

National Broadband Plan Project Overview

Kilkenny County Council

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15 February 2021

Agenda

Project Introduction

- The National Broadband Plan
- Benefits
- Progress Update
- The Network

Kilkenny

- Overview
- Survey Status

- **Broadband Connection Engagement**
- **Stakeholder Engagement**
- **Questions**



The National Broadband Plan

- **Access**

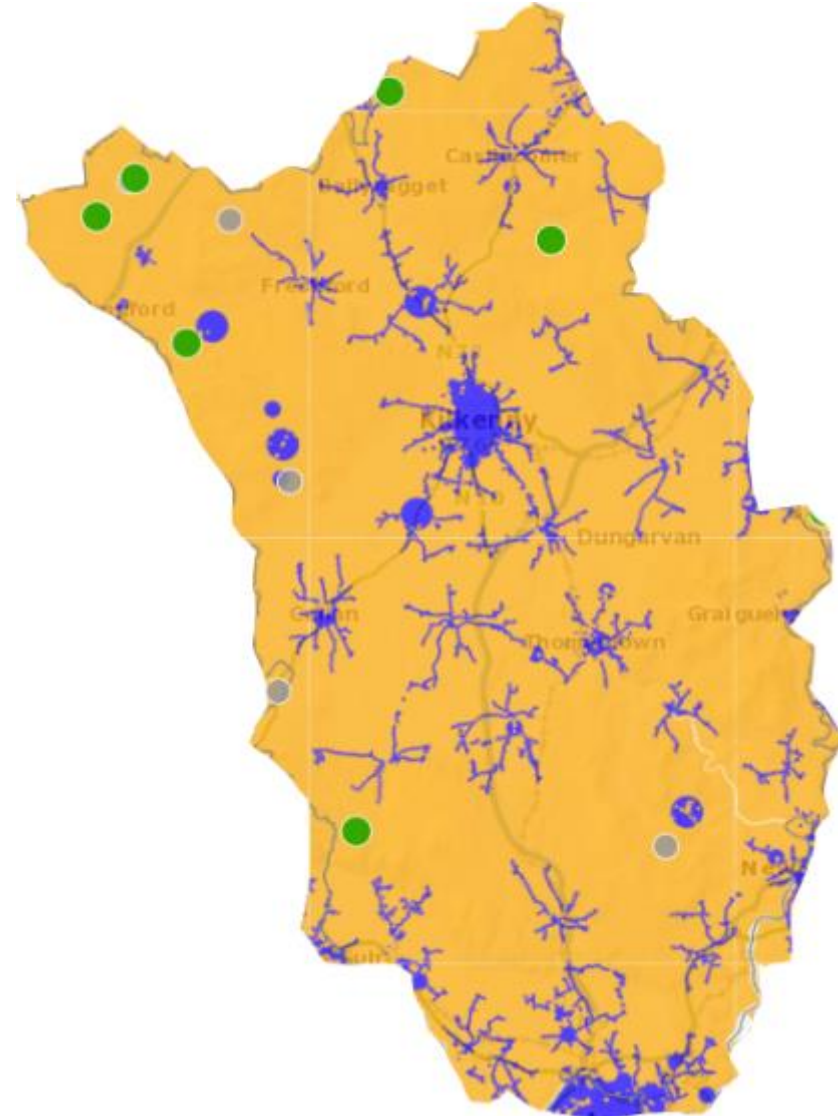
The aim of the programme is to ensure every premises has access to high-speed broadband.

- **Intervention Area**

DECC identified all premises in the country that don't have access to high-speed broadband – this is called the Intervention Area or Amber area.

- **Intervention Area**

NBI have been contracted to build a full fibre network to connect the 544,000+ premises ensuring no one is left behind.



AMBER areas - the target areas for the State intervention of the National Broadband Plan
BLUE areas - where commercial operators are delivering or have indicated plans to deliver high speed broadband services.

Ambitious Government Policy Gains EU Approval: Contract with NBI

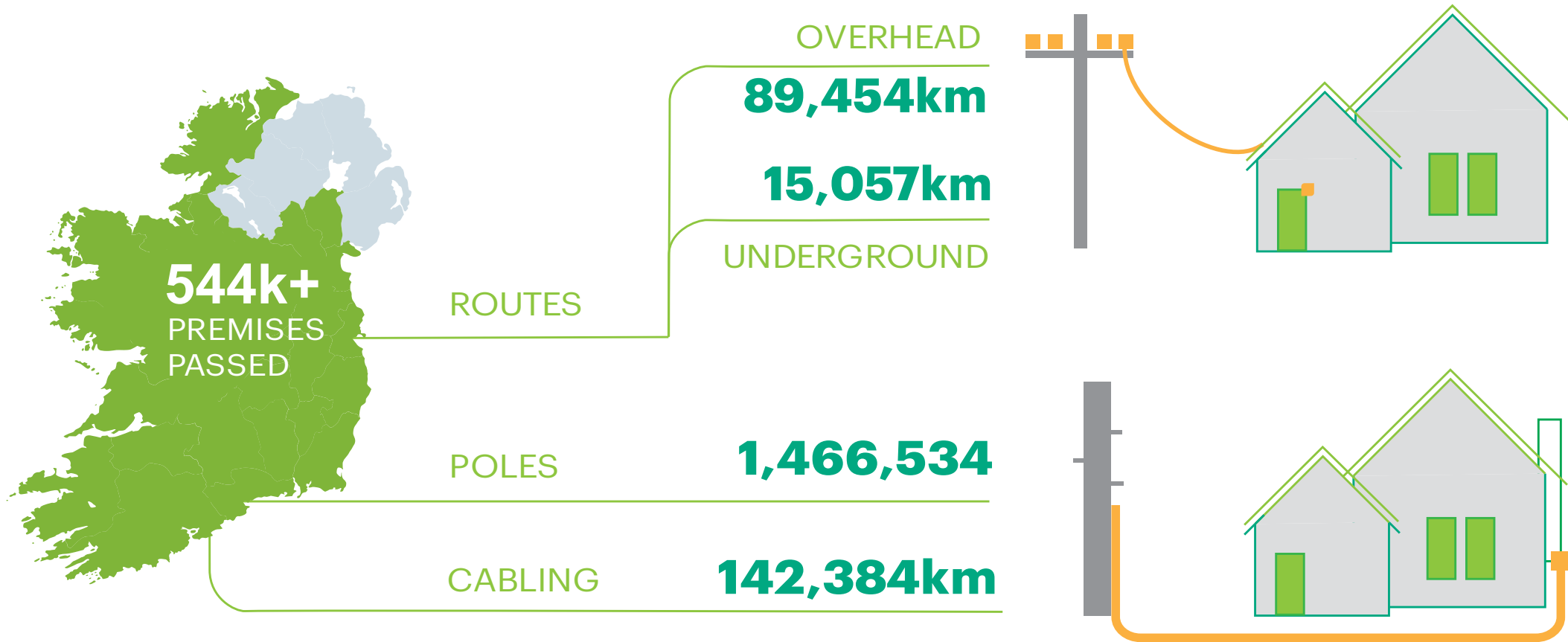
Our promise is to deliver a network that will be fit for future generations.

Commissioner Margrethe Vestager, in charge of competition policy said:

“The National Broadband Plan in Ireland is expected to address the significant digital divide between urban and rural areas in Ireland, enabling Irish consumers and businesses to benefit from the full potential of digital growth. This will help households and businesses in areas of Ireland where private investment is insufficient.”

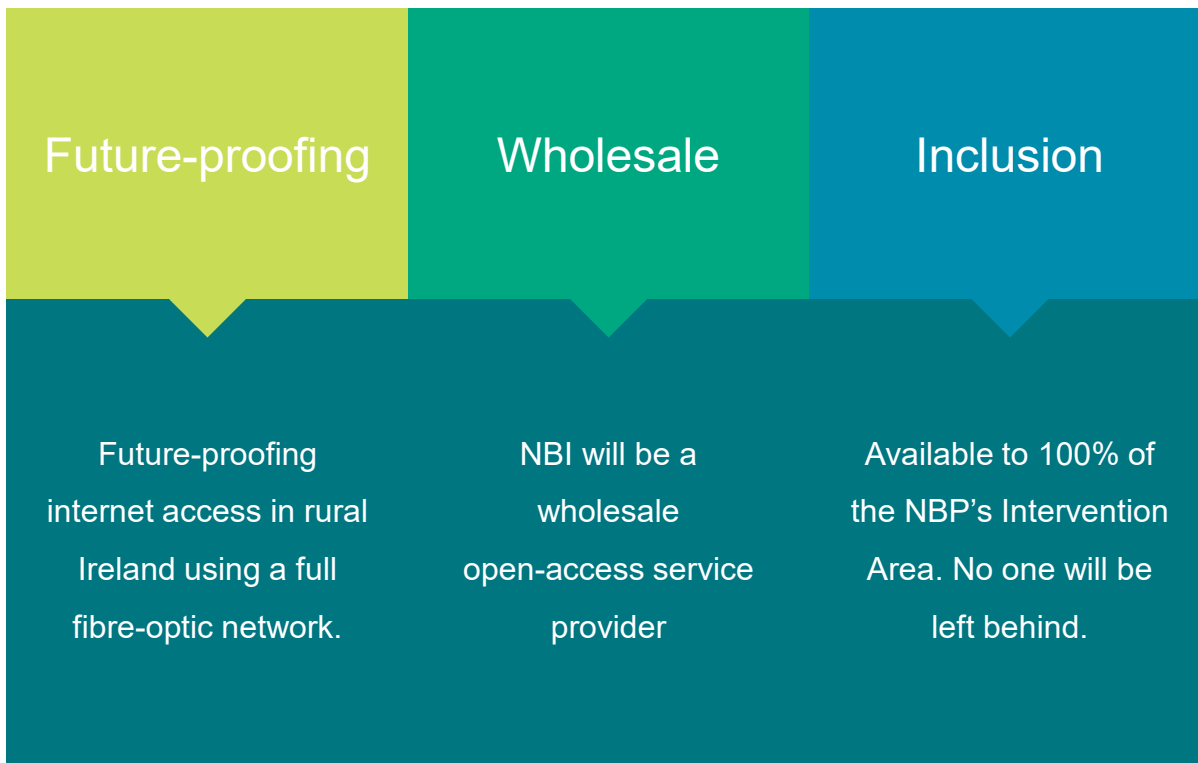


What we're delivering



Building a Future-Proofed FTTH Network

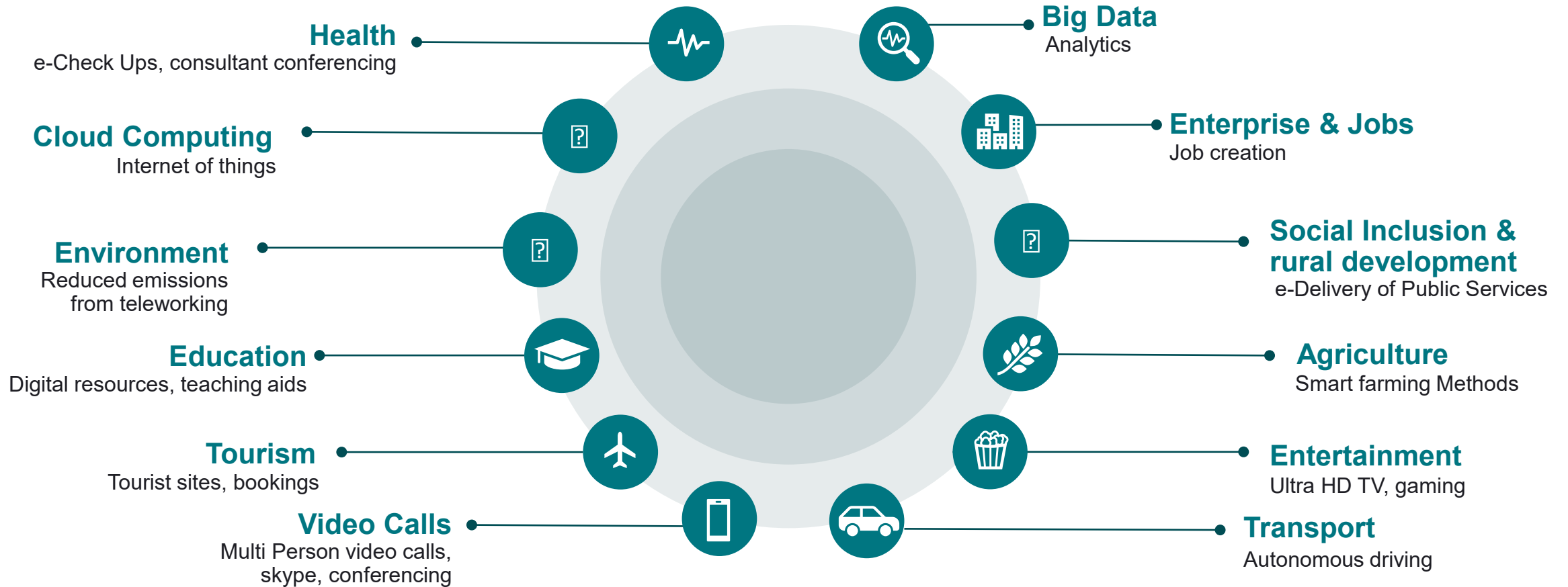
Our promise is to deliver a network that will be fit for future generations



Technology Decisions to Future-Proof the Country

- World leading technologies to futureproof the network
- Use existing infrastructure, where possible, to create a sustainable and cost-effective deployment
- Utilise latest technology capable of delivering multiples of current demand in traffic
- Empower all service providers in Ireland with equal access to a future-proofed wholesale, open access network
- Customers to receive option of up to 1Gbps supported from day one with minimum speed of 500Mbps

The benefits of high-speed broadband



General Progress Update

- **174,000+** premises have been surveyed to date and **136,000+** premises progressing through or completed detail design.
- **500+** premises available for connection in Carrigaline & Cavan Deployment Areas, increasing daily.
- **35 Retail Service Providers** have signed Contracts with NBI to deliver services once the network is built
- **113 BCP** sites live, plus **31** schools
- NBI team has grown to **~900** with **~192 FTE**
- **Surveying**
NBI will be surveying premises in all 26 counties in 2021
- **Fibre Network Build**
Build works will be initiated in all 26 counties in 2021.
- **Programme**
It's a seven-year build programme to complete all
Looking at opportunities to build faster



We're connecting premises!

- Launched first connection in **January 2021**
- **+500** connections available in the Carrigaline and Cavan Deployment Areas.
- Premises available for connection increasing daily.



General Update

Surveying continuing as planned:

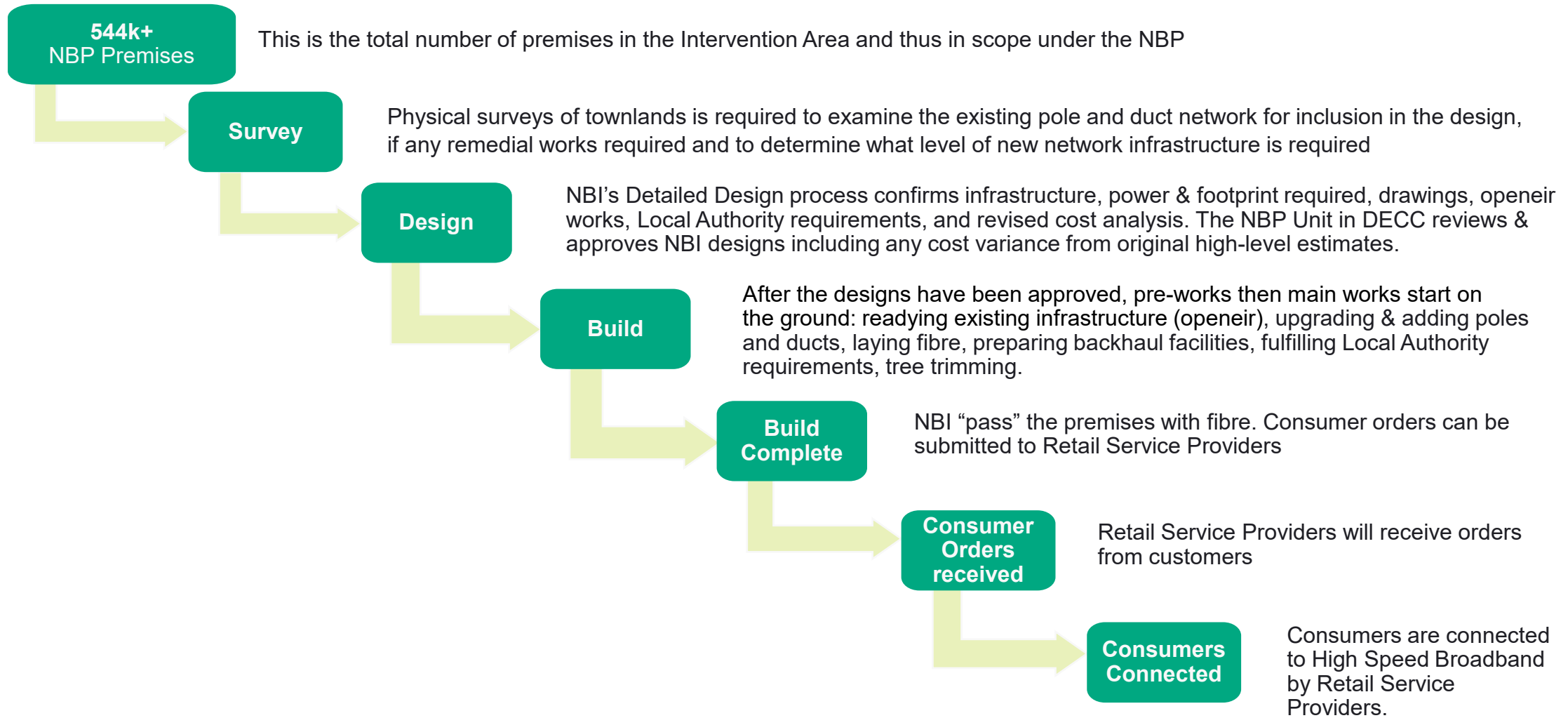
- Actively working across **58** Deployment Areas (DA's).
- Build Underway in **8** DA's
- Surveying completed in **43** DA's
- Surveying underway in **6** DA's

Deployment Area	Status
Carrigaline	Build Underway
Galway	Build Underway
Cavan	Build Underway
Limerick	Build Underway
Ballinasloe	Build Underway
Tralee	Build Underway
Wexford	Surveying Complete
Kilcoole	Surveying Complete
Mullingar	Surveying Complete
Monaghan	Surveying Complete
Roscommon	Build Underway
Killarney	Surveying Complete
Carlow	Surveying Complete
Tipperary	Build Underway
Dundalk	Surveying Complete
Blessington	Surveying Complete
Castlebar	Surveying Complete
Sligo	Surveying Complete
Midleton	Surveying Complete
Waterford	Surveying Complete
Skerries	Surveying Complete
Ballina	Surveying Complete
Drogheda	Surveying Complete
Portlaoise	Surveying Complete
Dunboyne/Clonee	Surveying Underway
Roscrea	Surveying Complete
Kilkenny	Surveying Complete

Deployment Area	Status
Clonmel	Surveying Complete
Gort	Surveying Complete
Athlone	Surveying Complete
Letterkenny	Surveying Complete
Carrick-On-Shannon	Surveying Complete
Longford	Surveying Complete
Youghal	Surveying Complete
Kilkishen	Surveying Complete
Adare	Surveying Complete
Ballycarney	Surveying Complete
Johnstown	Surveying Complete
Riverstown	Surveying Underway
Carrickmacross	Surveying Underway
Borris	Surveying Complete
Athenry	Surveying Complete
Loughrea	Surveying Complete
Inverin	Surveying Complete
Delvin	Surveying Complete
Castlegregory	Surveying Underway
Tomhaggard	Surveying Complete
Ballydavid	Surveying Complete
Ballyheigue	Surveying Complete
Emyvale	Surveying Complete
Clones	Surveying Complete
Redcross	Surveying Complete
Rathmore	Surveying Complete
Cashel	Surveying Underway
Creeslough	Surveying Complete

Deployment Area	Status
Newport (MO)	Surveying Underway
Castlegarron	Surveying Underway
Riverstown Rvn	Surveying Underway

NBI's Network Design and Build Process

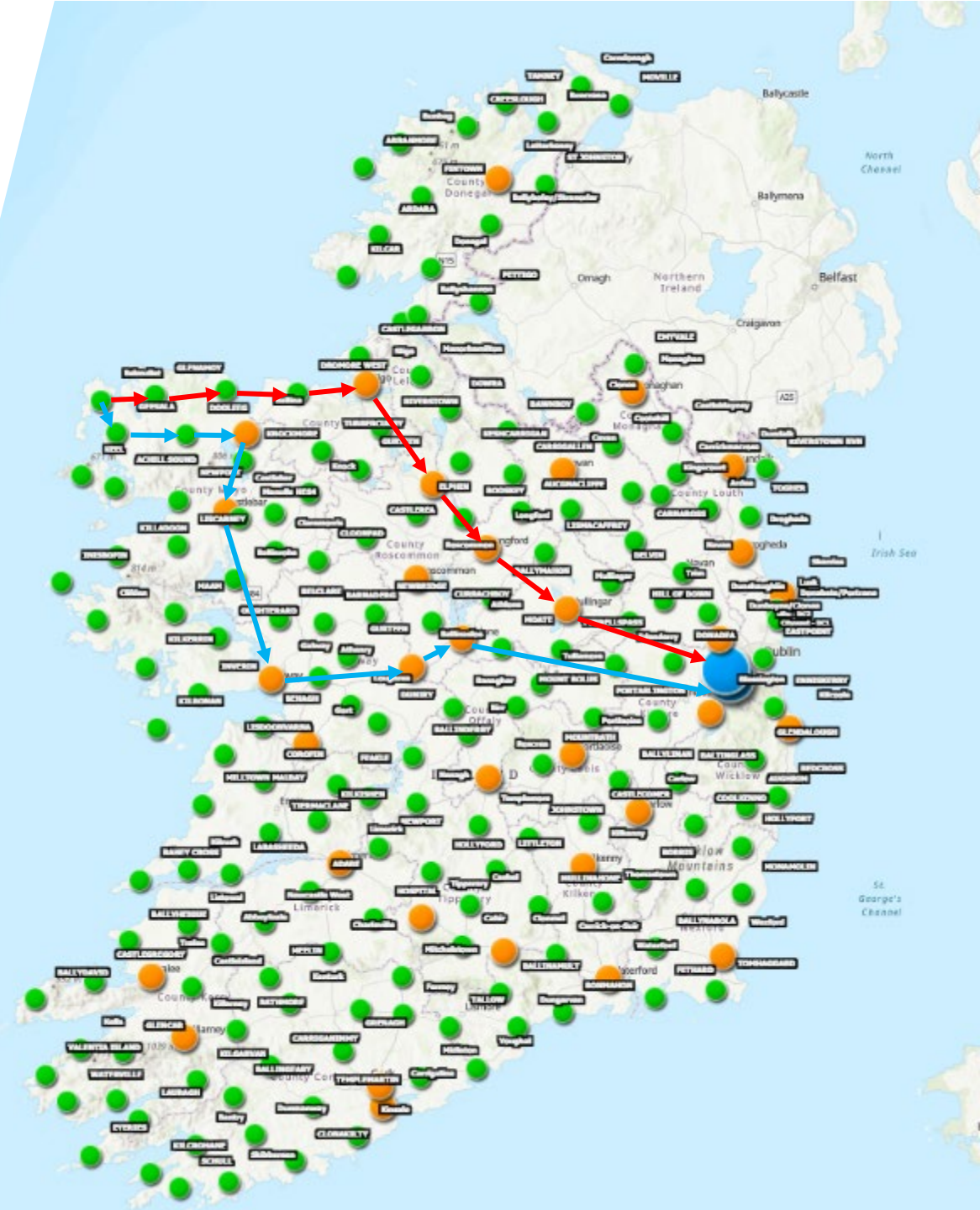


How a network 'works'

- When a premise connects to the internet, the data goes to a **Local Exchange**.
- From there the local exchange sends the data to the **Regional Exchange**.
- Then the data is sent to **Data Centres**, this is where most internet traffic ends up. These are primarily in Dublin.

→ Primary Data Path

→ Backup Data Path



How we're rolling out the NBI network

The NBI network is designed on 227 **Deployment Areas**, each with a **Local** or **Regional Exchange** at its core.

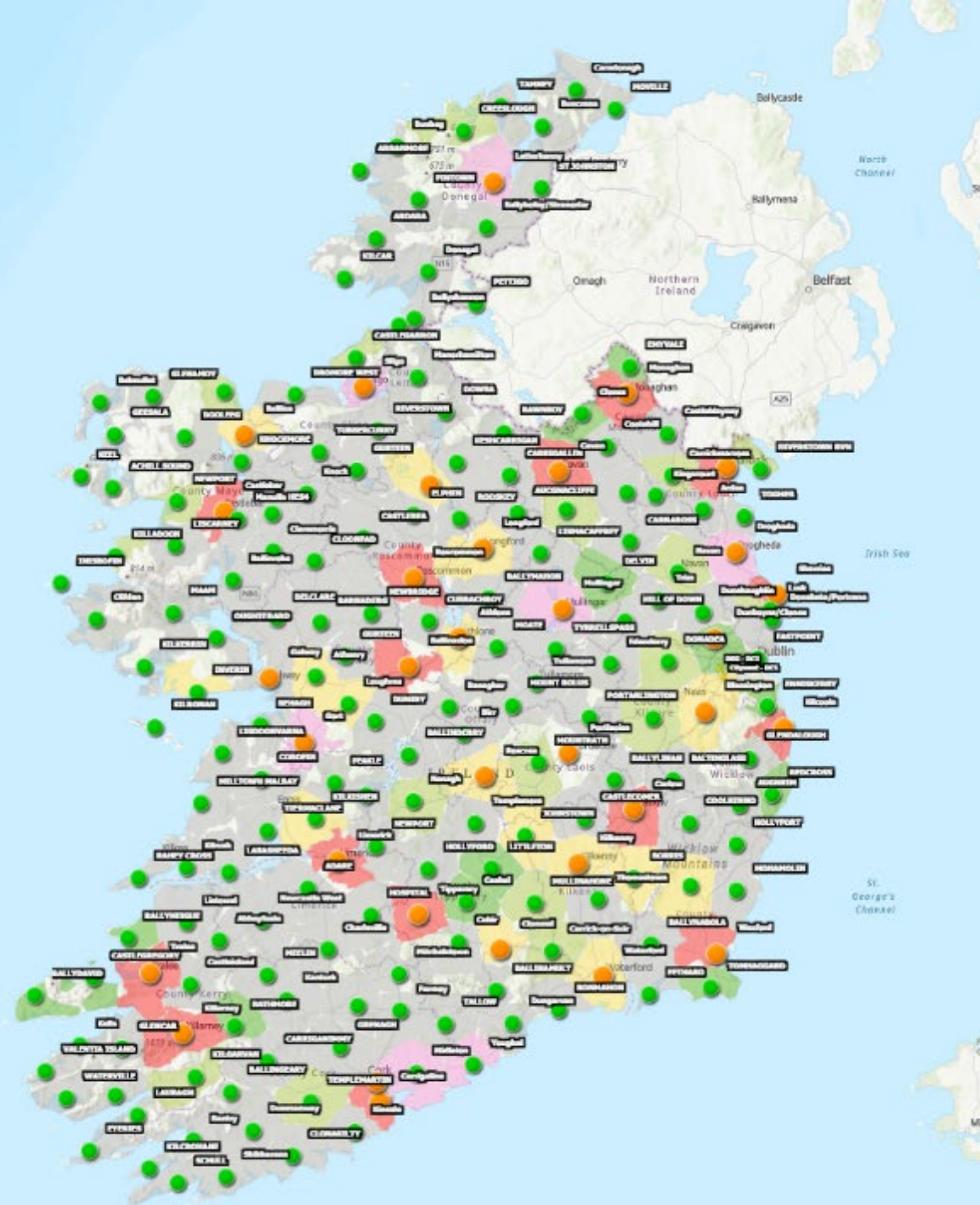
- **33 Regional Exchanges**

Regional Exchanges are our backbone and connect us directly connected to the Data Centres. We build these first.

- **194 Local Exchanges**

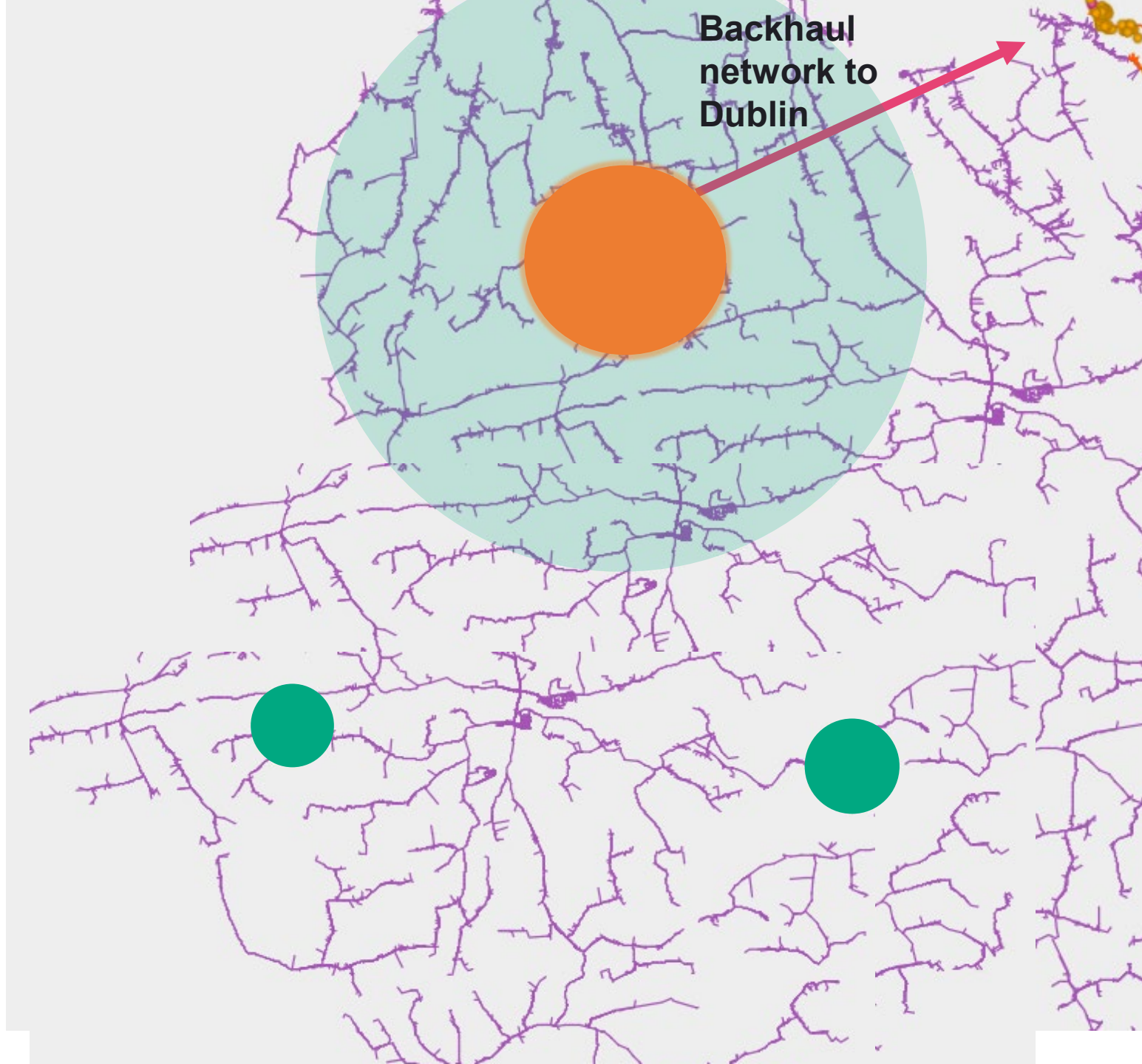
All local exchanges **connect to their nearest Regional Exchange**. These areas are built after the Regional Exchange area is built.

- Exchanges will all connect back to **Data Centres**, most are based in Dublin



Regional Exchanges

- Deployment Areas that have a **Regional Exchange** area are built first.
- This is to ensure we have a solid backhaul network connection back to Data Centres.
- Deployment Area around the **Regional Exchange** is ~20km in radius.

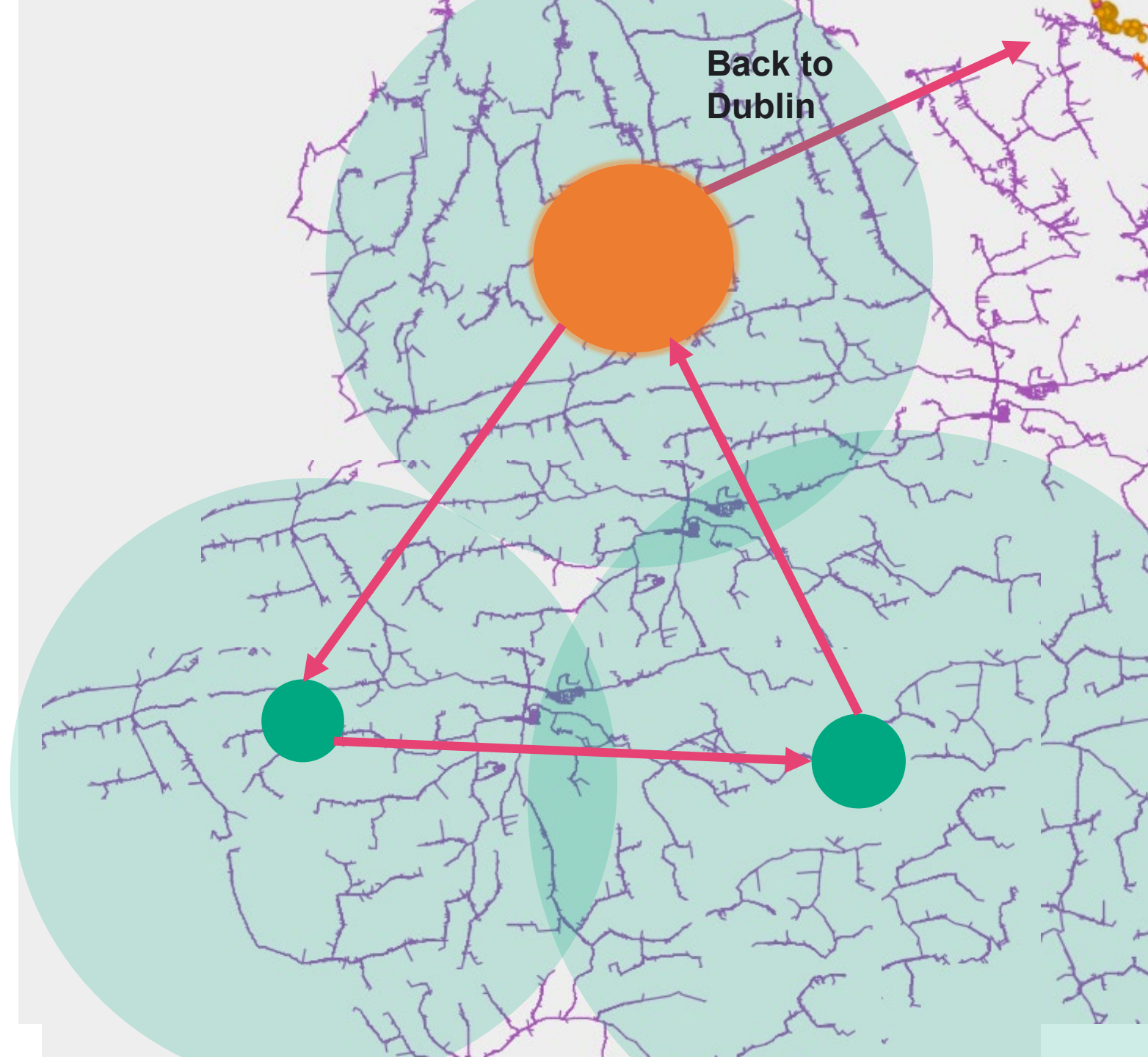


Local Exchanges

- Once the Deployment Area with the **Regional Exchange** is built, we then connect to an adjacent Deployment area with a **Local Exchange** and build out from there.
- Each Deployment Area is ~20km in diameter.
- Local Exchanges send data via the **Regional Exchange** to the Data Centres.

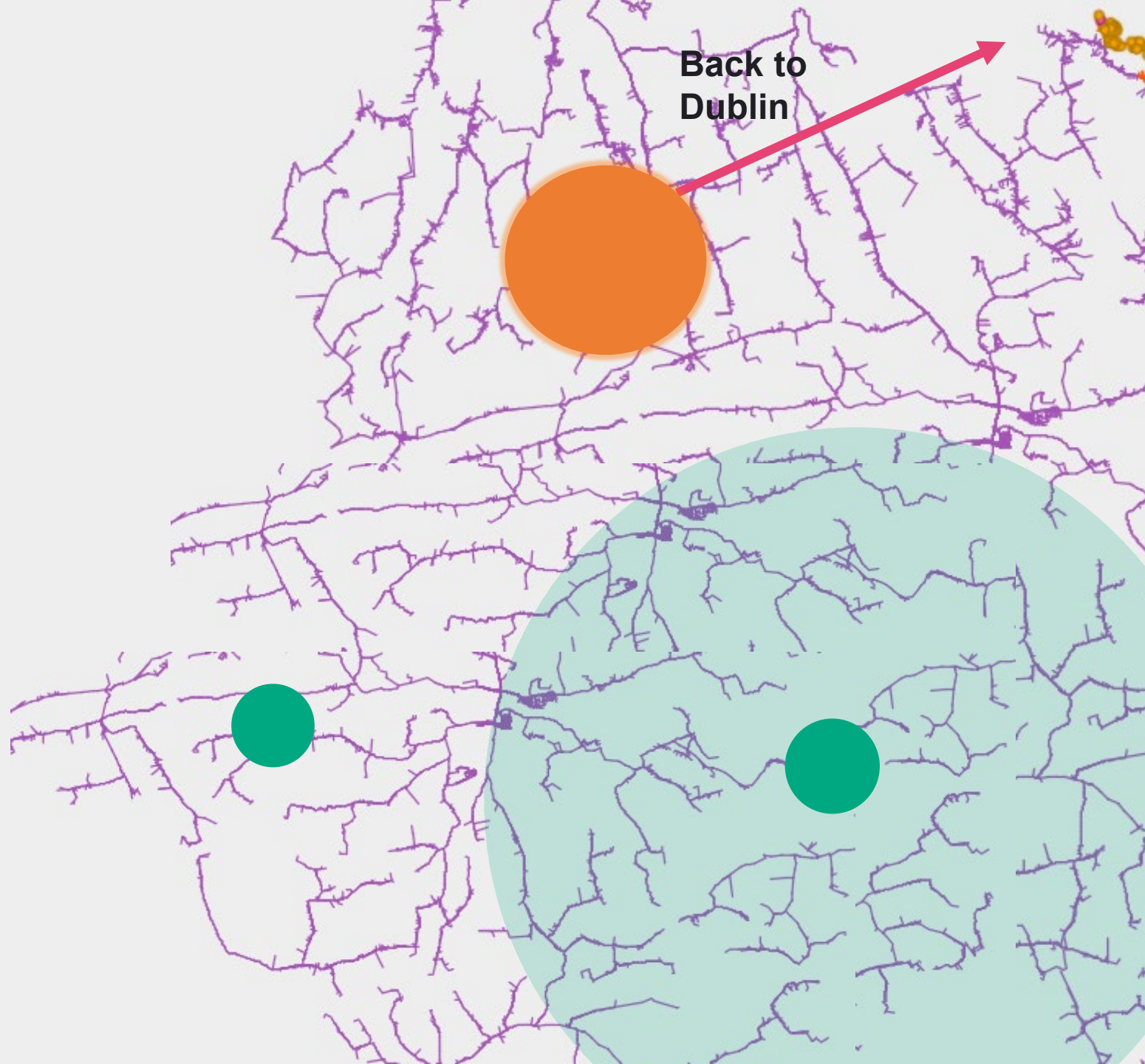
Why not build Local Exchanges first?

- Building Local Exchanges first would mean a delay in getting premises connected as the link to the Data Centres via the Regional Exchange would be missing.



If we built a Local Exchange first.

- If we built a Local Exchange first, there would be no connection back to the Data Centres.



Kilkenny

County Kilkenny Overview

- There are **~18,300** premises in Co. Kilkenny without access to high-speed broadband.
- This represents **38%** of the total premises in the county.
- Government will invest **~€72m** in building NBP in Co. Kilkenny.





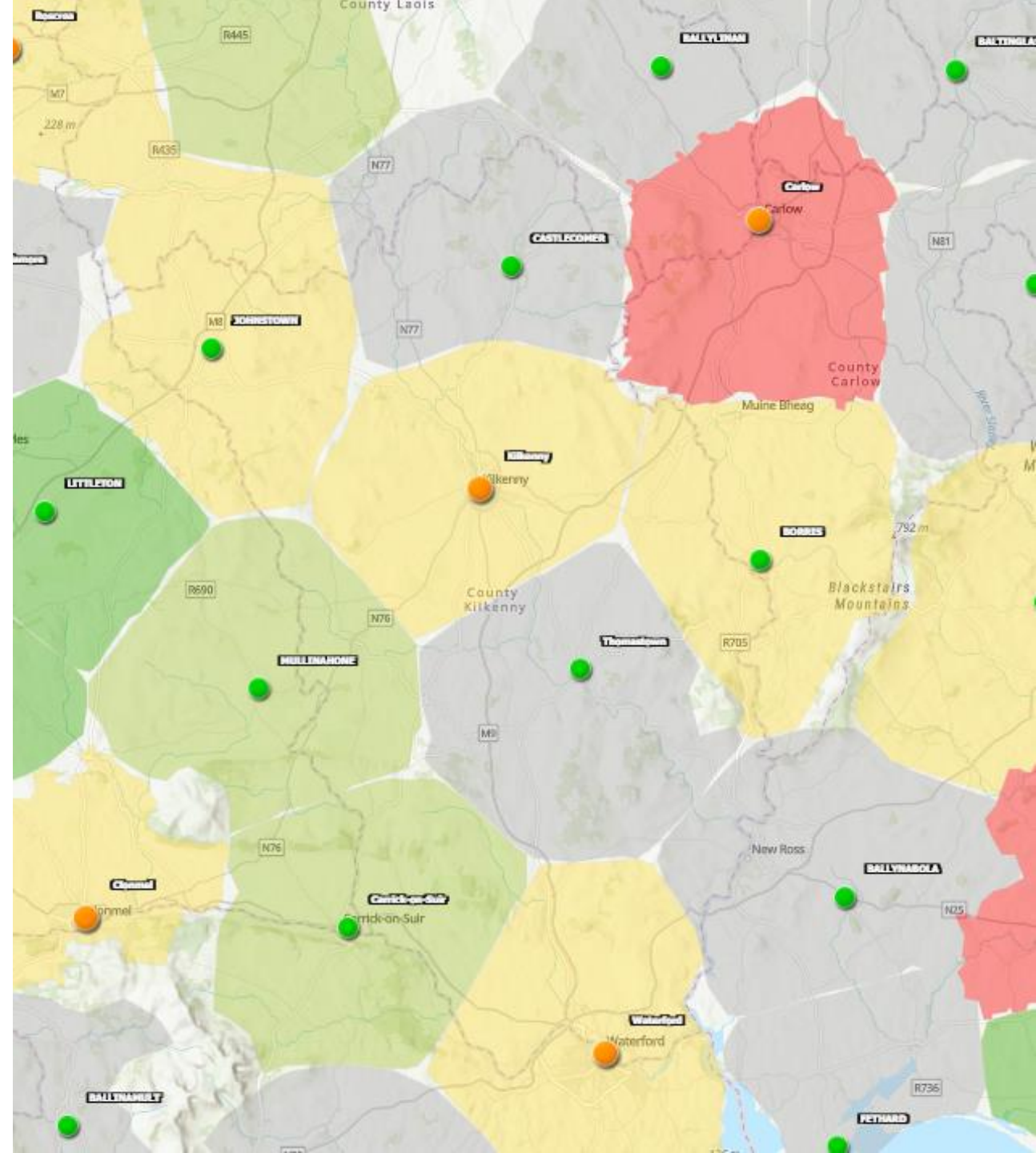
County Kilkenny Network

- There are **3 Regional** and **7 Local Exchanges** that make up the Kilkenny rollout:

EXCHANGE	DEPLOYMENT AREA	STATUS	Approx Premises in Kilkenny
REGIONAL	Carlow	SURVEY UNDERWAY	40
REGIONAL	Waterford	SURVEY UNDERWAY	1914
REGIONAL	Kilkenny	SURVEY UNDERWAY	2614
LOCAL	Johnstown	SURVEY UNDERWAY	1476
LOCAL	Borris	SURVEY UNDERWAY	1536
LOCAL	Ballynabola	SURVEY PENDING	524
LOCAL	Thomastown	SURVEY PENDING	2517
LOCAL	Mullinahone	SURVEY PENDING	887
LOCAL	Carrick-On-Suir	SURVEY PENDING	1457
LOCAL	Castlecomer	SURVEY PENDING	2169

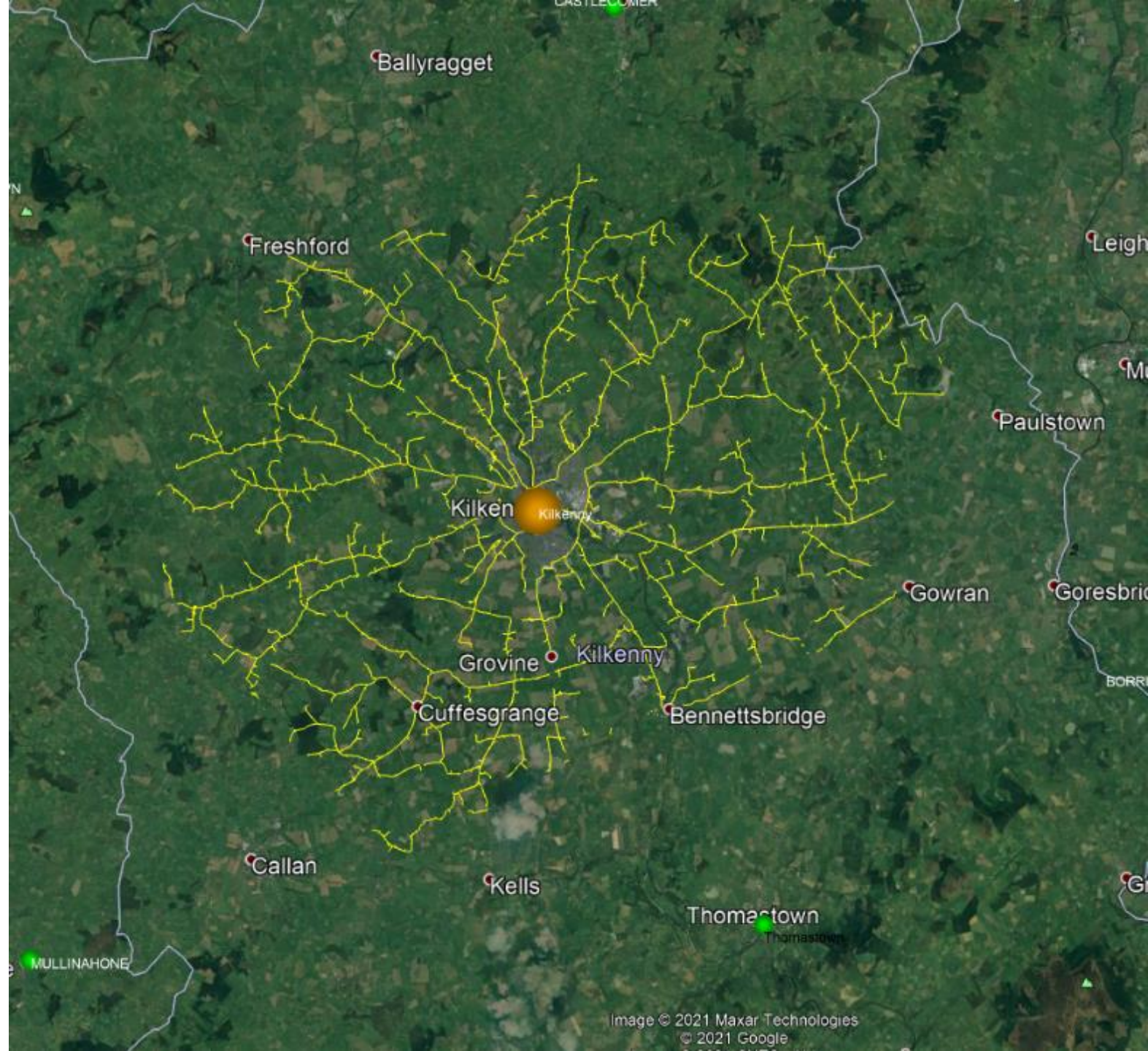
- NBI will connect the **Regional Exchanges** first to establish connection back to Data Centres.
- We build out from the Regional Exchanges ~20km
- Once the Deployment Areas with **Regional Exchanges** are built, we then spread the build to adjacent **Local Exchanges**.

-  Regional Exchanges
-  Local Exchanges



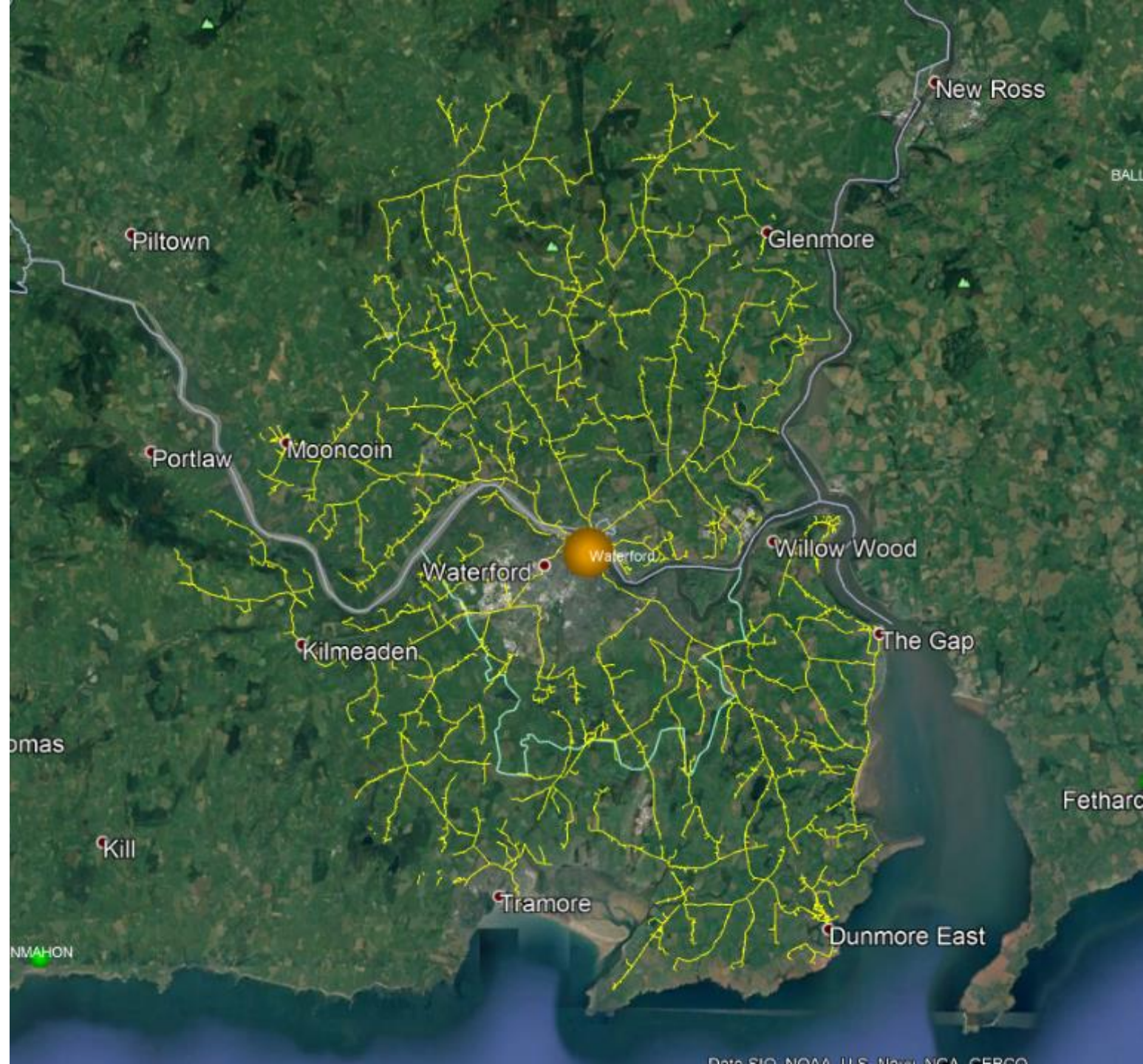
Kilkenny Deployment Area

- Survey works underway have started in the Kilkenny Deployment Area – **Regional Exchange**
- **Status:** Survey Underway
- **2619** Premises in this Deployment Area of which **~2614 premises are in Co. Kilkenny.**
- **Estimated Connection Dates between:** October 2022 - March 2023



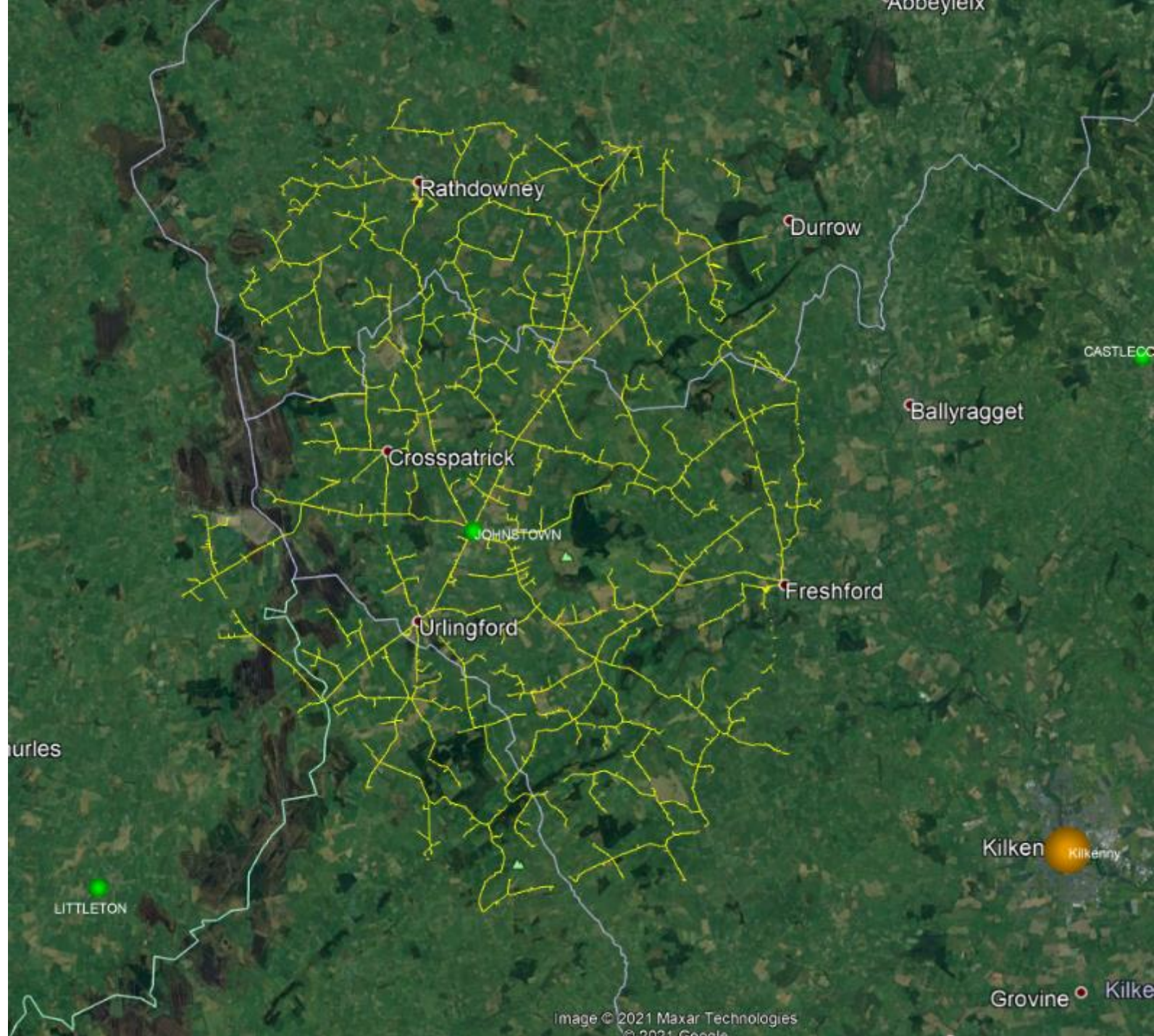
Waterford Deployment Area

- Surveying underway in the **Waterford Deployment Area – Regional Exchange**
- **Status:** Survey Underway
- **5,255** Premises in this Deployment Area of which **~1914 premises are in Co. Kilkenny.**
- **Estimated Connection Dates between:** April 2022 - September 2022



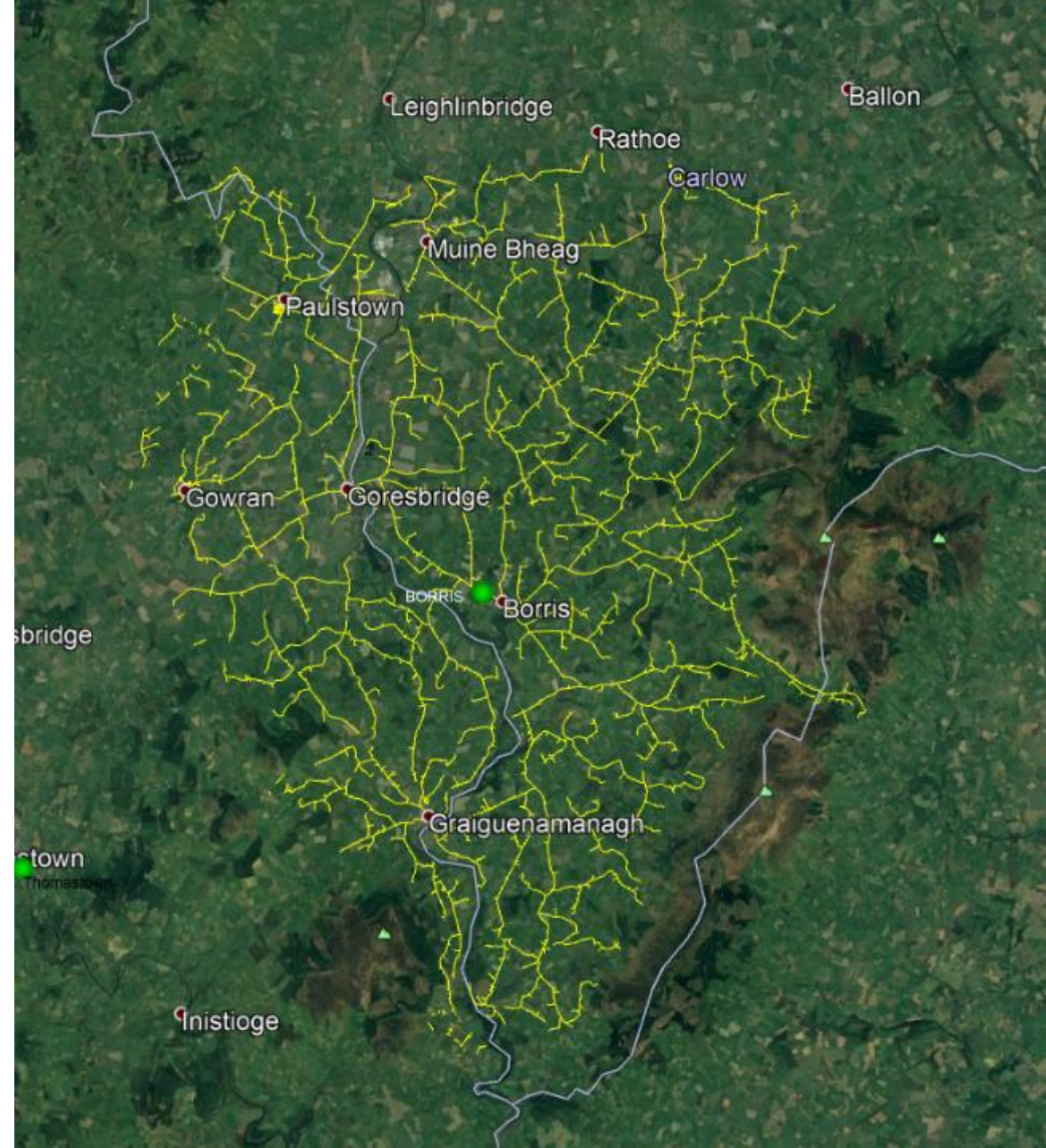
Johnstown Deployment Area

- Build Works have started in the **Johnstown Deployment Area – Local Exchange**
- **Status:** Survey Underway
- 2,542 premises in this Deployment Area of which **~1476 premises are in Co. Kilkenny.**
- **Estimated Connection Dates between:** December 2022 - May 2023



Borris Deployment Area

- Build Works have started in the **Borris Deployment Area – Local Exchange**
- **Status:** Survey Underway
- 3,441 premises in this Deployment Area of which **~1536 premises are in Co. Kilkenny.**
- **Estimated Connection Dates between:** November 2022 - April 2023



BCP Update

Broadband Connection Points

In 2020 and early 2021 NBI will also connect 270+ Broadband Connection Points (BCPs)

- Sites are located across all 26 counties
- These points will provide free high-speed internet access with many offering remote working capabilities.
- BCPs have been selected by local authority BBOs and submitted to the Department of Rural & Community Development. They are subject to change & schools will only provide educational access for pupils or any post school activities.
- The objective of BCPs is to ensure high speed connectivity for those in the IA in the short term



National BCP Launch Thursday October 9th

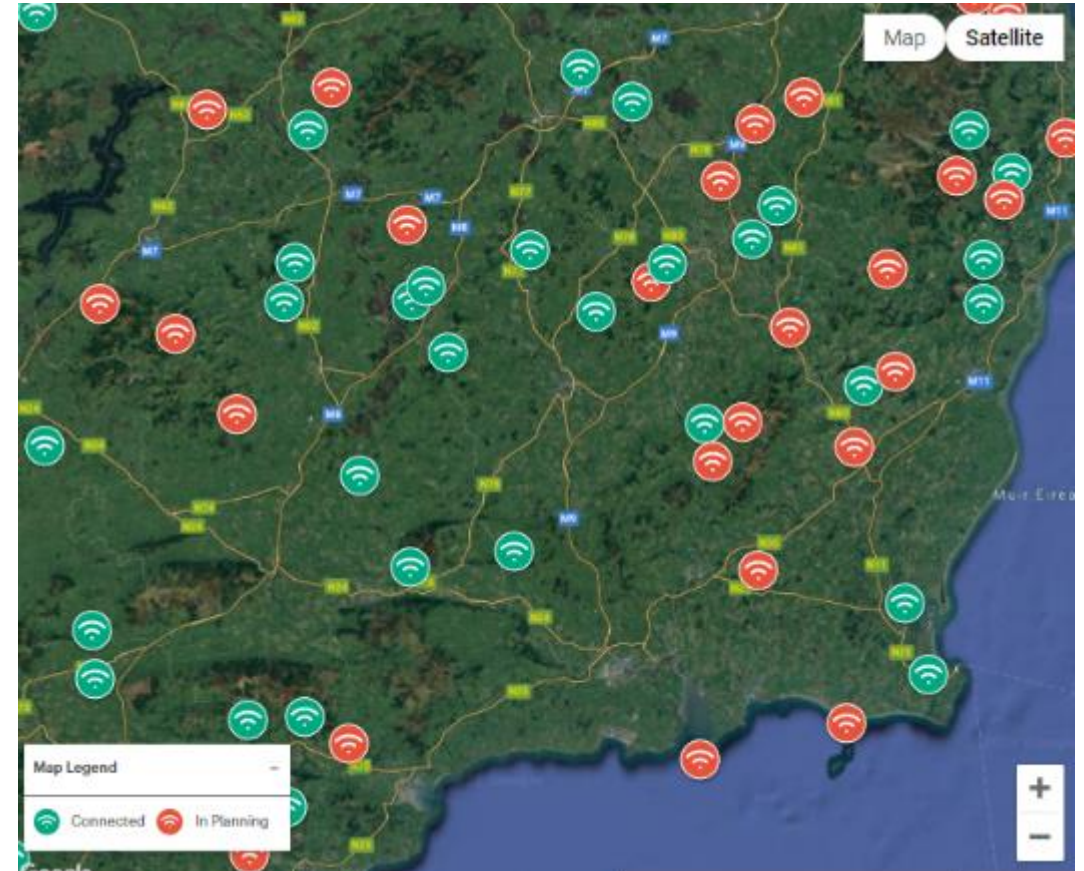


BCPs & Primary Schools in County Kilkenny

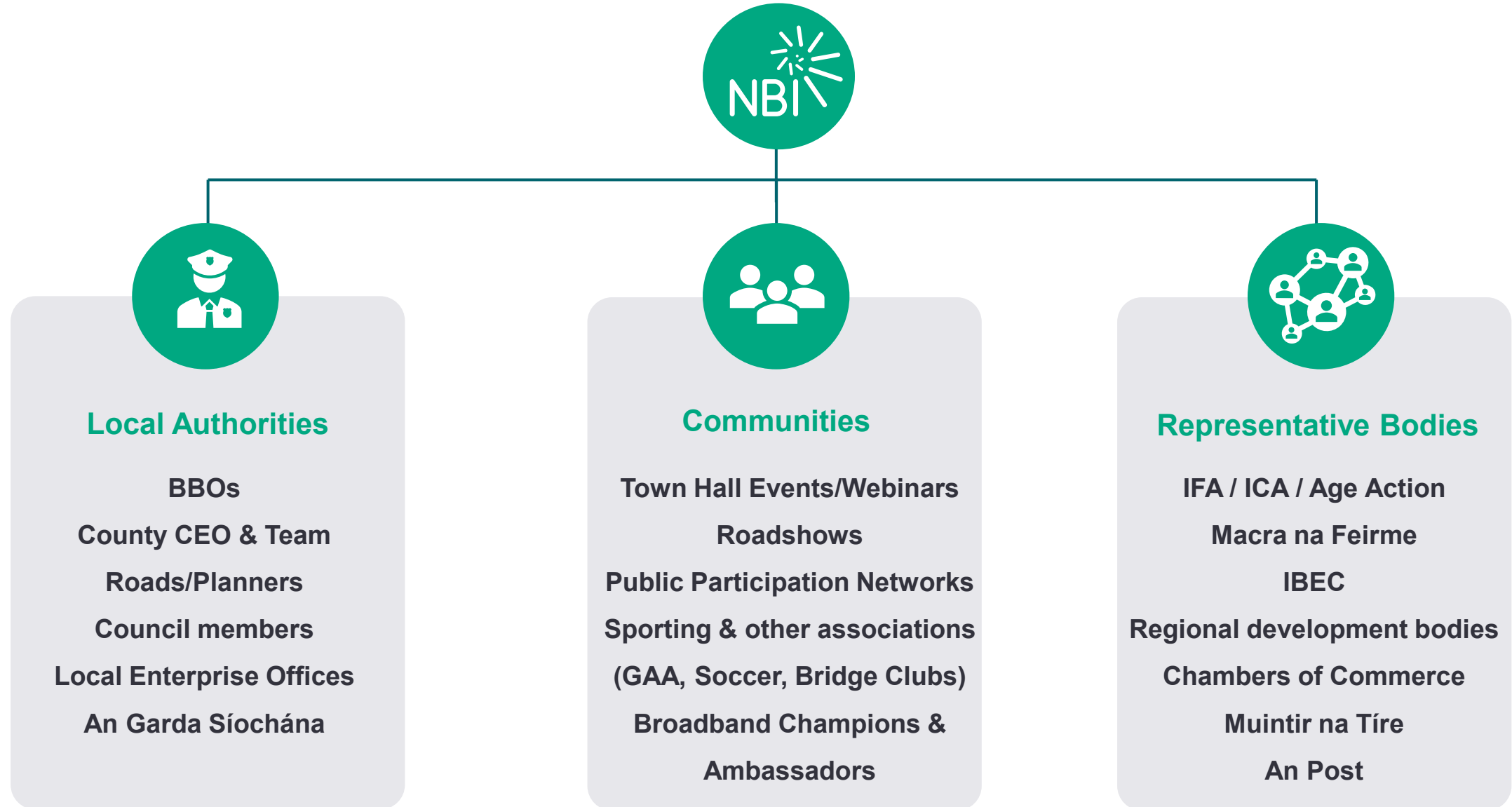
6 BCP locations & **21 schools** are in scope to connect to high-speed broadband:

The full list of BCPs is available on <https://nbi.ie/bcp-map/>

BCPs for Connection	Phase	Schools for Connection	Phase
Tullaghought Parish Hall	LIVE	Saint Aidan's National School	IN PROGRESS
Graine Community Hall	LIVE	Listerlin National School	IN PROGRESS
Galmoy Community Centre	LIVE	Creenkill National School	LIVE
Ballyouskill Parish Hall	LIVE	Saint Michael's Primary School	IN PROGRESS
Crosspatrick Parish Hall	LIVE	Urlingford Ns	PLANNED
Muckalee Handball Club	LIVE	Lisnafunchin Ns	PLANNED
		S N Shean Bhoth	PLANNED
		Galmoy National School.	PLANNED
		S N Mhuire Lourdes Buac	PLANNED
		S N Baile An Fhasaigh	PLANNED
		S N Naomh Colmain	PLANNED
		S N Muire	PLANNED
		Scoil Bhríde	PLANNED
		S N Baile An Phiull	PLANNED
		Bunscoil Mcauley Rice	PLANNED
		S N Moin Ruadh Mixed	PLANNED
		S N An Moinin Rua	PLANNED
		S N Bhreadain Naofa	PLANNED
		S N Colmain	PLANNED
		S N Caislean An Cumair	PLANNED
		Holycross N.S.	PLANNED



Stakeholder Engagement



Sign up on www.nbi.ie
to keep up to date with developments in your area

Email for political reps: reps@nbi.ie

Contact us on: **0818 624 624**
email: contactus@nbi.ie

