European Space Agency Digital Cities Seminar

Beyond the Demonstrator
Our journey towards establishing Glasgow as one of the most innovative and pioneering smart cities in the world

Dr Colin Birchenall
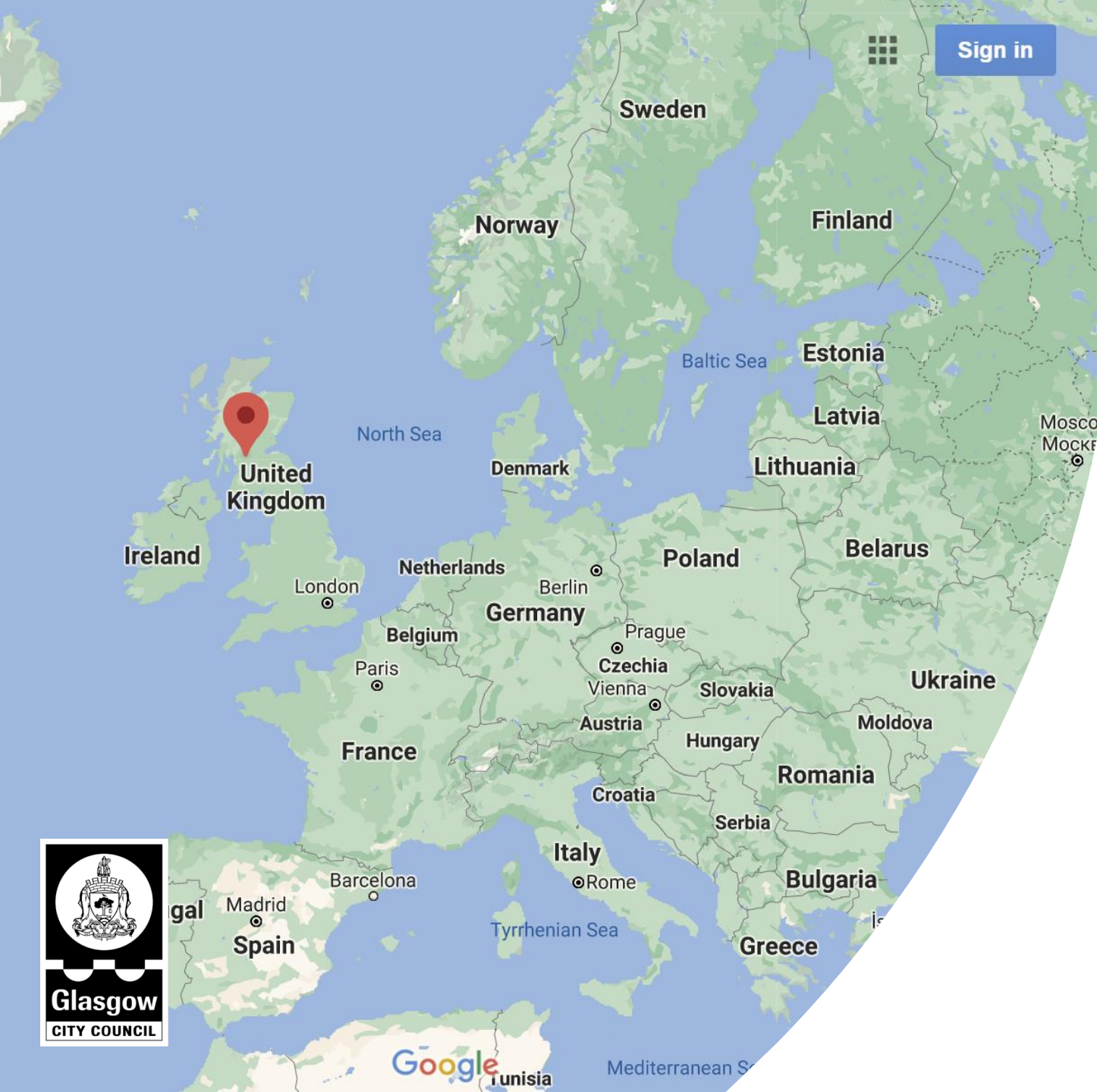Chief Digital Officer
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The City of Glasgow

- Scotland's largest city: 626,000 (city), 1.8M (city region)

- Powerhouse of the Scottish economy: £42.8bn GVA (30% of the Scottish economy)

- Diverse economy;
  - Digital Technology, Creative Economy, Low Carbon Industries, Life Sciences, Engineering Design and Advanced Manufacturing, Finance and Business Services, Higher and Further Education, Tourism

- UNESCO City of Music

- UN Global Green City, Carbon neutrality target for 2030

- **Host city for UN Climate Change Conference 2021 (COP26)**

DIGITAL GLASGOW

The City of Innovation

- Four world-renowned Universities

- **Three Innovation Districts**

- World-leading Research, Innovation Centres and Catapults
    - CENSIS (IoT and Sensors) Innovation Centre
    - Digital Health and Care Innovation Centre
    - Data Lab Scotland
    - Construction Scotland Innovation Centre
    - Connected Places Catapult
    - Offshore Renewable Energy Catapult
    - Scotland 5G Centre
    - Fraunhofer Centre for Applied Photonics
    - Urban Big Data Centre
    - Institute of Future Cities
    - James Watt Nanofabrication Centre
    - National Manufacturing Institute Scotland
    - SoXSA (Scottish Centre of Excellence for Satellite Applications)

Glasgow CITY COUNCIL

The Thriving Space Sector

- 18% of UK space sector employment in Scotland

- More satellites produced in Glasgow than any other city located outside of the United States

- Growing space sector in both upstream and downstream markets;
  - Clyde Space
  - Spire
  - Alba Orbital
  - R3-IoT
  - Bird.i

- Scottish Centre of Excellence for Space Applications and Space Business Incubator

- Increase growth expected with the creation of two UK Spaceports in Scotland;
  - Shetland Space Centre
  - Space Hub Sutherland

The Future City Demonstrator

- £24M Innovate UK "Future Cities Demonstrator"

- Programme delivered in two years 2013-2014

- Creation of
  - the "Glasgow Operations Centre"
  - the "Open Glasgow" City Data Platform

- Delivery of City Demonstrators;
  - Smart Energy
  - Active Travel
  - Intelligent Street Lighting
  - Smart Mobility
  - IP CCTV

Beyond the Demonstrator

- Large-scale deployment of Intelligent Street Lighting across the whole of the city centre (3,700 street lights)

- 14 acre Smart Campus programme

- Smart Street Project (H2020 Ruggedised)

- Smart Canal

- 3D Urban Model

- 99% LoRaWAN coverage

- New Centres of Excellence
  - Centre for Data Analytics
  - Centre for Civic Innovation

Glasgow
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The Ambition

1. "We want to be recognised as a top 20 global digital economy"

2. "We want Glasgow to be recognised as one of the most innovative and pioneering smart cities in the world, and we want to apply this innovation to transforming public services."

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Thank You

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