Newsletter The Best (and Worst) of 2021

Center for Cyber Security and International Relations Studies

January

- **'Hashtags come to life': How online extremists fueled Wednesday's Capitol Hill insurrection**
 As Americans began to process the horrors of Wednesday's assault on Capitol Hill, many far-right groups exulted in what they saw as a triumph, using the deadly riot to push an extremist agenda of sedition, conspiracy theories and overthrowing the government.

- **Data can still flow freely between Europe and the UK. But for how much longer?**
  After years of negotiation, the UK and the EU have finally signed their long-awaited trade deal on Brexit, but that is not to say that every sticking point has been resolved – and among the issues that are yet to be agreed on, is the transfer of personal data from the continent to the UK.

- **Cyber security, this is what the new Decree provides (on standby because of the crisis)**
  The DPR on the Cyber National Security Perimeter is ready but its approval process in the CDM crosses government crises and consultations.

- **IBM is using light, instead of electricity, to create ultra-fast computing**
  To quench algorithms' seemingly limitless thirst for processing power, IBM researchers have unveiled a new approach that could mean big changes for deep-learning applications: processors that perform computations entirely with light, rather than electricity.

February

- **Google's mega-capacity new transatlantic submarine cable is ready for action**
  Google's Transatlantic Dunant submarine cable system is ready for service, almost two-and-a-half years after announcing the project to bolster network capacity and resilience for Google Cloud customers.
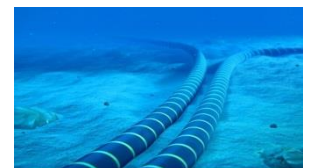
- **Switzerland ushers in new era as blockchain law takes effect**
  Switzerland has ushered in a new era for the digital assets industry after the tokenized securities law took effect on February 1. Known as the Blockchain Act, it sets a firm legal basis

for digital asset exchange and tokenization while tackling the threat of digital currency money laundering.

- [Singapore passes bill governing police use of contact tracing data](#)
  Singapore has passed new legislation detailing the scope of local law enforcement's access to COVID-19 contact tracing data. It does so amidst questions whether the bill offers sufficient clarity and if police access should be excluded in the interest of public health.

March

- [Quantum computing, networks, satellites, and lots more qubits: China reveals ambitious goals in five-year plan](#)

China has revealed its economic roadmap for the next few years, and among the government's most aggressive objectives feature some significant breakthroughs in quantum technologies – which, if they are achieved, would firmly establish the nation as a leading quantum superpower.

- [Google to face lawsuit over tracking users in 'Incognito' mode](#)
  In a significant ruling, a judge in the US has directed Google to face a class-action lawsuit seeking $5 billion, that claimed the tech giant is tracking and collecting data even when people use the private 'Incognito' mode on its Chrome browser.

- [The EU wants to build its first quantum computer. That plan might not be ambitious enough](#)
  As part of its roadmap for digital transformation during the next 10 years, the EU has announced some new goals for quantum technologies. Will its plan be enough to compete against other nations?

April

- [New Data Protection Rules From Chinese Government Targeted Squarely at Limiting Power of Tech Giants](#)
  The new Personal Information Protection Law (PIPL) creates the country's first comprehensive set of data protection rules. The move follows the issuance of new antitrust rules also seemingly aimed specifically at tech giants

- [A European approach to Artificial intelligence](#)
  A resilient Europe fit for the Digital Decade is one where people and businesses benefit from artificial intelligence-generated improvements in industry and day-to-day life. For example, artificial intelligence (AI) can help to treat diseases and minimise the environmental impact of farming.

- [Brazil publishes national artificial intelligence strategy](#)

The plan outlines the framework for fostering research and development in the field and driving AI innovation to solve the country's key challenges.

May

- [The Colonial Pipeline Hack Is a New Extreme for Ransomware](#)

  For years, the cybersecurity industry has warned that state-sponsored hackers could shut down large swathes of US energy infrastructure in a geopolitically motivated act of cyberwar. But now apparently profit-focused cybercriminal hackers have inflicted a disruption that military and intelligence agency hackers have never dared to, shutting down a pipeline that carries nearly half the fuel consumed on the East Coast of the United States.

- [Cybersecurity in the PNRR and Italia Digitale 2026 Strategy: resources and goals](#)
  Italia Digitale 2026 provides for measures to counter the increase in vulnerabilities and cyber threats starting with the implementation of the National Cyber Security Perimeter and the strengthening of defense.

June

- [NATO Warns That Cyber Attacks on Member States Could Trigger a Coordinated Military Response](#)


  NATO could respond to cyber-attacks on its member states in similar ways to an armed attack. The alliance's Secretary General Jens Stoltenberg said the military coalition viewed cyber-attacks on its members as armed land, sea, or air assault, which demanded a collective military response.

- [Brazil-Portugal undersea link goes live](#)
  A new submarine cable linking Brazil and Portugal has gone live as part of efforts around improving connectivity in the South American country. The undersea link is 6.200 kilometers long and connects the Brazilian city of Fortaleza to Sines, in Portugal and allows data traffic at a speed of 100 terabits per second, with response time of 60 milliseconds

- [EU to impose stricter export controls on cyber-surveillance items](#)
  Following the Council of the European Union's (Council) adoption of an updated regulation on May 10, 2021 (Updated Regulation), the European Union (EU) is set to expand its Dual-Use Regulation (Council Regulation (EC) No 428/2009, as amended) to authorize restrictions on exports of items that could be used to support human rights abuses, with a focus on "cyber-surveillance items," among other changes.

July

- [How quantum networking could transform the internet](#)
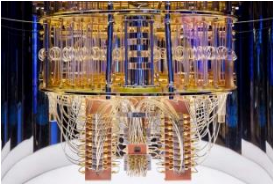
  Quantum computing (QC) and quantum networking (QN) are related, though independent, industries. Both leverage the same unexplained phenomenon in quantum physics: the entanglement between particles that enables them to share states -- or in the digital sense, information -- in apparent violation of relativity theory. But as services, they fulfill separate functions.

- [Italy ratifies the renewed Convention 108+, for a more modern data protection](#)
  Italy has ratified [Convention 108+,](#) adding a new and important step in the management of personal data with third countries in order to ensure better overall protection.

September

- [Fear and excitement in El Salvador as Bitcoin becomes legal tender](#)
  El Salvador has become the first country to accept Bitcoin as legal tender in a move that has got the nation and the world debating the opportunities and dangers of cryptocurrency. From today (7th September), businesses will be obliged where possible to accept the controversial digital coins as payment.

- [National Cloud, technologies and purposes: doubt over data security](#)
  The project for national cloud has been officially announced by the Minister for Digital Transition, Vittorio Colao, who presented the new [Cloud Strategy for Italy](#) on 7th September.

October_ [European Cybersecurity Month (ECSM)](#)

- [Does the NFT craze actually matter?](#)
  The NFT market is still defying reason, but then again that's kind of its thing. But one thing I'm especially unsure about lately as I see JPGs continue to sell for millions of dollars is… does any of this actually matter?
- [Twitch confirms massive data breach](#)

  Game-streaming platform Twitch has been the victim of a leak, reportedly divulging confidential company information and streamers' earnings. More than 100GB of data was posted online on Wednesday (6th October). The documents appear to show Twitch's top streamers each made millions of dollars from the Amazon-owned company in the past two years.

- [US leads world in bitcoin mining after China crackdown sends industry overseas](#)

The United States has overtaken China to account for the largest share of the world's bitcoin mining, according to data published by researchers at Cambridge University.

November

- **North Korean Lazarus Hacking Group Leverages Supply Chain Attacks To Distribute Malware for Cyber Espionage**
  North Korean threat actor Lazarus group has resorted to supply chain attacks similar to SolarWinds and Kaseya to compromise the regime's targets, according to cybersecurity firm Kaspersky. Kaspersky's Q3 2021 APT Trends report says that "Lazarus developed an infection chain that stemmed from legitimate South Korean security software deploying a malicious payload."

- **IBM creates largest ever superconducting quantum computer**
  IBM has created the world's largest superconducting quantum computer, surpassing the size of state-of-the-art machines from Google and from Chinese researchers. Previous devices have demonstrated up to 60 superconducting qubits, or quantum bits, working together to solve problems, but IBM's new Eagle processor more than doubles that by stringing together 127.

December

- **European Commission launches new data and cloud alliance**

  The new European Commission-powered Alliance for Industrial Data, Edge and Cloud was officially launched on Tuesday (December 14). With 39 members, the initiative gathers some of Europe's top-notch tech companies to collaborate on next-generation computing technologies.

  - **China lays out five-year plan to be global robotics hub**

  China has unveiled a five-year plan to drive its ambition of becoming a global innovation hub for robotics by 2025. It hopes to get there by focusing on enhancements in key components such as servomotors and control panels.