

UKRI UK Future Internet NetworkPlus Outline Stage Outcome

This document identifies the successful applicant at the outline stage, including their application title, summary, and details of the application team. The applicant has been recommended by the panel to submit a full application. We encourage the addition of further collaborators and project partners between the outline and full proposal stages. Those wishing to participate in or support a full application may contact the applicant. While the applicant is encouraged to take an inclusive approach, they are not required to collaborate with everyone who expresses interest in joining the project team.

Title of application	
F.I.R.S.T.- Future Internet for a Resilient Society in Transformation	
Summary	
<p>FIRST (Future Internet for a Resilient Society in Transformation) will establish a one-stop-shop for effective collaboration in the realm of future internet research, across academia, civil society, government (including regulators and the security community), industry, and the technical standards community. FIRST aims to develop a multidisciplinary community of stakeholders, fostering new avenues of research and collaboration to address emerging challenges and threats. By working closely with government partners, the FIRST Network+ will connect multiple academic disciplines, enhancing the UK's understanding of future internet possibilities and positioning the nation as a global leader in this field. With a strong emphasis on practicality, FIRST will collaborate with policymakers and provide well-considered options, thereby elevating the UK's status as a collaborative and interdisciplinary powerhouse in internet research and innovation. We have created a diverse management team of expertise to ensure impact across the entire UK.</p> <p>FIRST has identified four initial grand challenges that it aims to address. (1) Bridging the Gap: The Network+ will emphasise that technology should serve the needs of people, societies, cultures, and the economy, creating a fairer and more equitable environment. We will adopt a people-centric approach, focusing on internet accessibility, inclusivity, personal control, security, safety, and health implications. FIRST will support research that contributes to a society-driven internet that incorporates values, norms, ethics, and public digital literacy, in-line with sustainable development goals. (2) Connectivity in a Changing World: Recognizing the rapid pace of global change and existential challenges like climate change and the ageing population, FIRST will build a community that ensures that the internet remains robust and productive in the face of such future threats. The Network+ will particularly strengthen the UK's influence in standards and governance, to facilitate global coordinated actions with the UK at their heart. (3) A Safer, Securer & Open Internet: FIRST will address issues like internet fragmentation, online human rights, national security, and freedom of speech. FIRST will collaborate with industry and global governance organisations and explore the potential and risks of relevant emerging technologies such as AI, alongside their legal implications, in addressing challenges. (4) Future-Enabled Internet: We will build a community capable of addressing the strain on internet infrastructure caused by emerging technologies and novel use cases, such as Neuralink and interplanetary expansion. FIRST will lead the development of next-generation internet infrastructure, focusing on technologies like AI, satellite communications, IoT, and internetworked quantum computers. Security will be central to this innovation, integrating technological advancements with socioeconomic considerations.</p> <p>To address the above challenges, FIRST will build a diverse and interdisciplinary research community, creating a roadmap for future internet challenges, serving as a central support for UKRI's research strategy, and actively engaging with various UK regions to translate research outcomes into impactful innovations. These will be facilitated via a series of community activities, cascade funding, and place-based case studies.</p>	
Application team details (Project Lead and Co-Leads)	
Professor Jon Crowcroft	University of Cambridge
Professor Dimitra Simeonidou	Bristol University
Professor Rachel Cooper	Lancaster University
Professor Tim Watson	Loughborough University
Professor Wendy Hall	Southampton University
Professor Miguel Rio	University College London

Professor Lilian Edwards	University of Glasgow
Professor Joss Wright	University of Oxford

If there are any further questions, please email us at digital.security.resilience@epsrc.ukri.org.