

CELTIC-NEXT

Project Proposal Pitch

13th of March, Online



GrEen fiNtEch for susTainable ICt (GENETIC)

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[6G for [Sustainability] for 6G]

Develop 6G-enabled eco-friendly services across different verticals.

Sustainable innovation empowered by 6G (e.g. Transportation, e-health, manufacturing).

Develop eco-friendly 6G infrastructure and network for green telecommunications.

Sustainable and financially assured transition to net-zero compliant 6G via the international supply-chain.

[6G for [Sustainability] for 6G]

- Help Telecoms and IT networks industry achieve ESG compliance and secure Green Financing.
- Help verticals achieve sustainable and 6G-enabled innovation.
- Enable data acquisition, provenance, reporting in real-time through FinTech.
- Stakeholders
 - ICT industry with net zero compliance commitments as specified in Task Force on Climate-Related Financial Disclosures TCFD (<https://www.fsb-tcfd.org/about/>).
 - Banks have to ensure that their customers are net zero compliant in the way that they use their loans in their procurement.
 - International Chamber of Commerce (ICC) benefits by helping banks recognise and set standards and metrics for sustainable trade and sustainable trade finance which will have a knock-on effect on the 6G supply chains at a global level which will be more resilient and flexible.
 - Equipment vendors with an eco-friendly profile will be more accessible.
 - With UN Sustainability goals effectively implemented, citizens can expect to see a positive impact on their health, environment, and economic. [SG7, SG11, SG13].
 - Tax authority incentives for ESG compliance (policy considerations across jurisdictions).

Organisation profile

- Brunel University London, College of Engineering, Design and Physical Sciences. This project proposal involves the following departments:
 - Department of Computer Science
 - The Digital Economy and Cyber Security Research Group conduct multidisciplinary cross-cutting research across several critical areas in the digital economy funded by EPSRC, InnovateUK, and DECS; namely, Cyber Security, Banking and Fintech, DLT, Strong AI, Health and agent-based simulation.
 - Electronic and Electrical Engineering
 - Research into intelligent digital economy and society using AI, data analytics, 6G, media, human-machine interaction, digital games, augmented and virtual reality, digital twins, IoTs, cyber security, data & information fusion etc. providing legal and regulatory compliance solutions and all aspects of Govtech to promote social unity and enhance economic impact.

“6G technologies must also be an enabler for sustainability, considering environmental, social, and economic perspectives. A reduced carbon footprint and energy efficiency will be important design goals for 6G networks. More broadly, 6G should allow for reduced energy consumption across all sectors of the economy and society. Ideally, 6G technologies will generate less pollution and reduce other environmental impacts to better contribute to long-term social sustainability while maintaining economic feasibility.”
 European Commission (2023). *6G Outlook - Shaping Europe’s digital future*.

In applying the SDGs to 6G development, there is consensus to divide the approach into how the 6G end-to-end system will be sustainable (“Sustainable 6G”) and how it will contribute to the sustainability of other sectors (“6G for Sustainability”) through enabling use cases with a positive footprint (also called enabling effect or handprint).

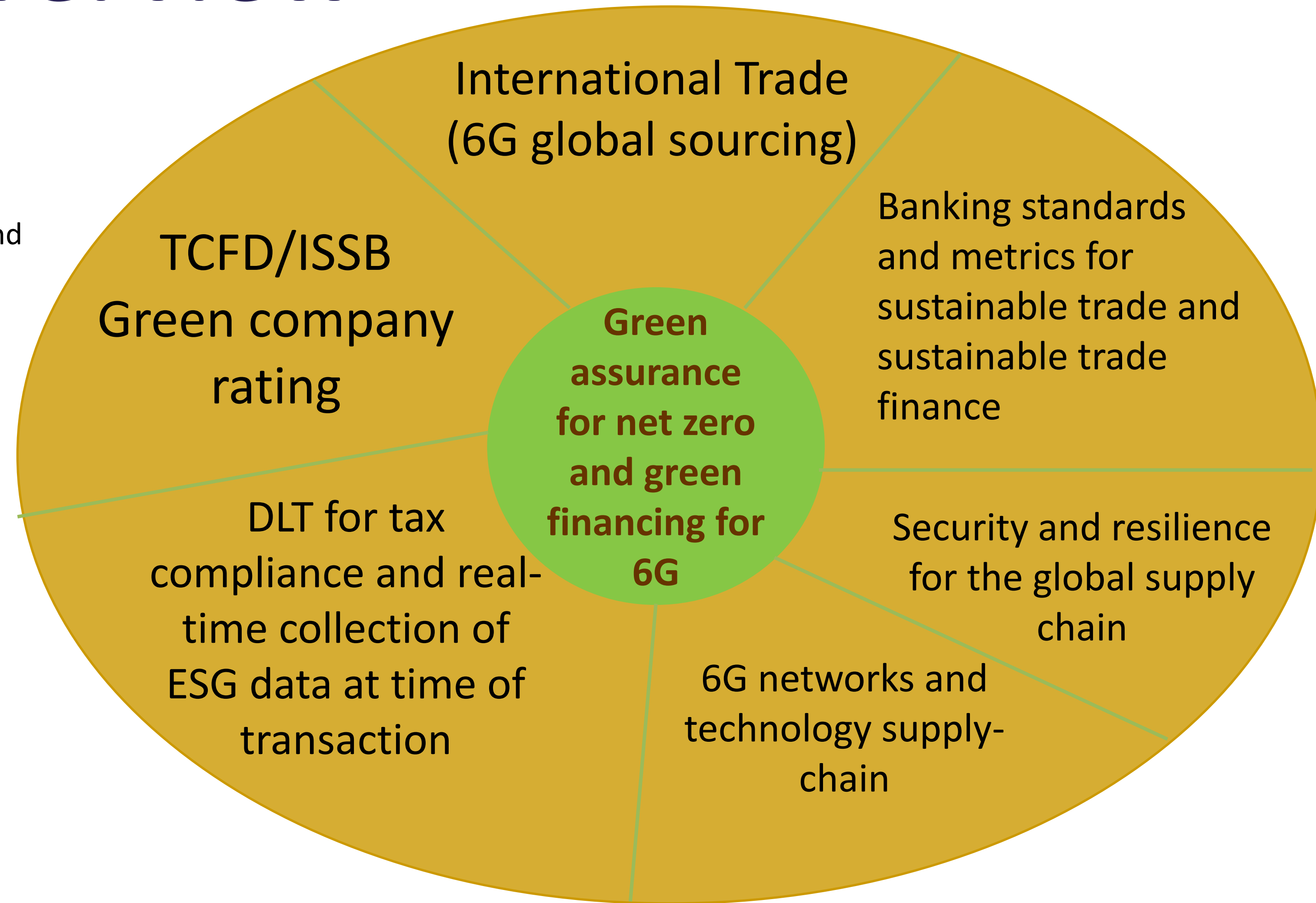
ATIS & 6GSNS “Beyond 5G & 6G Roadmap” for Potential EU-US Collaboration on Research and Investment Activities.

“The global supply chain for components is distributed across regions creating resilience and flexibility.”

UK’s 5G Supply Chain Diversification Strategy

“There is a significant gap between ESG data needs and ESG data availability”

“Two Problems for FinTech to Solve: Cross-Border Payments and ESG Data” - Keynote Speech by Mr Ravi Menon, Managing Director, Monetary Authority of Singapore



Partners

- Brunel University expertise
 - DLT for automated tax compliance.
 - Circular economy (International Centre of Excellence on Sustainable Resource Management in the Circular Economy)
 - HMRC (CDIO Innovation Team) validated DLT PoC on tax payments.
- Partners sought include:
 - Fintech.
 - Telecoms and IT network providers (5G/6G, hardware vendors, data centres, enterprise networks).
 - Regulators (Tax authorities, Central Banks).
 - Commercial Banks.

Proposal Introduction

Deliverable: Smart Procurement platform for resilient 6G for sustainability and sustainability for 6G.

Impact: Green assurance for net-zero and green financing for 6G, secure and resilient supply chains

Stage 1: Identify standards and data points for assuring compliance in 6G development and 6G enabled innovation (8-9 months)

Stage 2: Co-design smart procurement system with stakeholders (regulators, investors, vendors, service providers, (8-9 months)

Stage 3: Integration with tax, accounting, and payment systems. (5-6 months)

Stage 4: Field trial and validation (5-6 months)

Stage 5: Final Report and Dissemination activities (4-6 months)

Start

Total: 30-36 months

Finish

Contact Info

For more information and for interest to participate please contact:



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Presentation available via:



Join Consortium Building Session

15th of March 9-9.30 CET

[join here](#)



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