Enabling modern Digital Britain – data as infrastructure

From Principles to Practice: Delivering Interoperable Data at Scale

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Ordnance Survey

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“Data is one of the UK’s unrealised growth assets, underpinning innovation and productivity….
the ability to collect, share and use data in a safe and trusted way has become essential.”

Capitalising Data Value

The UK's Modern Industrial Strategy 2025 - GOV.UK

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Data Interoperability at scale

Share and use data with minimal intervention

1

Data Standards

Standardised data formats and data models

2

Data Linkage & Foundational Data

Making data easy to use by joining disparate datasets together

Data Exchange & Access

Enable users to access data using the tools and tech they know and love

4

Semantic interoperability

Unlock insight by exploring data without needing to be an expert

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Data Standards

Proprietary data formats	Open standards	Cloud native (geospatial)
SHP	GML	Parquet - WKB
		Parquet - native Geometry/ geography
NTF TIF	GeoTIFF	CSV GeoPackage
		COG / STAC
DXF	WFS / WMS	OGC Features / Tiles API
		Open table formats – Iceberg / Delta
Metadata	ISO 19115 / UK Gemini	GeoDCAT
		Open Data Contracts

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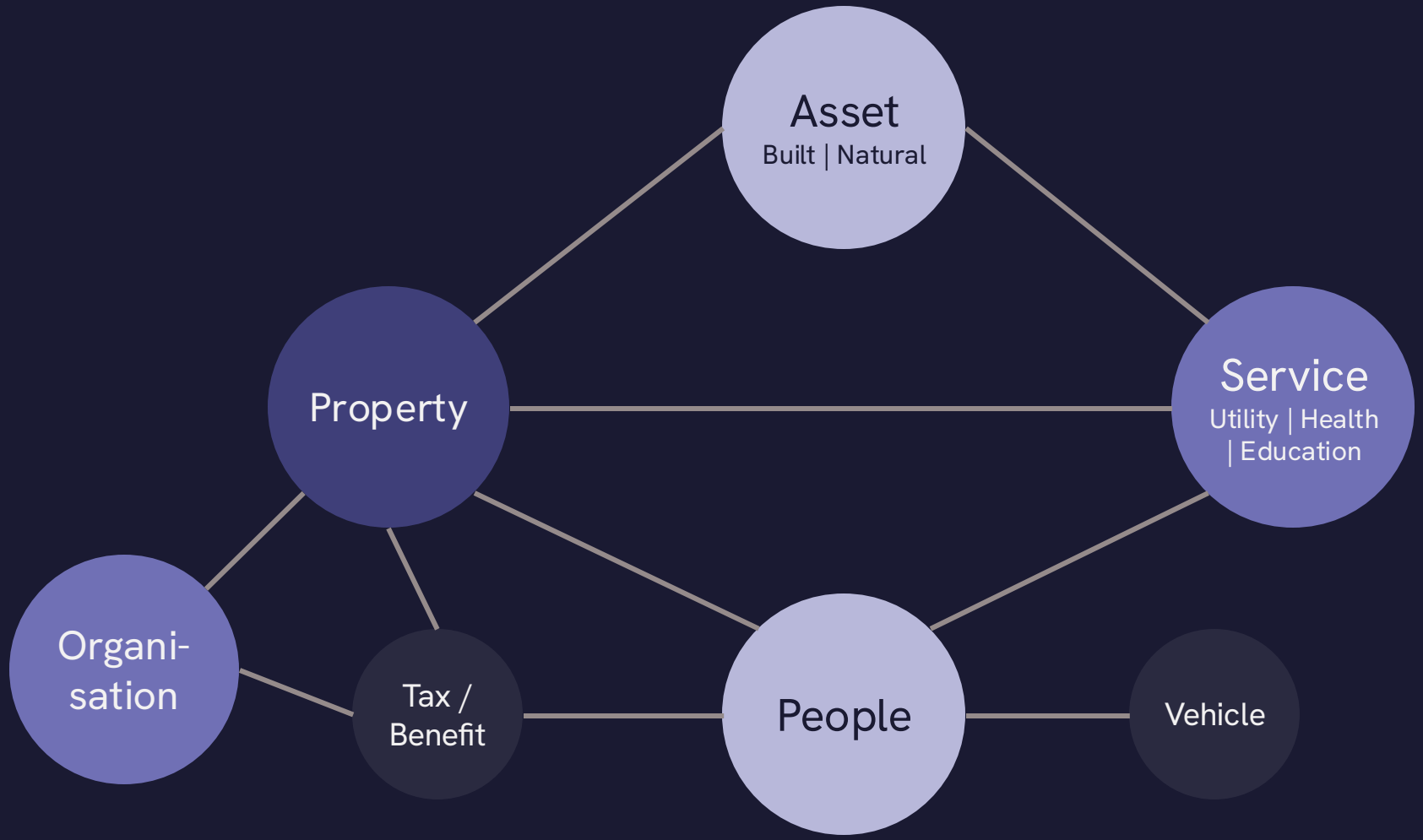
NGD = National Geographic Database

Data Linkage & Foundational Data



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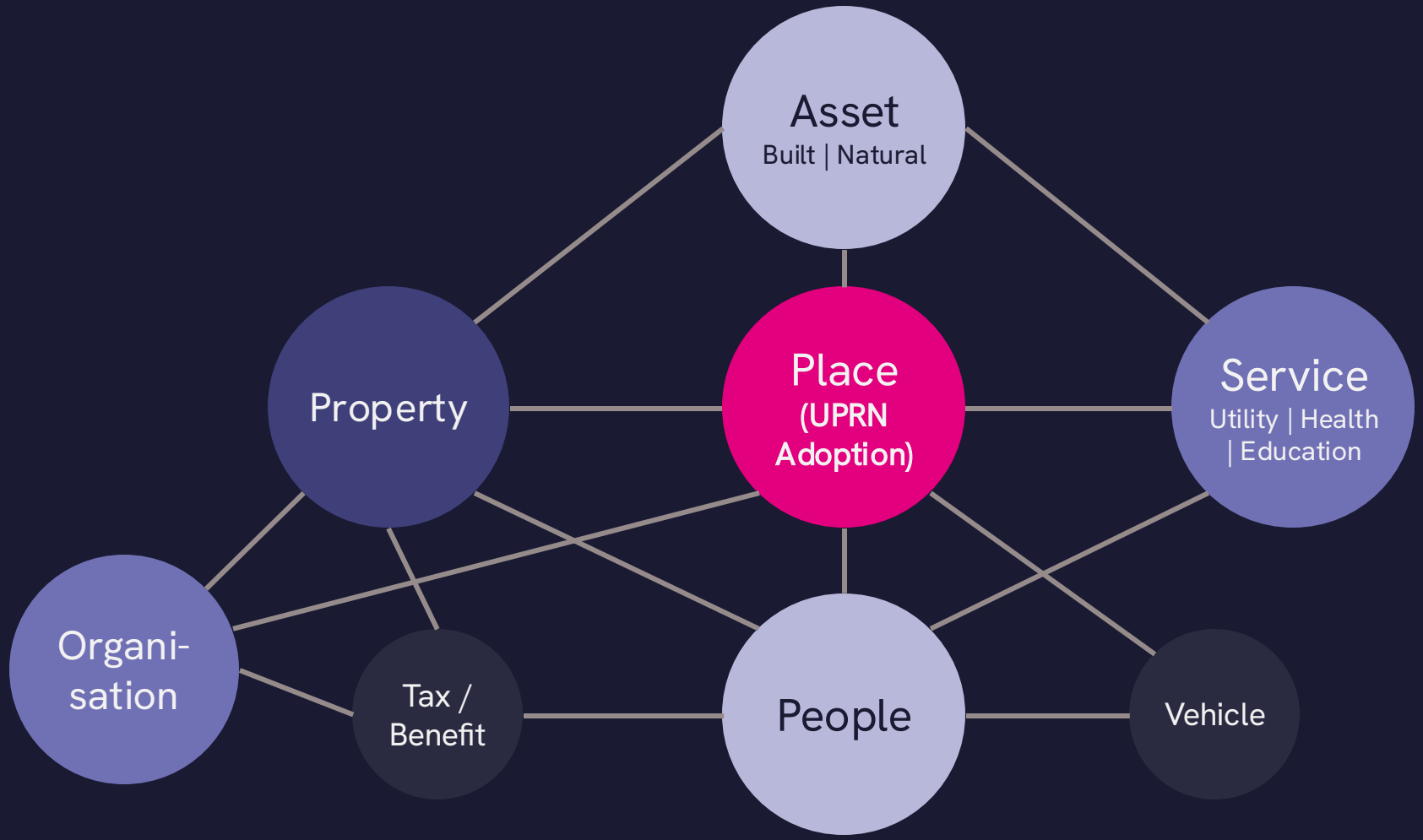
Data Linkage & Foundational Data



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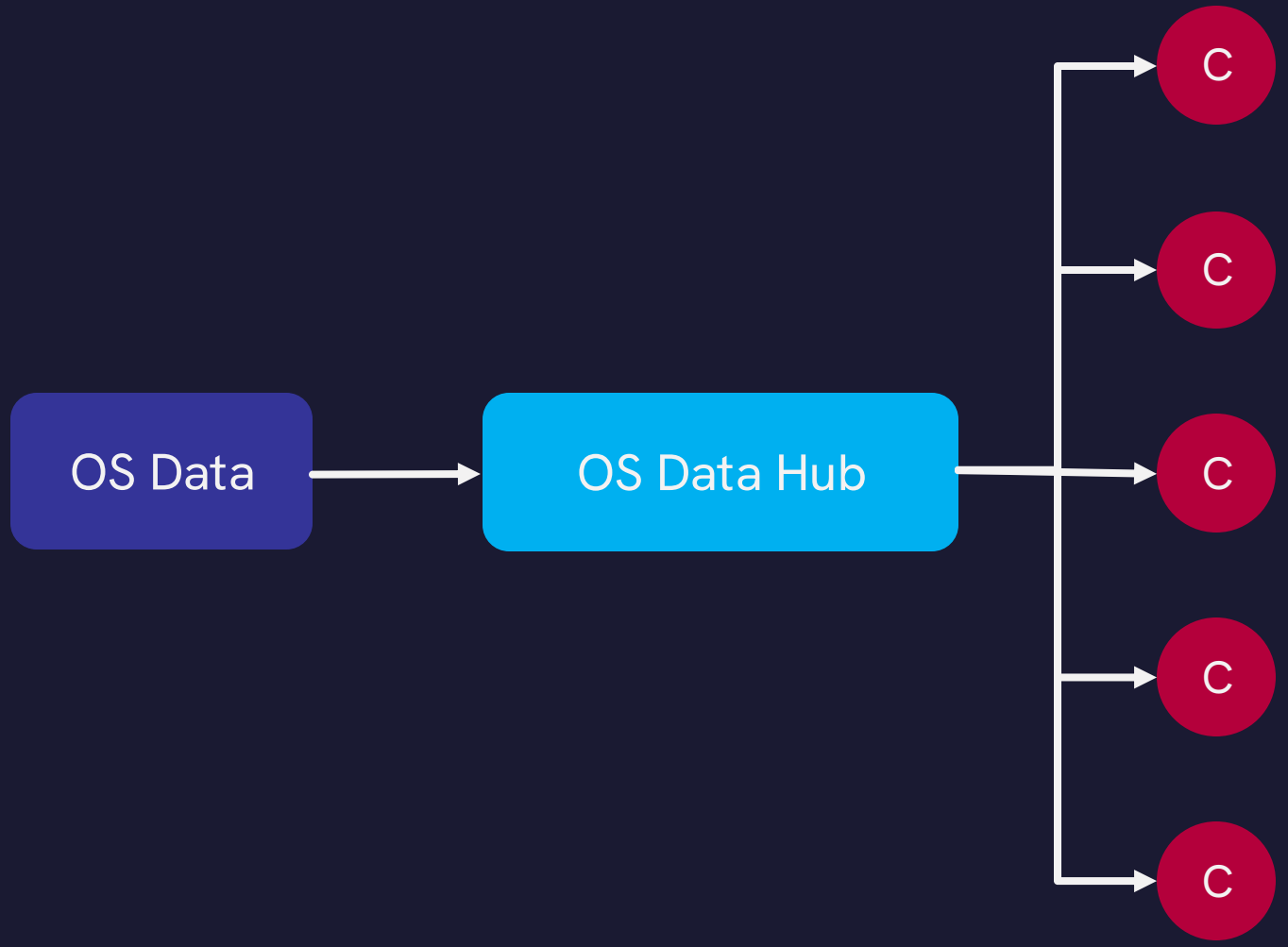
Geospatial is an integral part of our foundational national data: assets, property, service and place

Data Exchange & Access - From Data Hub to Data Platform

Architecture



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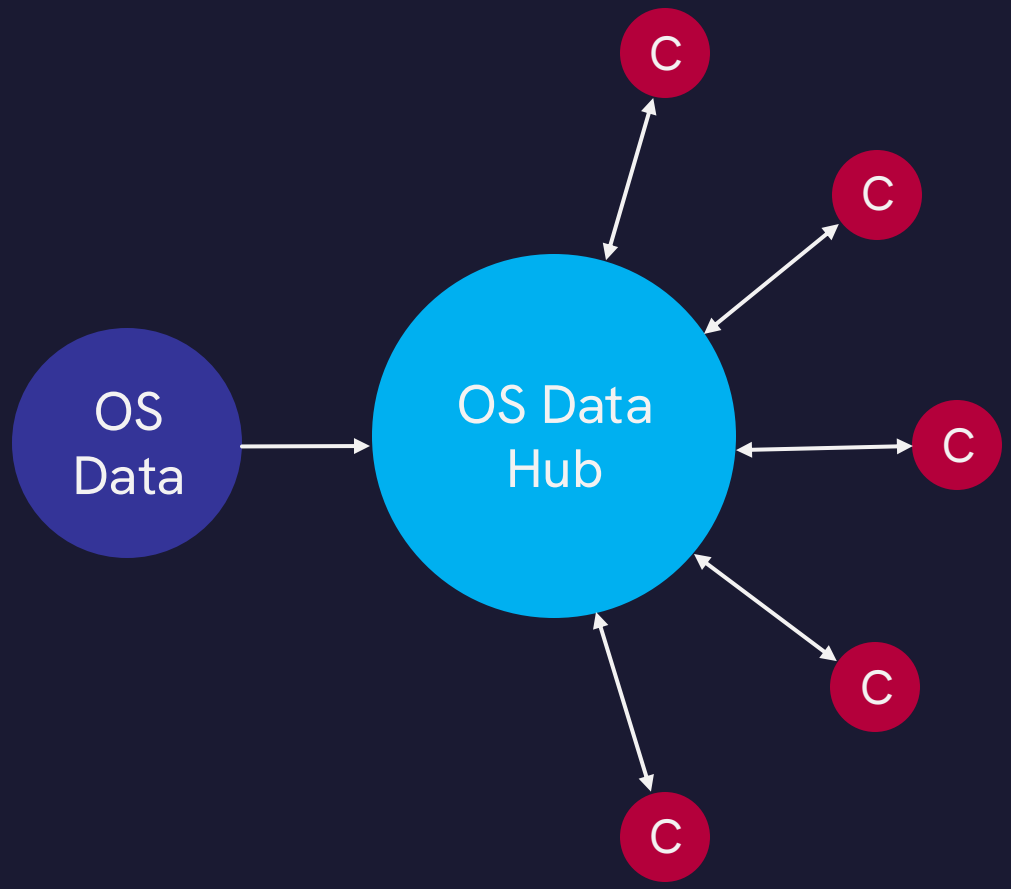
Data Exchange & Access - From Data Hub to Data Platform Architecture

NGD - 600 million features

1.4Bn updates since launch

> 1.25m data improvements per year



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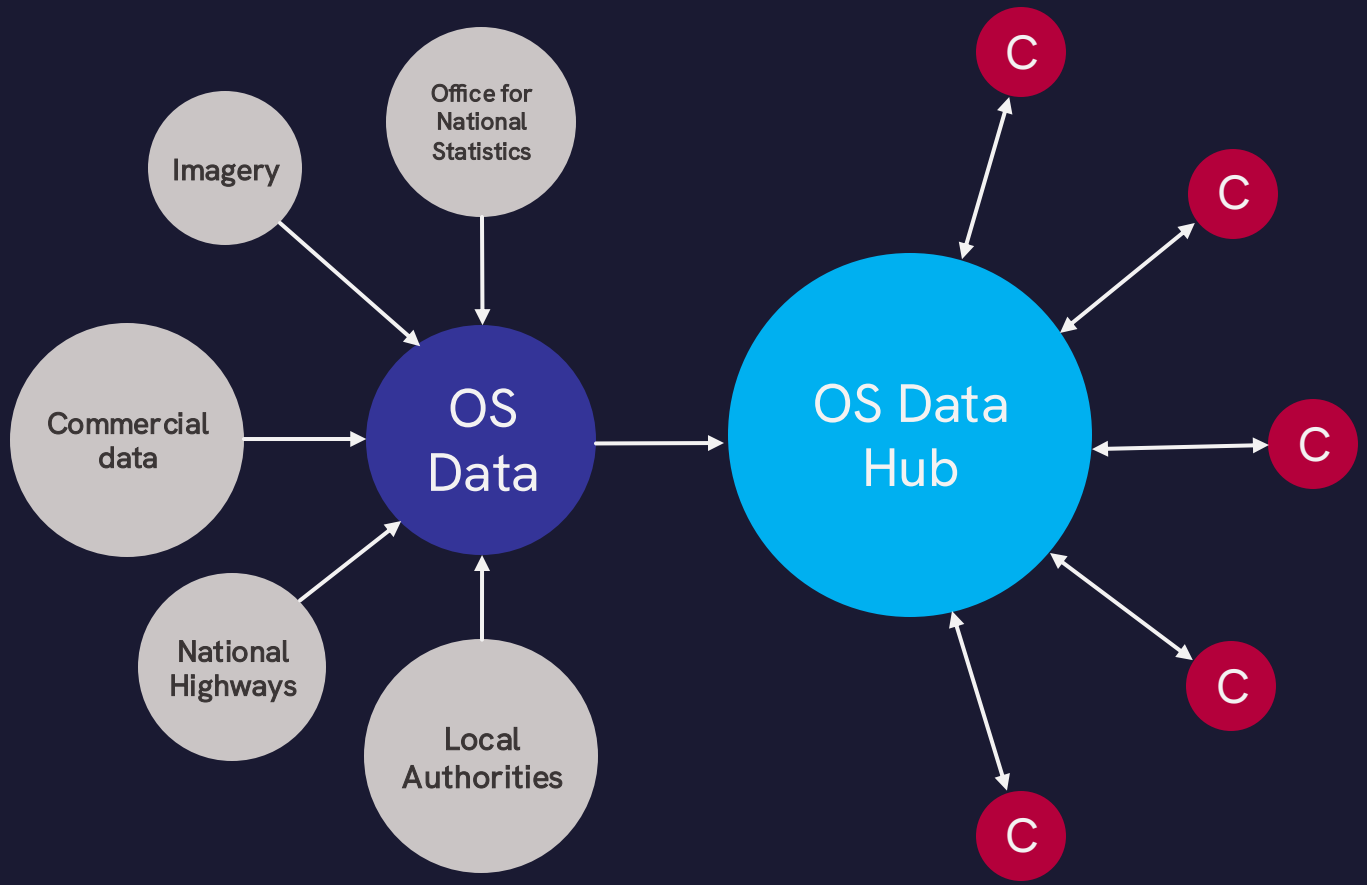
Data Exchange & Access - From Data Hub to Data Platform Architecture



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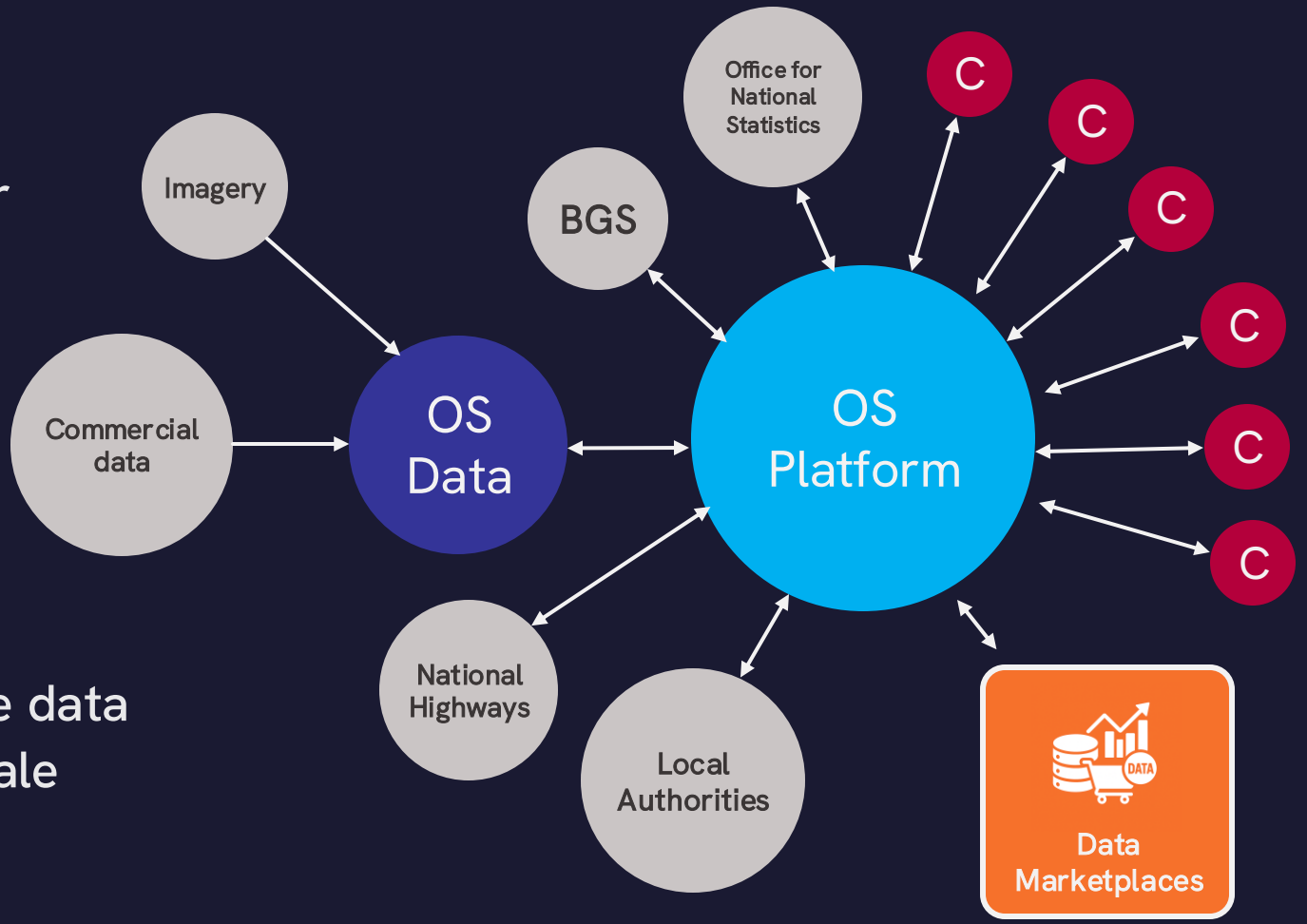
Data Exchange & Access - From Data Hub to Data Platform Architecture

Data producer ecosystem

Interoperable data sharing at scale



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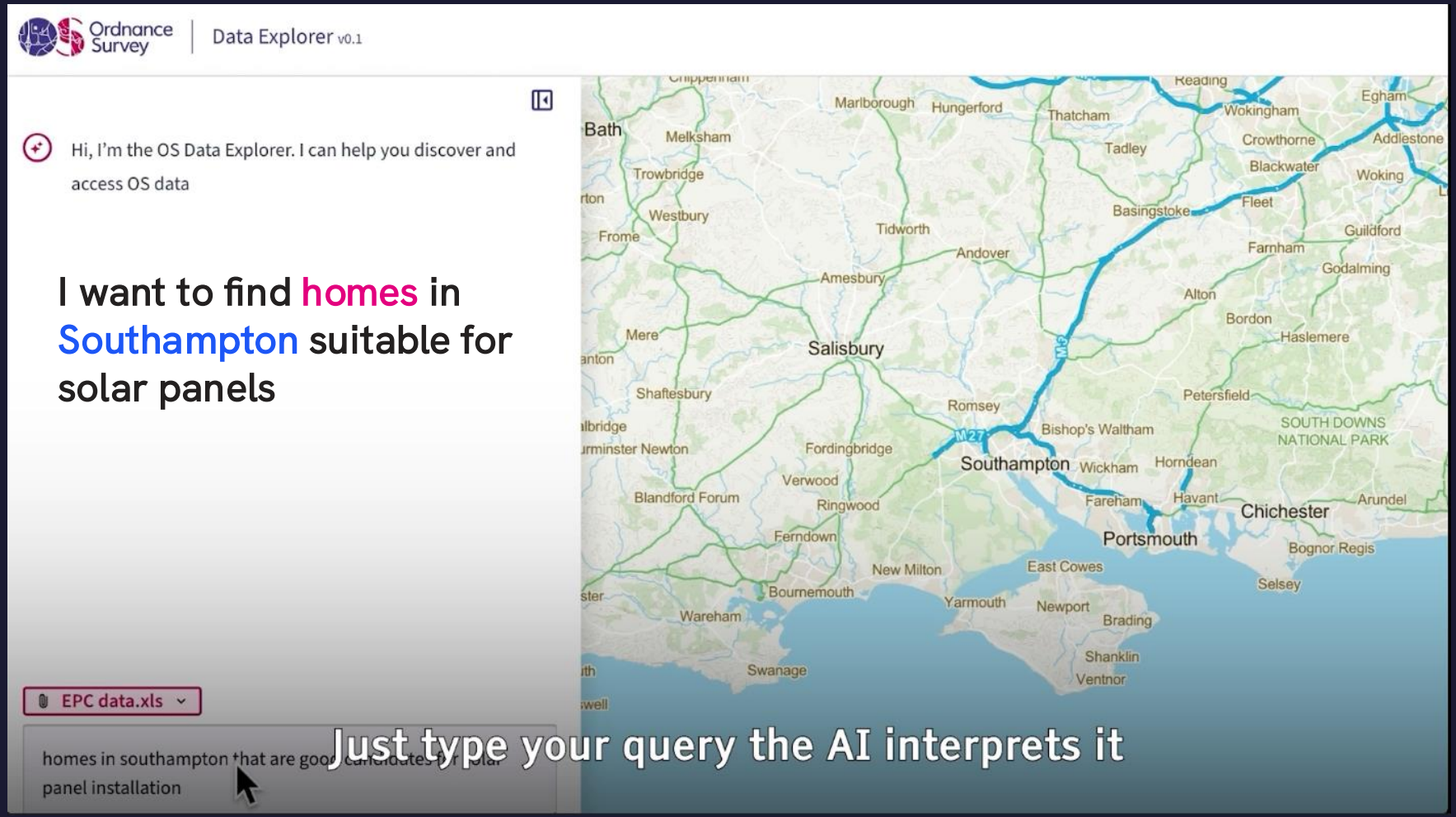
Semantic interoperability – discoverability to insight



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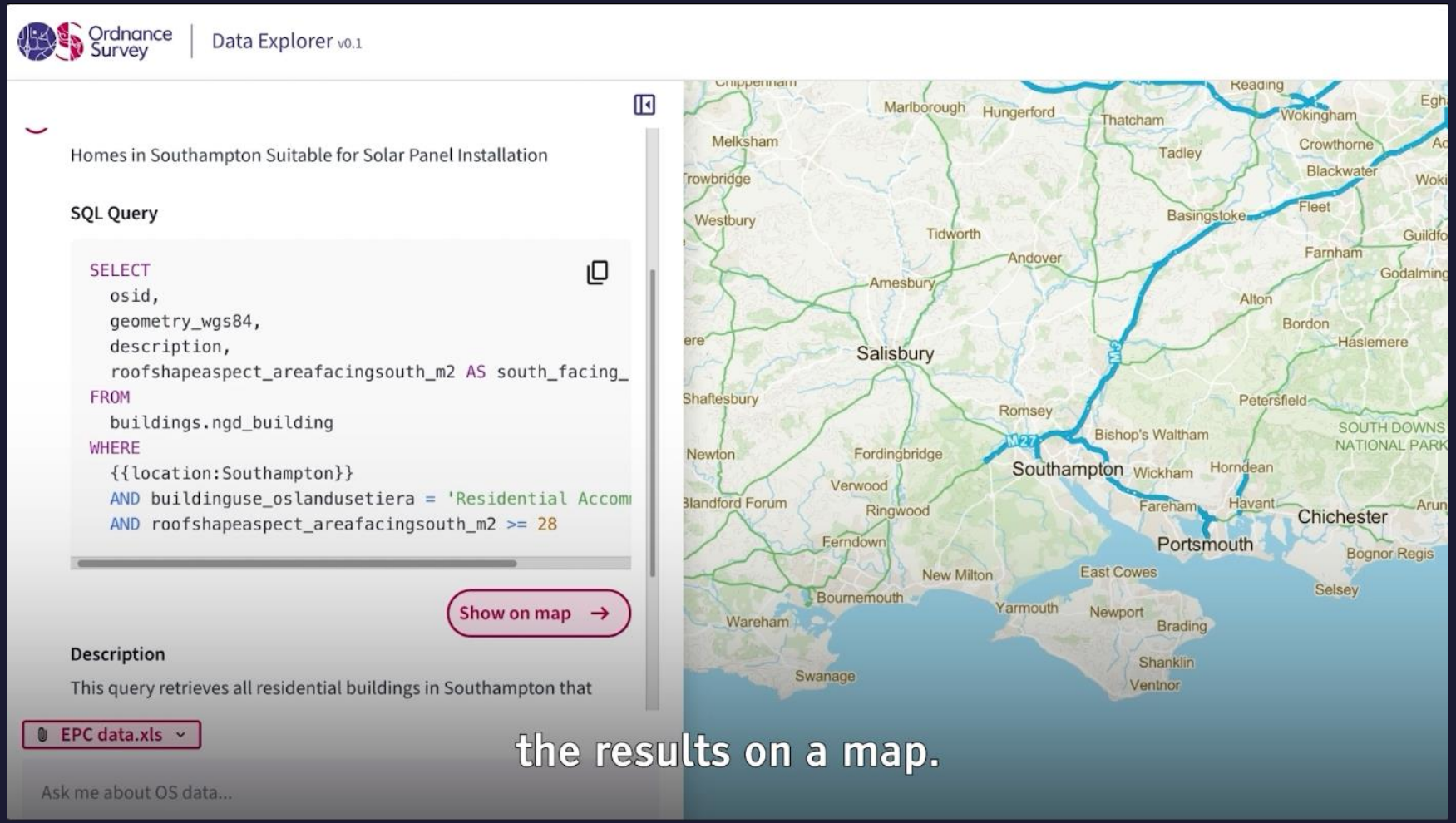
Semantic interoperability – discoverability to insight



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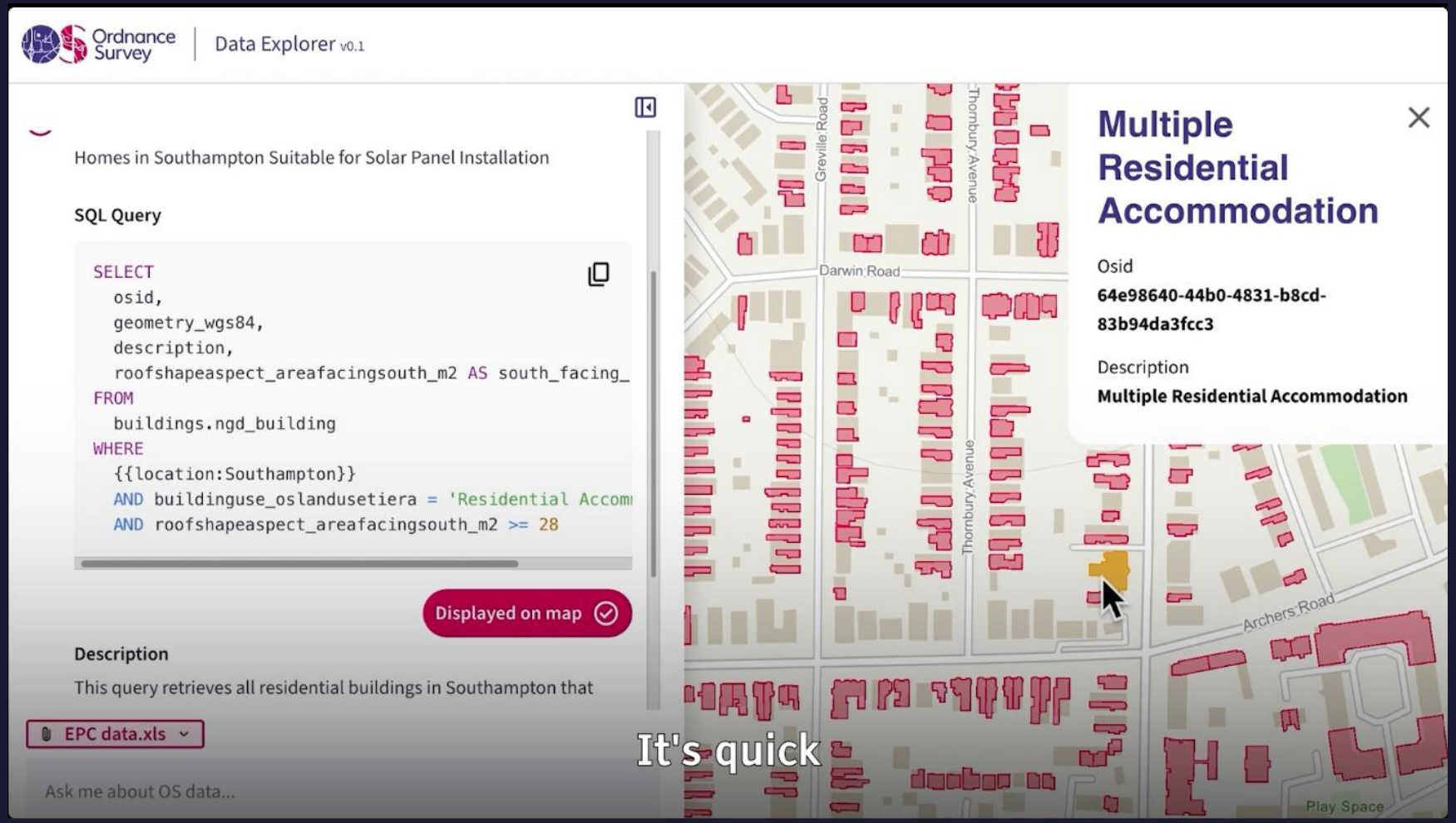
Semantic interoperability – discoverability to insight



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Summary

→ Geospatial is foundational national data infrastructure

→ Customers expect easier access to data and to find more of the data they need in the place where they work

→ Collaborative co-creation data spaces are essential to drive innovation

→ AI is transformational to unlock interoperability simplifying ease of use

→ Geospatial standards must continue to enhance mainstream data standards and initiatives to drive digital innovation

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