



CELTIC-NEXT



Proposers Brokerage Day

25th September 2026,

IMEC

in Leuven, Belgium

**INDUCT: Novel robots for steerable
cable deployment IN telecoms DUCTs**



**University of
Nottingham**
UK | CHINA | MALAYSIA

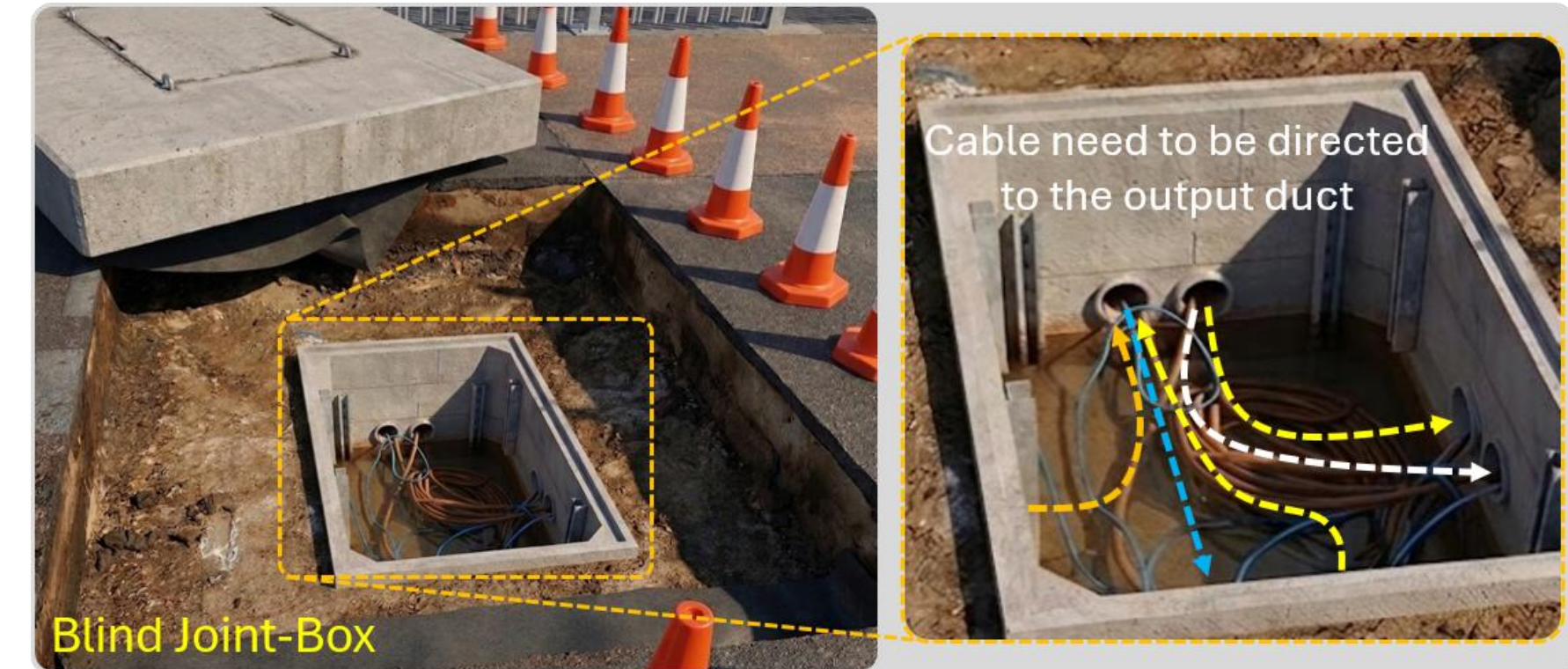
Abdelkhalick Mohammad, Associate Professor
Rolls-Royce UTC in Manufacturing and On-wing Technology
Abd.mohammad1@nottingham.ac.uk

INDUCT: Novel robots for steerable cable deployment IN telecoms DUCTs

Challenge 1



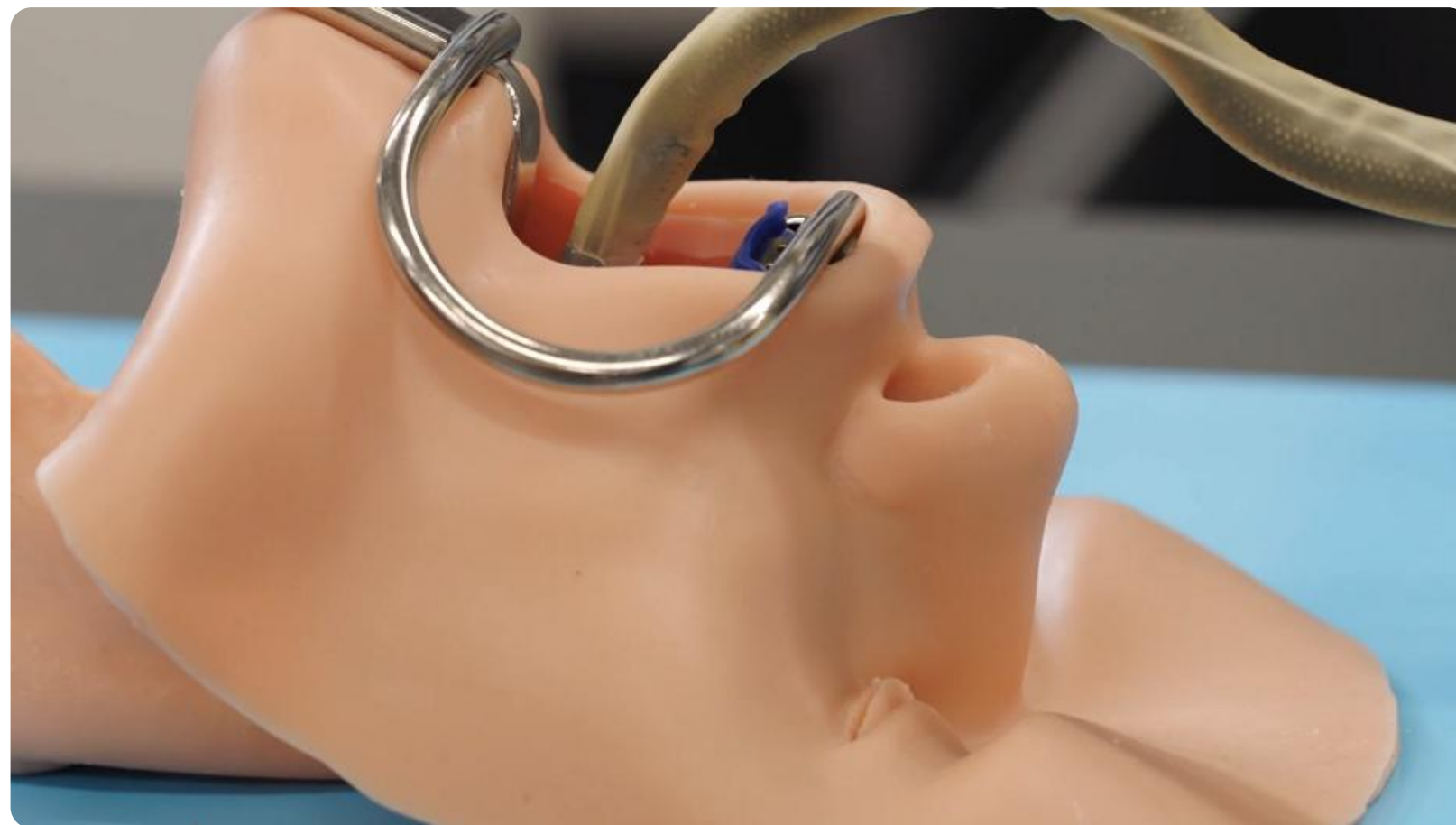
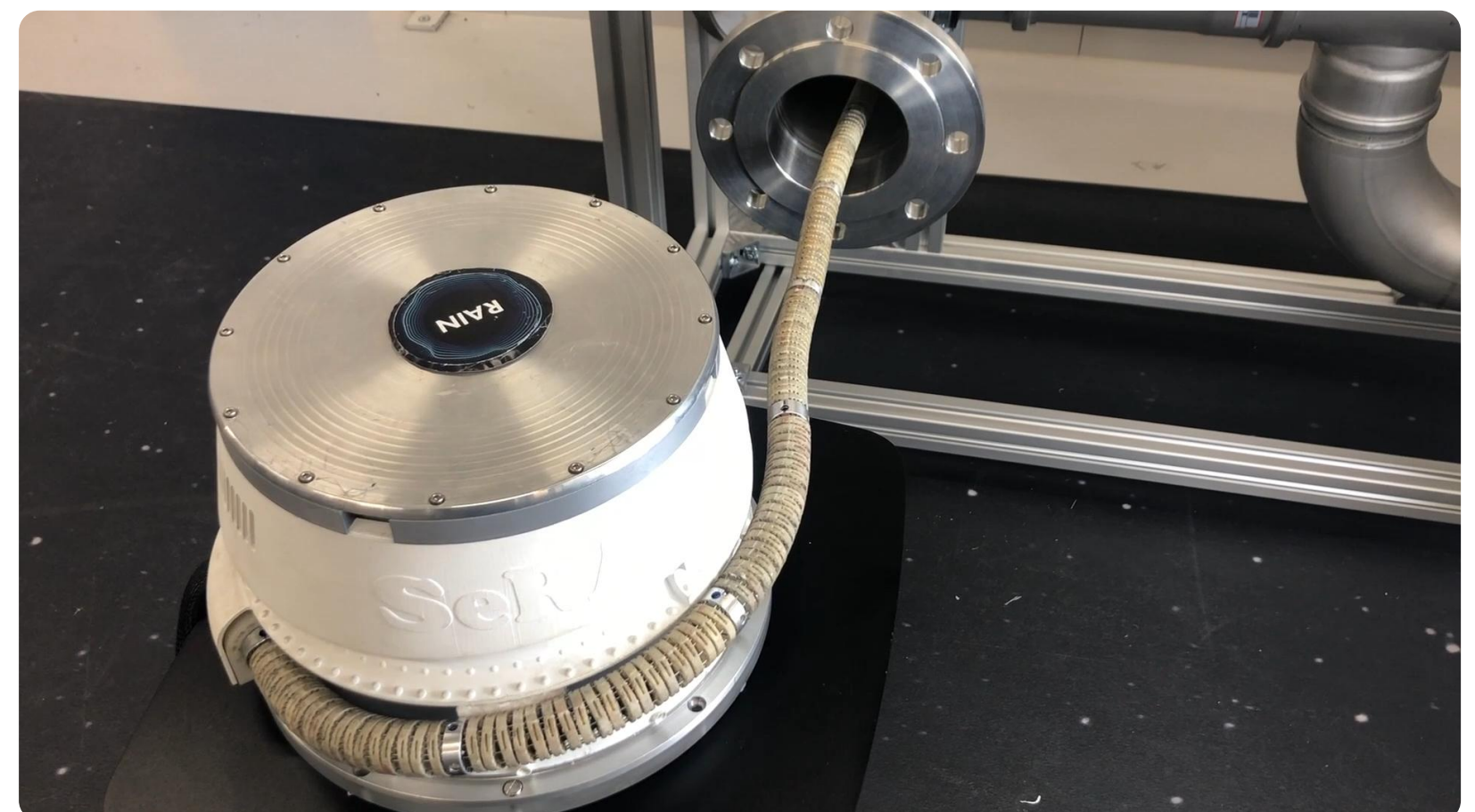
Challenge 2



Challenge 3



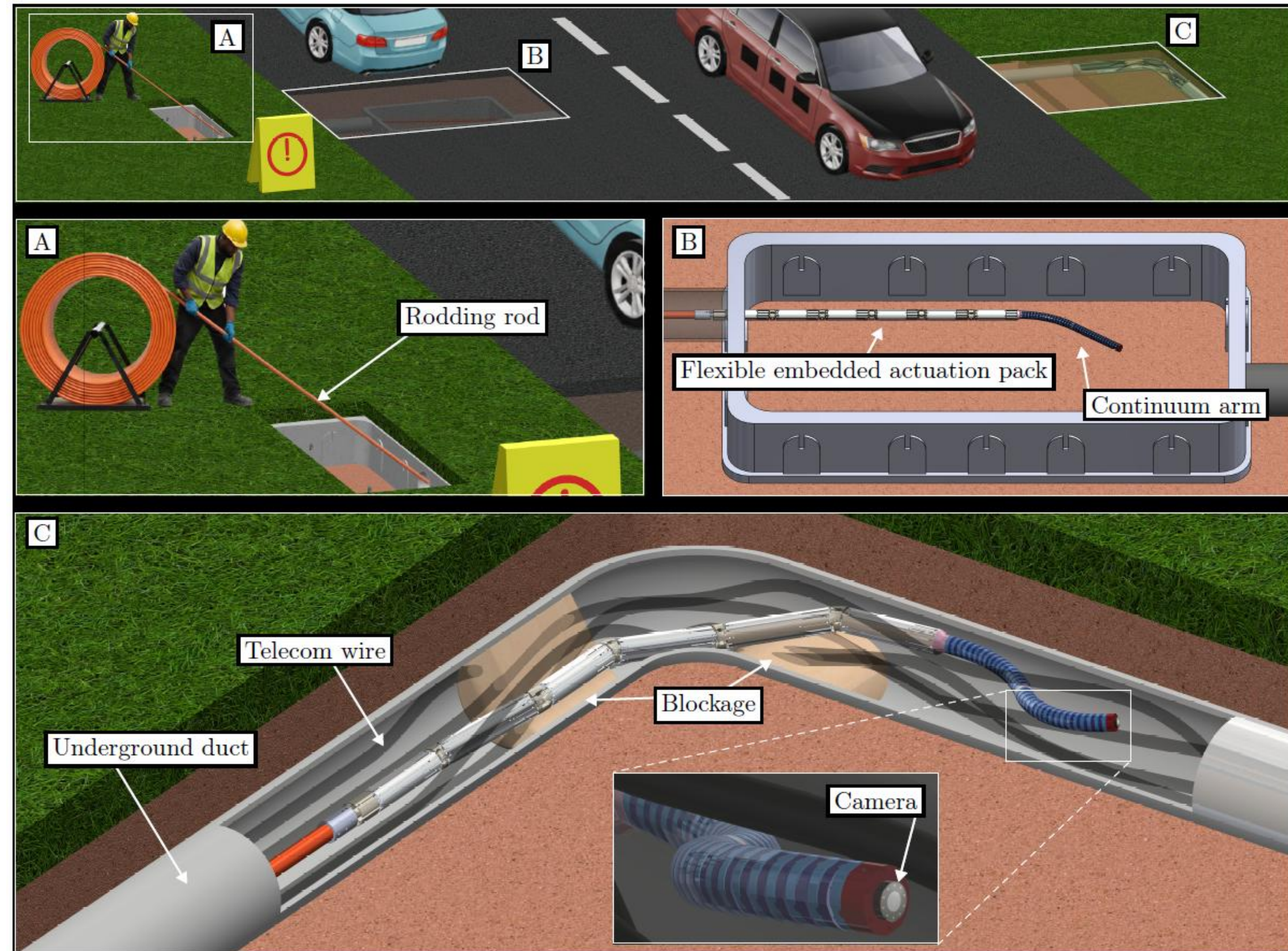
We are experts in developing snake-like robots for confined spaces ranging from aeroengine to medical app



**Next
Challenge!**

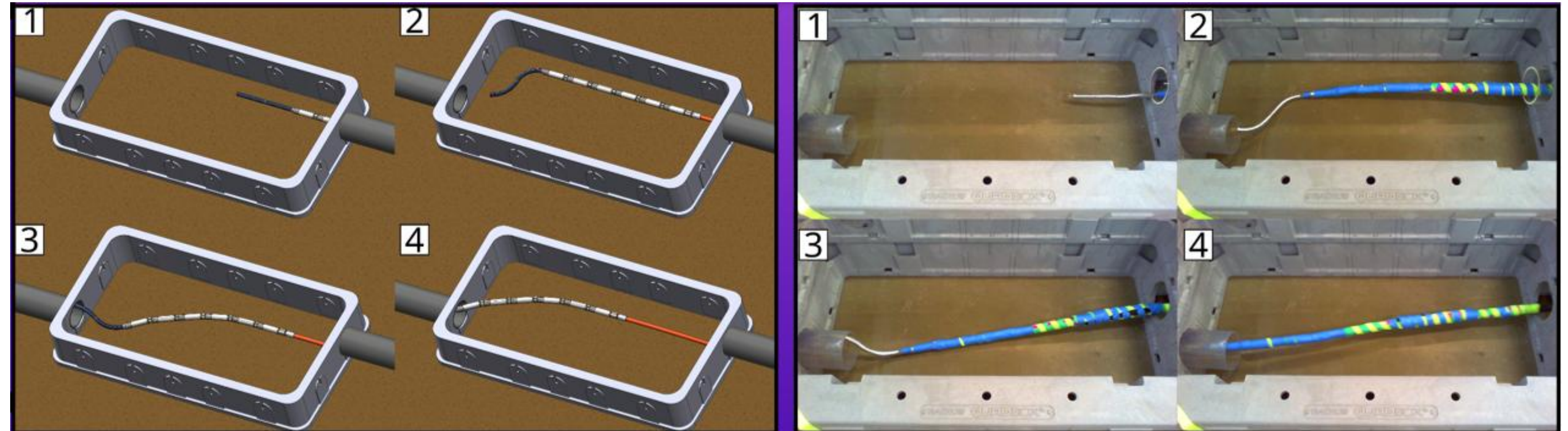
Proposal Introduction

- The proposal is to investigate a **novel continuum robot platform with embed flexible actuation pack**.
- The proposed robot will be engineered to operate within **constrained duct environments, traverse complex junctions and inaccessible chambers**, and facilitate the installation of draw ropes or fiber cables.
- The proposed platform will integrate **compact locomotion, obstacle negotiation and intelligent navigation capabilities** within a

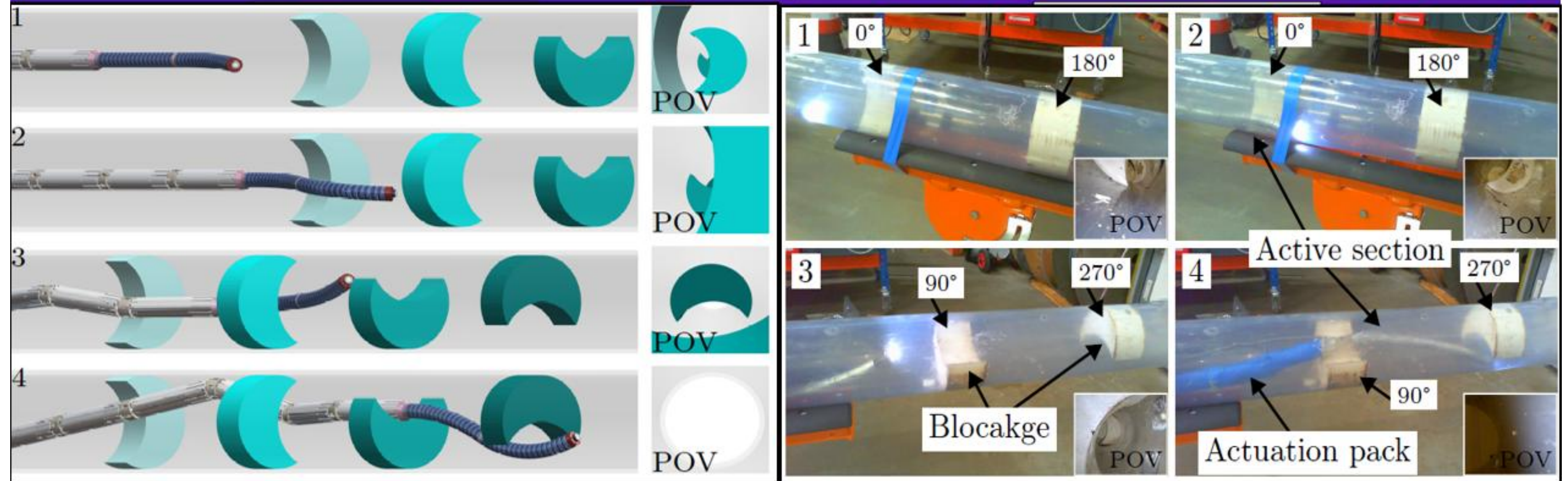


Proposal Introduction

Challenge 1



Challenge 2



Initial

Proof-of-concept

Proposal Introduction



Partners



BT Group



aunqa

Türk Telekom

Değerli Hissettirir



We are looking to partner with end-users in telecom
and utility services experiencing similar operational
challenges.

Contact Info

For more information and for interest to participate please contact:

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Presentation is available via:

Join the Consortium Building Sessions

**28. September
from 11:00-12:00 CET**

Connection details:
Via

www.celticnext.eu/new-ideas

