

CELTIC-NEXT

Project Proposal Pitch

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Automated Tax Compliance for Cross-border Trading with NB-IoT

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Teaser

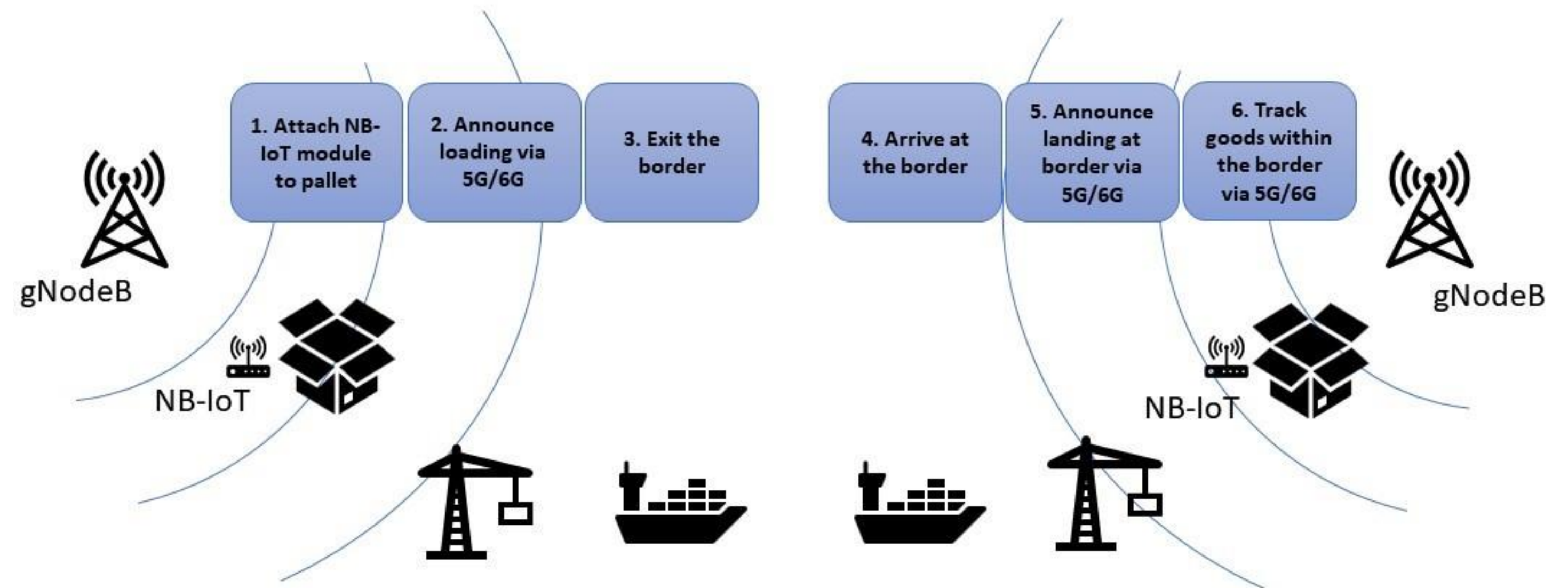
- NB-IoT enabled automated and real-time payment of taxes when goods land at the border.
- Confirmed physical localization of goods.
- Digitalisation can help save up to 20% of trade costs.
- Participation benefits:
 - Tax authorities:
 - Enforces compliance, counters tax fraud, reduces burden of administration, makes tax effortless for businesses.
 - Importers/Exporters:
 - Reduced costs for businesses.
 - Technology providers:
 - Inform future design for the cross-border Use Case of NB-IoT.
 - Smart transport:
 - Logistics, freight management.

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.

Proposal Introduction

- Real-time tracking of goods from the point of loading to the point of landing using NB-IoT modules.
- Landing triggers tax payments.
- Evidence-based thick connectivity between physical and cyber layers.
- Extends previously EPSRC funded research outputs on automated tax collection.



Proposal Introduction

- Build 5G/6G testbed, DLT environment and payments sandbox.
- Establish feasibility (economic, technical, legal) of building the NB-IoT enabled infrastructure capability for tax collection, tracking of goods and facilitation of trade as part of an economically viable comprehensive approach.

Stage 1: Design requirements for integrating payments with logistics via NB-IOT (9 months)

Stage 2: Build prototype and test environment (12 months)

Stage 3: Verify and Validate (9 months)

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

Start

Total: 36 months

Finish

Partners

- Brunel University expertise
 - DLT for automated tax payments.
 - 5G testbed.
 - HMRC (CDIO Innovation Team) validated DLT PoC on tax payments.
- Partners sought include:
 - SME's involved in cross-border transportation of goods.
 - Technology providers (e.g. NB-IoT, LoRa, GPS).
 - Requires tax authority involvement from participating members.

Contact Info

For more information and for interest to participate please contact:



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Presentation available via:

