infrastructure
- Evidence to the UK House of Lords committee on capabilities and trends of large language models
- Response to the UK Government (DfE) call for evidence on generative AI in education
- Evidence to the UK House of Lords committee on computing education for 11-16 year-olds

Professor Alastair Irons, FBCS, CITP, BCS Vice President (Academic)

August 2024