

From: [REDACTED]
To: [NBP Mapping](#)
Subject: [REDACTED]
Date: 20 September 2019 20:17:04

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Hello,

I am contacting you in regards to your plan to roll out high-speed internet to rural areas.

Is it possible to check when /if my family home area will be covered ([REDACTED])

We rarely get more than 5mbps download speed here, and the speed is mostly below 1mbps. I have contacted our ISP many times but to no avail. I work in IT and believe that the root cause of the poor speed is due to the infrastructure leading to our house, however am unsure of who I can contact to verify this.

This inhibits me from working from home. I cannot adequately respond to emergencies at work while I am at home.

Thank you in advance for your assistance.

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: 30 September 2019 16:17
To: NBP Mapping
Cc: [REDACTED]
Subject: Consultation on Conclusion of the NBP Mapping Exercise for the Intervention Area
Attachments: Submission to DCCAE - Conclusion of Mapping Exercise - rev1.docx

Follow Up Flag: Follow up
Flag Status: Completed

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NBP Mapping Team,
National Broadband Plan Division,
Department of Communications, Climate Action & Environment,
29-31 Adelaide Road,
Dublin 2,
Ireland.

[REDACTED]

Re: Consultation on the Conclusion of the Department of Communications, Climate Action & Environment's Mapping Exercise in order 'To confirm the scope of the Intervention Area of the National Broadband Plan for the purposes of the deployment'

Dear Sirs/ Madam,

I refer to the aforementioned Consultation on the Conclusion of the **Department of Communications, Climate Action & Environment's Mapping Exercise in order 'To confirm the scope of the Intervention Area of the National Broadband Plan for the purposes of the deployment'** and in this regards;

Find attached is the submission of Tipperary County Council on this Consultation for your Considerations.

The Settlement Hierarchy for County Tipperary includes the following;

- a. **One (1) Regional Town**
- b. **Two (2) Sub-Regional Town**
- c. **Six (6) District Towns**
- d. **Thirty two (32) Service Centres**
- e. **Forty Nine (49) Settlement Nodes**

I have included a number of comments for each location.

Thanks, [REDACTED]

Regards,
[REDACTED]

Broadband Development Officer
Community & Economic Development

Tipperary County Council, Ballingarrane House, Clonmel, Co. Tipperary [REDACTED]

T [REDACTED] | M [REDACTED] | E [REDACTED] | www.tipperarycoco.ie

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Comhairle Contae Thiobraid Árann
Tipperary County Council
www.tipperarycoco.ie

[Tipperary County Council Disclaimer](#)

National Broadband Plan - Conclusion of the Mapping Exercise for the Intervention Area pre-Deployment
NBP - Mapping Exercise for the Intervention Area

General Notes:
 (applies
 throughout County
 Tipperary)

NBP-Commercial Investment Area

1. Since 2015, a number of 'new build Premises' and 'unFinished housing developments' in the NBP IA have been completed in County Tipperary and are not yet shown on the NBP Consultation Mapping, 2019. These premises have not yet received an Eircode and may not be included in the Geo-Directory database. It is considered that these will increase the numbers of premises in the NBP-Commercial Investment Area.
 It is also considered that the most current OSi Maps should be used as base mapping.
2. eir is the **Universal Service Provider** for access at a fixed location (see ComReg's document **D05/16**) and as a result is obliged to provide a connection between a permanent address and its fixed telecoms network for a (geographical) standard connection fee. This connection is required to be capable of supporting voice, facsimile and data communications at **data rates of a minimum of 28.8kbit/s only. Can this USO be amended in the future to deliver high speed broadband?**
How does this impact on premises in the NBP-IA?
3. In County Tipperary, eir are using other methods to make the customer connection, which meets the criteria set out in D05/16, rather than a physical connection such as copper, **eir are advising a number of 'New built Premises' in housing Estates to use wireless technologies. Can these locations be mapped?**

NBP-IA

4. As per item 1, above. This will increase the numbers of premises in the NBP-IA.
5. eir has reported that an additional circa **34k premises outside but contiguous to the 300k** committed to in April 2017 have also been passed at the end of June 2019. However, as these premises are not covered by the Commitment Agreement with eir, they have to date remained in the Intervention Area i.e. represented as Amber.
 (DCCAIE advises that where eir demonstrates that these premises are in fact passed and subject to providing sufficient assurances that at least 95% of orders received from these premises will be connected at the standard regulated connection charge, it is proposed that these premises will be removed from the Intervention Area)
 These premises are situate within c. 100 metres from/ outside the eir 300K RFTTH light-Blue Cell Line and include for;
 - 1) **Commercial/business premises in close proximity to the current eir fibre route**
 - 2) **Primary schools in close proximity to the current eir fibre route.**
 - 3) **Premises in the 84.5k area** (these are mainly represented on the map as single amber dots in the dark blue area) where the eir 300k fibre passes the premises.
 - 4) **Single/isolated premises** near the Light Blue area.
 - 5) **Premises that could be included on route to a "committed" Light Blue premises** – these isolated Light Blue premises may occur as a result of coordinates updates from GeoDirectory e.g. new premises.
 - 6) Other.

Can these locations be shown on the NBP MAPPING for the purpose of clarifying the NBP IA area?

6. There is an extensive number of in-consistencies between the Mapping details as shown at <https://fibrerollout.ie/rollout-map/> and the **NBP High-Speed Mapping** and relating to the Extents of fixed fibre route (light-blue cell) which has been deployed on the ground by eir under the 300k RFTTH Commitment Agreement - April, 2017 (In some cases in County Tipperary eir has extended the ribbon fibre route, to target rural village's, by a distance of KM's)
7. Whereas the T300k RFTTH Project is near completed in County Tipperary with XXX premises passed to Q2 2019 a high-percentage of these are;
"Premises which have not-yet being Connected" resulting from;
 - a) non-receipt of a customer connection request.
 - b) The extents of fixed cable infrastructure which has to be deployed between the network termination device located in the end user's Premises and the Distribution Point of the fixed network – i.e. failure to connect a non-standard request / and the resulting costs of connection to the Customer.

In order to improve the take-up of these connections, I am of the opinion that there needs to be a greater clarity regarding eir customer connection costs. Also, can the locations identifying for eir connected / non-connected premises in the T300k RFTTH area be mapped? or is this commercial information.

8. Can a feature be added to the NBP Mapping to search for the name of a Town / or Village and similar to that found at <https://fibrerollout.ie/rollout-map/>

Regional Town

Clonmel

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A number of these premises (coloured 'purple') are now situated within 1Km of eir 'Live' Cabinets in Clonmel and as a result may have **high-speed broadband**.

eir identifies all of its Cabinet (s) in the exchange area of the town of Clonmel as 'Live' shown at

<https://fibre rollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure these are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. eir has recently tasked KN clrcet to deliver its New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) This project will commence in the town of Clonmel in early 2020 and will overbuild approximately 90% of the existing Fibre to the cabinet (FTTC) footprint with FTTH. The technology will be GPON-based with a single 32-way split.

A T1 Road Opening Licence Application is to be submitted to TCC in the near future.

The extents of the eir commercial IFN deployment area requires to be determined and in order to ensure the correct boundary is identified with the NBP IA.

3. Works to deploy SIRO fibre to c.10,000 premises located in the town of Clonmel are near Completed.

The extents of the SIRO Commercial deployment area requires to be determined and in order to ensure the correct boundary is identified with the NBP IA.

4. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise.

Whereas, these premises are shown within the NBP IA - they are now the subject of a planned commercial deployment and as a result can these be reviewed with Industry?

Having reviewed the extents of the commercial roll-out plans, it appears that a number of same may remain in the NBP IA upon the completion of the commercial deployment - and as a result can these eircodes also be progressed/identified with eir, SIRO and others?

5. In general,

I have received few representations/ public complaints regarding poor broadband services from the town of Clonmel.

**Sub-Regional Town
Nenagh**

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, identified circa 45k premises (coloured 'purple') on NBP mapping which to date have been represented as commercial areas i.e. they are represented as blue, but which may not in fact have access to NGA services. A number of these premises (coloured 'purple') are situated within 1Km of eir 'Live' Cabinets in **Nenagh** and as a result may have **high-speed broadband**.

eir identifies all of its **Cabinet (s)** in the **exchange area of the town of Nenagh** as 'Live' shown at

<https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. eir has recently tasked KN circet to deliver its New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) **This project has commenced in the town of Nenagh (and will be completed before November, 2019)**. This project will overbuild approximately 90% of the existing Fibre to the cabinet (FTTC) footprint with FTTH. The technology will be GPON-based with a single 32-way split.

The extents of the eir commercial IFN deployment area requires to be determined and in order to ensure the correct boundary is identified with the NBP IA.

3. Works to deploy SIRO fibre to c.4,000 premises located in the town of Nenagh are near Completed.

The extents of the SIRO Commercial deployment area requires to be determined and in order to ensure the correct boundary is identified with the NBP IA.

4. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise.

Whereas, these premises are shown within the NBP IA - they are now the subject of a planned commercial deployment and as a result can these be reviewed with Industry?

Having reviewed the extents of the commercial roll-out plans, it appears that a number of same may remain in the NBP IA upon the completion of the commercial deployment - and as a result can these eircodes also be progressed/identified with eir, SIRO and others?

5. In general,

I have received a few representations/ public complaints regarding poor broadband services from the town of Nenagh.

Sub-Regional Town **NBP-Commercial Investment Area and Intervention Area**
Thurles

- Eir Exchange Area**
1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A number of these **premises (coloured 'purple')** are situated within 1Km of eir 'Live' Cabinets in Thurles.

eir identifies all of its **Cabinet (s)** in the **exchange area of the town of Thurles** as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled? and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. eir has recently tasked KN circet to deliver its New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) This project will commence in the town of Thurles in early 2020. This project will overbuild approximately 90% of the existing Fibre to the cabinet (FTTC) footprint with FTTH. The technology will be GPON-based with a single 32-way split. A T1 Road Opening Licence Application is to be submitted in the near future.

The extents of the eir commercial IFN deployment area requires to be determined and in order to ensure the correct boundary is identified with the NBP IA.

3. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise.

Whereas, these premises are shown within the NBP IA - they are now the subject of a planned commercial deployment and as a result can these be reviewed with Industry?

4. In general, I have received a few representations/ public complaints regarding poor broadband services from the town of Thurles.

District Towns

Carrick on Suir, NBP-Commercial Investment Area and Intervention Area

Eir exchange Area 1. The Department has through consumer representations and its own analysis, identified a further circa 46k premises (coloured 'purple') on NBP mapping which to date have been represented as commercial areas i.e. they are represented as blue, but which may not in fact have access to NGA services. A number of these premises (coloured 'purple') are situated within 1Km of eir 'Live' Cabinets in Carrick-on-Suir.

eir identifies nearly all of its Cabinet (s) in the exchange area of the town of Carrick-on-Suir as 'Live' shown at

<https://fibre rollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. eir has recently tasked KN direct to deliver its New Urban Fibre to the home programme (Ireland's Fibre Network (IFN))
This project will commence in the town of Carrick-On-Suir in early 2020. This project will overbuild approximately 90% of the existing Fibre to the cabinet (FTTC) footprint with FTTH. The technology will be GPON-based with a single 32-way split. A T1 Road Opening Licence Application is to be submitted in the near future.

The extents of the eir commercial IFN deployment area requires to be determined and in order to ensure the correct boundary is identified with the NBP IA.

3. Resulting from the eir Commitment Agreement (2017) the Department added a further 84.5k premises to the Intervention Area where commercial investment plans previously provided to the Department had failed to materialise.

The current NBP Mapping identifies nearly all of the premises located in the town centre of Carrick-on-Suir as situated within the NBP-IA.

Whereas, these premises are shown within the NBP IA - they are now the subject of a planned commercial deployment and as a result can these be reviewed with Industry?

5. In general,
I have received a number representations/ public complaints regarding poor broadband services from the town of Carrick-On-Suir.

**District Towns
Roscrea,**

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.** A number of these **premises (coloured 'purple')** are situated within 1Km of eir 'Live' Cabinets in Roscrea.

eir identifies all of its **Cabinet (s)** in the **exchange area of the town of Roscrea** as 'Live' shown at <https://fibre.rollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled? and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. eir has recently tasked KN circet to deliver its New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) **This project will commence in the town of Roscrea in early 2020.** This project will overbuild approximately 90% of the existing Fibre to the cabinet (FTTC) footprint with FTTH. The technology will be GPON-based with a single 32-way split. A T1 Road Opening Licence Application is to be submitted in the near future.

The extents of the eir commercial IFN deployment area requires to be determined and in order to ensure the correct boundary is identified with the NBP IA.

3. **Works to deploy SIRO fibre to c.4,000 premises located in the town of Roscrea are near Completed.**

The extents of the SIRO Commercial deployment area requires to be determined and in order to ensure the correct boundary is identified with the NBP IA.

4. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise.

Whereas, these premises are shown within the NBP IA - they are now the subject of a planned commercial deployment and as a result can these be reviewed with Industry? Having reviewed the extents of the commercial roll-out plans, it appears that a number of same may remain in the NBP IA upon the completion of the commercial deployment - and as a result can these eir codes also be progressed/identified with eir, SIRO and others?

5. In general,
I have received few representations/ public complaints regarding poor broadband services from the town of Roscrea.

**District Towns
Tipperary**

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A number of these **premises (coloured 'purple')** are situated within 1Km of eir 'Live' Cabinets in Tipperary Town.

eir identifies all of its **Cabinet (s)** in the **exchange area of the town of Tipperary** as 'Live' shown at

<https://fibredeployment.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. eir has recently tasked KN circet to deliver its New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) **This project will commence in the town of Tipperary in 2020**. This project will overbuild approximately 90% of the existing Fibre to the cabinet (FTTC) footprint with FTTH. The technology will be GPON-based with a single 32-way split. A T1 Road Opening Licence Application is to be submitted in the near future.

The extents of the eir commercial IFN deployment area requires to be determined and in order to ensure the correct boundary is identified with the NBP IA.

3. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise.

Whereas, these premises are shown within the NBP IA - they are now the subject of a planned commercial deployment and as a result can these be reviewed with Industry?

4. In general, I have received a few representations/ public complaints regarding poor broadband services in the town of Tipperary.

**District Towns
Cashel,**

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A number of these **premises (coloured 'purple')** are situated within 1Km of eir 'Live' Cabinets in **Cashel**.

eir identifies all of its **Cabinet (s)** in the **exchange area of the town of Cashel** as 'Live' shown at

<https://fibredeployment.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. eir has recently tasked KN circet to deliver its New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) **This project will commence in the town of Cashel in early 2020**. This project will overbuild approximately 90% of the existing Fibre to the cabinet (FTTC) footprint with FTTH. The technology will be GPON-based with a single 32-way split. A T1 Road Opening Licence Application is to be submitted in the near future.

The extents of the eir commercial IFN deployment area requires to be determined and in order to ensure the correct boundary is identified with the NBP IA.

3. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise.

Whereas, these premises are shown within the NBP IA - they are now the subject of a planned commercial deployment and as a result can these be reviewed with Industry?

4. In general, I have received a number of representations/ public complaints regarding poor broadband services from the town of Cashel.

District Towns
Cahir.

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.** A number of these **premises (coloured 'purple')** are situated within 1Km of eir 'Live' Cabinets in Cahir.

eir identifies all of its **Cabinet (s)** in the **exchange area of the town of Cahir** as 'Live' shown at

<https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. eir has recently tasked KN circet to deliver its New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) **This project will commence in the town of Cahir by end 2019.** This project will overbuild approximately 90% of the existing Fibre to the cabinet (FTTC) footprint with FTTH. The technology will be GPON-based with a single 32-way split. A T1 Road Opening Licence Application is has been submitted.

The extents of the eir commercial IFN deployment area requires to be determined and in order to ensure the correct boundary is identified with the NBP IA.

3. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise.

Whereas, these premises are shown within the NBP IA - they are now the subject of a planned commercial deployment and as a result can these be reviewed with Industry?

District Towns
Templemore.

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.** A number of these **premises (coloured 'purple')** are situated within 1Km of eir 'Live' Cabinets in Templemore.

eir identifies all of its **Cabinet (s)** in the **exchange area of the town of Templemore** as 'Live' shown at

<https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. eir has recently tasked KN circet to deliver its New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) **This project will commence in the town of Templemore before end 2019.** This project will overbuild approximately 90% of the existing Fibre to the cabinet (FTTC) footprint with FTTH. The technology will be GPON-based with a single 32-way split. A T1 Road Opening Licence Application is to be submitted in the near future.

The extents of the eir commercial IFN deployment area requires to be determined and in order to ensure the correct boundary is identified with the NBP IA.

3. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise.

Whereas, these premises are shown within the NBP IA - they are now the subject of a planned commercial deployment and as a result can these be reviewed with Industry?

Having reviewed the extents of the commercial roll-out plans, it appears that a number of same may remain in the NBP IA upon the completion of the commercial deployment - and as a result can these eircodes also be progressed/identified with eir, SIRO and others?

32 Service Centres

Ardfinnan,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.**
A number of these premises (coloured 'purple') are situated within 1Km of a 'Live' Cabinet in Ardfinnan.

eir identifies all of its Cabinet (s) in the exchange area of the village of Ardfinnan as 'Live' shown at

<https://fibredeployment.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

Ardfinnan is not included in the eir New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) as this urban area does not exceed 1,000 urban premises.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in Ardfinnan are situated in the NBP-IA.

Ballina/Killaloe, County Tipperary/ County Clare.

NBP-Commercial Investment Area and Intervention Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.**
A number of these premises (coloured 'purple') are situated within 1Km of eir 'Live' Cabinets in Ballina/Killaloe.

eir identifies all of its Cabinet (s) in the exchange area of the town of Ballina (Exchange is situated in Killaloe) as 'Live' shown at

<https://fibredeployment.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. eir has recently tasked KN direct to deliver its New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) This project will commence in the town of Ballina/Killaloe (check with County Clare) . This project will overbuild approximately 90% of the existing Fibre to the cabinet (FTTC) footprint with FTTH. The technology will be GPON-based with a single 32-way split. A T1 Road Opening Licence Application is to be submitted in the near future.

The extents of the proposed eir Commercial deployment area requires to be determined and in order to ensure the correct boundary is identified with the NBP IA.

3. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise.

Whereas, these premises are shown within the NBP IA - they are now the subject of a planned commercial deployment and as a result can these be reviewed with Industry?

**Ballingarry, South
Tipperary**

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Village of Ballingarry, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Ballingarry at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These works are not yet completed and are not 'Live'

**Ballyclerihan
Eir Exchange Area**

NBP-Commercial Investment Area and Intervention Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.**

A number of these **premises (coloured 'purple')** are situate within 1Km of eir 'Live' Cabinets in Ballyclerihan.

eir identifies its Cabinet (s) in the exchange area of the village of Ballyclerihan as 'Live' shown at

<https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

Ballyclerihan (commercial area) is not included in the eir New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) as this urban area does not exceed 1,000 urban premises.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes (housing developments) in **Ballyclerihan** are situate in the NBP-IA.

Ballyporeen,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Village of Ballyporeen, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Ballyporeen at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These works are not yet completed and are not 'Live'

Bansha

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.** A number of these **premises (coloured 'purple')** are situate within 1Km of eir 'Live' Cabinets in Bansha.

eir identifies all of its Cabinet (s) in the exchange area of the village of Bansha as 'Live' shown at

<https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

Bansha (commercial area) is not included in the eir New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) as this urban area does not exceed 1,000 urban premises.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes (housing developments) in **Bansha** are situate in the NBP-IA.

Boherlahan,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. **The Village of Boherlahan, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**

(The **BLUE** areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services (including a cabinet) in the village of Boherlahan at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These works are not yet completed.

Borrisokane,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A number of these **premises (coloured 'purple')** are situate within **1Km of One eir 'Live' Cabinet**.

eir identifies all of its **Cabinet (s)** in the **exchange area of the town of Borrisokane** as 'Live' shown at

<https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

Borrisokane (commercial area) is not included in the eir New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) as this urban area does not exceed 1,000 urban premises

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes (housing developments) in **Borrisokane** are situate in the NBP-IA.

Borrisoleigh,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A number of these **premises (coloured 'purple')** are situate within **1Km of One eir 'Live' exchange**

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Borrisoleigh** as 'Live' shown at

<https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

Borrisoleigh (commercial area) is not included in the eir New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) as this urban area does not exceed 1,000 urban premises

NBP - Mapping Exercise for the Intervention Area

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in **Borrisoleigh** are situate in the NBP-IA.

Cappawhite,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.**

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Cappawhite** as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled? and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in **Cappawhite** are situate in the NBP-IA.

Clogheen,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.**

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Clogheen** as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled? and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in **Cappawhite** are situate in the NBP-IA.

Cloughjordan,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. **The Village of Cloughjordan, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**

[The **BLUE** areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir 1300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Cloughjordan at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These works are not yet completed.

Dundrum, NBP-Commercial Investment Area and Intervention Area

- Eir Exchange Area**
1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A number of Eircodes are shown 'Purple'

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Dundrum** as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?
and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.
 2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in **Dundrum** are situate in the NBP-IA.

Emly, NBP-Commercial Investment Area and Intervention Area

- Eir Exchange Area**
1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A number of Eircodes are shown 'Purple'

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Emly** as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?
and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

Emly (commercial area) is not included in the eir New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) as this urban area does not exceed 1,000 urban premises
 2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in **Dundrum** are situate in the NBP-IA.

Fethard, NBP-Commercial Investment Area and Intervention Area

- Eir Exchange Area**
1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A number of these **premises (coloured 'purple')** are situate within **1Km of One eir 'Live' exchange**

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Fethard** as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?
and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

Fethard (commercial area) is not included in the eir New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) as this urban area does not exceed 1,000 urban premises
 2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in **Dundrum** are situate in the NBP-IA.

Golden, NBP-Commercial Investment Area and Intervention Area

- Eir Exchange Area**
1. **The Village of Golden, County Tipperary is not situated within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
 2. eir identifies planned Fibre services (including a fibre cabinet) in the village of Golden at <https://fibredeployment.ie/rollout-map/> under the eir Commitment Agreement (2017) **These works are not yet completed and are not yet 'Live'**

Gortnahoe, NBP-Commercial Investment Area and Intervention Area

- Eir Exchange area**
1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.** No Eircodes are shown 'Purple'

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Gortnahoe** as 'Live' shown at <https://fibredeployment.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?
and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

Gortnahoe (commercial area) is not included in the eir New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) as this urban area does not exceed 1,000 urban premises
 2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in **Gortnahoe** are situated in the NBP-IA

Holycross, NBP-Commercial Investment Area and Intervention Area

- Eir Exchange Area**
1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.** A substantial number of Eircodes are shown 'Purple'

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Holycross** as 'Live' shown at <https://fibredeployment.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?
and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.
 2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in **Holycross** are situated in the NBP-IA.

Hollyford, NBP-Commercial Investment Area and Intervention Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.** A substantial number of Eircodes are shown 'Purple'

NBP - Mapping Exercise for the Intervention Area

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Hollyford** as 'Live' shown at <https://fibredeployment.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled? and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. No eircodes shown in this area subject to NBP-IA.

Killenaule

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A substantial number of Eircodes are shown 'Purple'

eir identifies all of its **Cabinet (s)** in the **exchange area of the town of Killenaule** as 'Live' shown at <https://fibredeployment.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled? and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in **Killenaule** are situate in the NBP-IA.

Kilsheelan

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A number of Eircodes are shown 'Purple'

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Kilsheelan** as 'Live' shown at <https://fibredeployment.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled? and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

Kilsheelan (commercial area) is not included in the eir New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) as this urban area does not exceed 1,000 urban premises.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in **Kilsheelan** are situate in the NBP-IA

Littleton,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A substantial number of Eircodes are shown 'Purple'

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Littleton** as 'Live' shown at <https://fibredeployment.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled? and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

Littleton (commercial area) is not included in the eir New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) as this urban area does not exceed 1,000 urban premises.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in **Kilsheelan** are situate in the NBP-IA.

Mullinahone, NBP-Commercial Investment Area and Intervention Area

- Eir Exchange Area**
1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A substantial number of Eircodes are shown 'Purple'

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Mullinahone** as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

Mullinahone (commercial area) is not included in the eir New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) as this urban area does not exceed 1,000 urban premises.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in **Kilsheelan** are situate in the NBP-IA.

Newcastle, NBP-Commercial Investment Area and Intervention Area

- Eir Exchange Area**
1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. A substantial number of Eircodes are shown 'Purple'

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Newcastle** as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

Newcastle (commercial area) is not included in the eir New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) as this urban area does not exceed 1,000 urban premises

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes subject to the NBP-IA are located within this area.

Newport, NBP-Commercial Investment Area and Intervention Area

- Eir Exchange Area**
1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services**. No Eircodes are shown 'Purple'

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Newport** as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

Newport (commercial area) is not included in the eir New Urban Fibre to the home programme (Ireland's Fibre Network (IFN) as this urban area does not exceed 1,000 urban premises

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in **Newport** are situated in the NBP-IA.

Newtown,

NBP-Commercial Investment Area and Intervention Area

1. **The Village of Newtown, County Tipperary is not situated within a NBP-Commercial Investment 'Blue' Area.**

(The **BLUE** areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Newtown at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These works are 'Live'**

eir identifies a number of Cabinets in the village of Portroe 'Live' shown at <https://fibrerollout.ie/rollout-map/>

Portroe,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. **The Village of Portroe, County Tipperary is not situated within a NBP-Commercial Investment 'Blue' Area.**

(The **BLUE** areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Golden at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These works are 'Live'**

eir identifies a number of Cabinets in the village of Portroe 'Live' shown at <https://fibrerollout.ie/rollout-map/>

Puckaun,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. **The Village of Puckaun, County Tipperary is not situated within a NBP-Commercial Investment 'Blue' Area.**

(The **BLUE** areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Puckaun at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These works are 'Planned'**

eir identifies a number of Cabinets in the village are 'planned' at <https://fibrerollout.ie/rollout-map/>

Silvermines,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. **The Village of Silvermines, County Tipperary is not situated within a NBP-Commercial Investment 'Blue' Area.**

(The **BLUE** areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Silvermines at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These works are 'planned'** eir identifies a Cabinet in the village of Silvermines as 'planned' shown at <https://fibrerollout.ie/rollout-map/>

Templetuohy, NBP-Commercial Investment Area and Intervention Area

- Eir Exchange Area**
1. **The Village of Templetuohy, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
 2. eir identifies planned Fibre services in the village of Templetuohy at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These works are 'planned'** eir identifies a Cabinet in the village of Templetuohy as 'planned' shown at <https://fibrerollout.ie/rollout-map/>

Toomevara, NBP-Commercial Investment Area and Intervention Area

- Eir Exchange Area**
1. **The Village of Toomevara, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
 2. eir identifies planned Fibre services in the village of Toomevara at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These works are 'live'** eir identifies a Cabinet in the village of Toomevara as 'live' shown at <https://fibrerollout.ie/rollout-map/>

Twomileborris, NBP-Commercial Investment Area and Intervention Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.** A substantial number of Eircodes are shown 'Purple'

eir identifies a **Cabinet (s)** in the village of Twomileborris as 'Planned' shown at <https://fibrerollout.ie/rollout-map/> - can its current status be confirmed with eir in order to determine when it goes 'Live' and fibre enabled?
and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet in the area.
2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. A number of these Eircodes in Twomileborris are situate in the NBP-IA.

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Annacarthy,

NBP-Commercial Investment Area and Intervention Area

1. **The Village of Anna-Carthy, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
2. eir identifies planned Fibre services in the village of annacCarthy at <https://fibre rollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are now 'Live'**

Ardcrooney ,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, identified a further circa 46k premises (coloured 'purple') on NBP mapping which to date have been represented as commercial areas i.e. they are represented as blue, but which may not in fact have access to NGA services. A substantial number of Eircodes are shown 'Purple'

eir identifies all of its Cabinet (s) in the exchange area of the village of ArdCrooney as 'Live' shown at <https://fibre rollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?
and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.
2. Resulting from the eir Commitment Agreement (2017) the Department added a further 84.5k premises to the Intervention Area where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes subject to the NBP-IA are located within this area.

Ballycommon,

NBP-Commercial Investment Area and Intervention Area

1. **The Village of Ballycommon, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
2. eir identifies planned Fibre services in the village of Ballycommon at <https://fibre rollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are now 'Live' and also 'planned'**

Ballynonty,

NBP-Commercial Investment Area and Intervention Area

1. The Department has through consumer representations and its own analysis, identified a further circa 46k premises (coloured 'purple') on NBP mapping which to date have been represented as commercial areas i.e. they are represented as blue, but which may not in fact have access to NGA services. No Eircodes are shown 'Purple'

eir identifies a Cabinet (s) in the village of Ballynonty as 'Live' shown at <https://fibre rollout.ie/rollout-map/> - can its current status be confirmed with eir in order to ensure that it is 'Live' and fibre enabled?
And required in order to identify for other premises where NGA / FTTC services are/ may not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet in the area.
2. Resulting from the eir Commitment Agreement (2017) the Department added a further 84.5k premises to the Intervention Area where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes the subject to the NBP-IA are located within this area.

Ballypatrick,

NBP-Commercial Investment Area and Intervention Area

- 1. The Village of Ballypatrick, County Tipperary is not situated within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
- 2. eir identifies planned Fibre services in the village of Ballypatrick at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services are now 'Live'**

Burncourt

NBP-Commercial Investment Area and Intervention Area

- 1. The Village of Burncourt, County Tipperary is not situated within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
- 2. eir identifies planned Fibre services in the village of Burncourt at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services are 'Planned' and are not yet gone 'Live' - Issue with DCCA Mapping.**

Cloneen,

NBP-Commercial Investment Area and Intervention Area

- 1. The Village of Cloneen, County Tipperary is not situated within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
- 2. eir identifies planned Fibre services in the village of Ballypatrick at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services are now 'Live'**

Clonmore,

NBP-Commercial Investment Area and Intervention Area

- 1. The Village of Clonmore, County Tipperary is not situated within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
- 2. eir identifies planned Fibre services in the village of Clonmore at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services are 'Live'**

Clonoulty,

NBP-Commercial Investment Area and Intervention Area

- 1. The Village of Clonoulty, County Tipperary is not situated within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?

NBP - Mapping Exercise for the Intervention Area

2. eir identifies planned Fibre services in the village of Clonoulty at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are 'planned' and not yet 'Live'**

Cullen,

NBP-Commercial Investment Area and Intervention Area

1. **The Village of Cullen, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Cullen at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are 'planned' and not yet 'Live'**

Donaskeagh,

NBP-Commercial Investment Area and Intervention Area

1. The Department has through consumer representations and its own analysis, **Identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.** A substantial number of Eircodes are shown 'Purple'

eir identifies a **Cabinet (s)** in the village of Donaskeagh as 'Planned' shown at <https://fibrerollout.ie/rollout-map/> - can its current status be confirmed with eir in order to ensure that it is 'built' and fibre enabled?

And required in order to identify for other premises where NGA / FTTC services are/ may not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet in the area or other.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes the subject to the NBP-IA are located within this area.

Donohill,

NBP-Commercial Investment Area and Intervention Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.** A substantial number of Eircodes are shown 'Purple'

eir identifies a **Cabinet (s)** in the **village of Donohill** as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can its current status be confirmed with eir in order to ensure that it is 'Live' and fibre enabled?

And required in order to identify for other premises where NGA / FTTC services are/ may not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet in the area or other.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes the subject to the NBP-IA are located within this area.

Drangan,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.** No Eircodes are shown 'Purple'

eir identifies all of its **Cabinet (s)** in the **exchange area of the village of Drangan** as 'Live' shown at

<https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes the subject to the NBP-IA are located within this area.

Dromineer

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. **The Village of Dromineer, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Dromineer at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are 'planned' and not yet 'Live'**

Dualia,

NBP-Commercial Investment Area and Intervention Area

1. **The Village of Dualia, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Dualia at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are 'planned' and not yet 'Live'**

Faugheen,

NBP-Commercial Investment Area and Intervention Area

1. **The Village of Faugheen, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Faugheen at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services were 'planned' and are now 'Live'**

Glengoole, New Birmingham

NBP-Commercial Investment Area and Intervention Area

1. **The Village of New Birmingham, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of **Glengoole, New Birmingham** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services were 'planned' and are now 'Live'**

Grangemockler,

NBP-Commercial Investment Area and Intervention Area

**Known as eir
Mullennagough
Exchange Area**

1. The Village of Grangemockler, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Grangemockler at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services are 'planned' and are not yet 'Live'

Kilcash,

NBP-Commercial Investment Area and Intervention Area

1. The Village of Kilcash, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Kilcash at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services were 'planned' and are now 'Live'

Kilfeakle,

NBP-Commercial Investment Area and Intervention Area

1. The Village of Kilfeakle, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir extended its Fibre services in the village of Kilfeakle at <https://fibrerollout.ie/rollout-map/> These services were not planned under the eir Commitment Agreement (2017) These services are now 'Live'

Lattin,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, identified a further circa 46k premises (coloured 'purple') on NBP mapping which to date have been represented as commercial areas i.e. they are represented as blue, but which may not in fact have access to NGA services. A number of Eircodes are shown 'Purple'

eir identifies all of its Cabinet (s) in the exchange area of the village of Lattin as 'Live' shown at

<https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. Resulting from the eir Commitment Agreement (2017) the Department added a further 84.5k premises to the Intervention Area where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes the subject to the NBP-IA are located within this area.

Limerick Junction, NBP-Commercial Investment Area and Intervention Area

1. The Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple')** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services.** A substantial number of Eircodes are shown 'Purple'

eir identifies a **Cabinet (s)** in the **village of Limerick Junction** as 'Planned' shown at <https://fibrerollout.ie/rollout-map/> - can its current status be confirmed with eir in order to ensure that it is 'built' and fibre enabled?

And required in order to identify for other premises where NGA / FTTC services are/ may not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet in the area or other.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes the subject to the NBP-IA are located within this area.

Lisronagh, NBP-Commercial Investment Area and Intervention Area

1. **The Village of Lisronagh, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of **Lisronagh** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services were 'planned' and are now 'Live'**

Lisvarrinane, NBP-Commercial Investment Area and Intervention Area

Aherlow Eir Exchange Area

1. **The Village of Lisvarrinane, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of **Lisvarrinane** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services were 'planned' and are not yet 'Live' A fibre cabinet is also planned.**

Lorrha, NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. **The Village of Lorrha, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of **Lisvarrinane** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services were 'planned' and are not yet 'Live'**

Loughmore,

NBP-Commercial Investment Area and Intervention Area

1. The Village of Loughmore, County Tipperary is not situated within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Loughmore at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services were 'planned' and are now 'Live'

Marfield,

Refer to the town of Clonmel.

Monard,

NBP-Commercial Investment Area and Intervention Area

1. The Department has through consumer representations and its own analysis, identified a further circa 46k premises (coloured 'purple') on NBP mapping which to date have been represented as commercial areas i.e. they are represented as blue, but which may not in fact have access to NGA services. A substantial number of Eircodes are shown 'Purple'

2. Resulting from the eir Commitment Agreement (2017) the Department added a further 84.5k premises to the Intervention Area where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes the subject to the NBP-IA are located within this area.

New Inn,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. The Department has through consumer representations and its own analysis, identified a further circa 46k premises (coloured 'purple') on NBP mapping which to date have been represented as commercial areas i.e. they are represented as blue, but which may not in fact have access to NGA services. A substantial number of Eircodes are shown 'Purple'

eir identifies all of its Cabinet (s) in the exchange area of the village of New Inn as 'Live' shown at

<https://fibrerollout.ie/rollout-map/> - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled?

and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.

2. Resulting from the eir Commitment Agreement (2017) the Department added a further 84.5k premises to the Intervention Area where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes the subject to the NBP-IA are located within this area.

Rathcabbin,

NBP-Commercial Investment Area and Intervention Area

1. The Department has through consumer representations and its own analysis, identified a further circa 46k premises (coloured 'purple') on NBP mapping which to date have been represented as commercial areas i.e. they are represented as blue, but which may not in fact have access to NGA services. A substantial number of Eircodes are shown 'Purple'

eir identifies a Cabinet (s) in the village of Rathcabbin as 'Live' shown at

<https://fibrerollout.ie/rollout-map/> - can its current status be confirmed with eir in order to ensure that it is 'Live' and fibre enabled?

And required in order to identify for other premises where NGA / FTTC services are/ may not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet in the area or other.

2. Resulting from the eir Commitment Agreement (2017) the Department added a further 84.5k premises to the Intervention Area where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes the subject to the NBP-IA are located within this area.

Rearcross,

NBP-Commercial Investment Area and Intervention Area

1. the Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services. No Eircodes are shown 'Purple'**

eir identifies a **Cabinet (s)** in the village of Rearcross as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can its current status be confirmed with eir in order to ensure that it is 'Live' and fibre enabled?
And required in order to identify for other premises where NGA / FTTC services are/ may not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet in the area or other.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. **A number of Eircodes the subject to the NBP-IA are located within this area.**

**Riverstown, part of
Birr**

NBP-Commercial Investment Area and Intervention Area

1. the Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services. No Eircodes are shown 'Purple'**

eir identifies a **Cabinet (s)** in the village of Riverstown as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can its current status be confirmed with eir in order to ensure that it is 'Live' and fibre enabled?
And required in order to identify for other premises where NGA / FTTC services are/ may not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet in the area or other.

2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. **A number of these Eircodes in Riverstown, part of Birr are situate in the NBP-IA.**

Rosegreen,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

1. **The Village of Rosegreen, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of **Rosegreen** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services were 'planned' and are now 'Live' to part only.**

Terryglass,

NBP-Commercial Investment Area and Intervention Area

1. **The Village of Terryglass, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of **Terryglass** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services were 'planned' and are not yet 'Live'**

**The Commons,
Ballingarry**

NBP-Commercial Investment Area and Intervention Area

1. The Village of the Commons, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of the Commons at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services were 'planned' and are not yet 'Live'

Upperchurch.

NBP-Commercial Investment Area and Intervention Area

**Part of the
Rossoulty Eir
Exchange Area**

1. The Village of Upperchurch, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Upperchurch at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services were 'planned' and are now 'Live'

49 Settlement Nodes

Aglish,	<p style="text-align: center;">NBP-Commercial Investment Area and Intervention Area</p> <ol style="list-style-type: none">1. The Village of Aglish, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area. (The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband. Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI) Is a Commercial Investment 'Blue' area to be created for this Village?2. eir identifies planned Fibre services in the village of Aglish at https://fibre rollout.ie/rollout-map/ under the eir Commitment Agreement (2017) These services were 'planned' and are not yet 'Live'
Ahenny,	<p>The village of Ahenny is a Target area of the NBP, which have no existing or planned NGA Networks.</p>
Ballagh,	<p style="text-align: center;">NBP-Commercial Investment Area and Intervention Area</p> <ol style="list-style-type: none">1. The Village of Ballagh, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area. (The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband. Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI) Is a Commercial Investment 'Blue' area to be created for this Village?2. eir identifies planned Fibre services in the village of Ballagh at https://fibre rollout.ie/rollout-map/ under the eir Commitment Agreement (2017) These services were 'planned' and are not yet 'Live'
Ballinahinch,	<p>The village of Ballinahinch is a Target area of the NBP, which have no existing or planned NGA Networks.</p>
Ballinderry,	<p style="text-align: center;">NBP-Commercial Investment Area and Intervention Area</p>
Eir Exchange Area	<ol style="list-style-type: none">1. the Department has through consumer representations and its own analysis, identified a further circa 46k premises (coloured 'purple') on NBP mapping which to date have been represented as commercial areas i.e. they are represented as blue, but which may not in fact have access to NGA services. A number of Eircodes are shown 'Purple' eir identifies all of its Cabinet (s) in the exchange area of the village of Ballinderry as 'Live' shown at https://fibre rollout.ie/rollout-map/ - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled? and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.2. Resulting from the eir Commitment Agreement (2017) the Department added a further 84.5k premises to the Intervention Area where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes the subject to the NBP-IA are located within this area.

- Ballingarry, Eir Exchange Area** **NBP-Commercial Investment Area and Intervention Area**
- 1. The Village of Ballingarry, North Tipperary, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
 - 2. eir identifies planned Fibre services in the village of Ballingarry, North Tipperary, County Tipperary at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services were 'planned' and are not yet 'Live'**
- Ballinure,** **NBP-Commercial Investment Area and Intervention Area**
- 1. The Village of Ballinure, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
 - 2. eir identifies planned Fibre services in the village of Ballinure, County Tipperary at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services were 'planned' and are not yet 'Live'**
- Ballycahill,** **NBP-Commercial Investment Area and Intervention Area**
- 1. The Village of Ballycahill, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
 - 2. eir did not plan Fibre services in the village of Ballycahill, County Tipperary at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These fibre services were 'completed' and are now 'Live'**
- Ballylooby,** **NBP-Commercial Investment Area and Intervention Area**
- 1. the Department has through consumer representations and its own analysis, identified a further circa 46k premises (coloured 'purple') on NBP mapping which to date have been represented as commercial areas i.e. they are represented as blue, but which may not in fact have access to NGA services. A number of Eircodes are shown 'Purple'**

eir identifies a **Cabinet (s)** in the village of Ballylooby as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can its current status be confirmed with eir in order to ensure that it is 'Live' and fibre enabled?
And required in order to identify for other premises where NGA / FTTC services are/ may not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet in the area or other.
 - 2. Resulting from the eir Commitment Agreement (2017) the Department added a further 84.5k premises to the Intervention Area where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes the subject to the NBP-IA are located within this area.**
- Ballinree,** Refer to the town of Cashel

Ballynacloagh,	NBP-Commercial Investment Area and Intervention Area <ol style="list-style-type: none">1. The Village of Ballynacloagh, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.<p>(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband. Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI) Is a Commercial Investment 'Blue' area to be created for this Village?</p>2. eir identifies planned Fibre services in the village of Ballynacloagh, County Tipperary at https://fibredeployment.ie/rollout-map/ under the eir Commitment Agreement (2017) These services were 'planned' and are 'Live'
Ballyneill,	NBP-Commercial Investment Area and Intervention Area <ol style="list-style-type: none">1. The Village of Ballyneill, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.<p>(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband. Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI) Is a Commercial Investment 'Blue' area to be created for this Village?</p>2. eir identifies planned Fibre services in the village of Ballyneill, County Tipperary at https://fibredeployment.ie/rollout-map/ under the eir Commitment Agreement (2017) These services were 'planned' and are 'Live'
Ballysloe,	NBP-Commercial Investment Area and Intervention Area <ol style="list-style-type: none">1. The Village of Ballysloe, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.<p>(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband. Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI) Is a Commercial Investment 'Blue' area to be created for this Village?</p>2. eir identifies planned Fibre services in the village of Ballysloe, County Tipperary at https://fibredeployment.ie/rollout-map/ under the eir Commitment Agreement (2017) These services were 'planned' and are not yet 'Live'
Birdhill,	NBP-Commercial Investment Area and Intervention Area
Eir Exchange Area	<ol style="list-style-type: none">1. the Department has through consumer representations and its own analysis, identified a further circa 46k premises (coloured 'purple') on NBP mapping which to date have been represented as commercial areas i.e. they are represented as blue, but which may not in fact have access to NGA services. A substantial number of Eircodes are shown 'Purple'<p>eir identifies all of its Cabinet (s) in the exchange area of the village of Birdhill as 'Live' shown at https://fibredeployment.ie/rollout-map/ - can their status be confirmed with eir in order to ensure they are 'Live' and fibre enabled? and required in order to identify for other premises where NGA / FTTC services are not being delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet or exchange in the area.</p>2. Resulting from the eir Commitment Agreement (2017) the Department added a further 84.5k premises to the Intervention Area where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes the subject to the NBP-IA are located within this area.
Boher,	Refer to Birdhill

Carrig,

NBP-Commercial Investment Area and Intervention Area

1. The Village of Carrig, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Carrig, County Tipperary at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services were 'planned' and are not yet 'Live'

Carrigahorig,

NBP-Commercial Investment Area and Intervention Area

1. The Village of Carrigahorig, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Carrigahorig, County Tipperary at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services were 'planned' and are not yet 'Live'

**Castleiney, Temple
more**

NBP-Commercial Investment Area and Intervention Area

1. The Village of Castleiney, Templemore, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Castleiney, Templemore, County Tipperary at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services are 'planned' and are not yet 'Live'

Clonakenny,

The village of Clonakenny is a Target area of the NBP, which have no existing or planned NGA Networks

Dolla,

NBP-Commercial Investment Area and Intervention Area

1. The Village of Dolla, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Dolla, County Tipperary at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) These services are 'planned' and are not yet 'Live'

Drom,

The village of Drom is a Target area of the NBP, which have no existing or planned NGA Networks

Drumbane,	NBP-Commercial Investment Area and Intervention Area <ol style="list-style-type: none">1. The Village of Drumbane, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.<p>(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.</p><p>Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)</p><p>Is a Commercial investment 'Blue' area to be created for this Village?</p>2. eir identifies planned Fibre services in the village of Drumbane, County Tipperary at https://fibredeployment.ie/rollout-map/ under the eir Commitment Agreement (2017) These services were 'planned' and are now 'Live'
Garrykennedy,	Refer to Portroe
Goatenbridge,	NBP-Commercial Investment Area and Intervention Area <ol style="list-style-type: none">1. The Village of Goatenbridge, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.<p>(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.</p><p>Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)</p><p>Is a Commercial Investment 'Blue' area to be created for this Village?</p>2. eir identifies planned Fibre services in the village of Goatenbridge, County Tipperary at https://fibredeployment.ie/rollout-map/ under the eir Commitment Agreement (2017) These services are 'planned' and are not yet 'Live'
Gortagarry,	The village of Gortagarry is a Target area of the NBP, which have no existing or planned NGA Networks
Gouldscross,	NBP-Commercial Investment Area and Intervention Area
Eir Exchange Area	1. The Village of Gouldscross, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area. <p>(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.</p> <p>Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)</p> <p>Is a Commercial Investment 'Blue' area to be created for this Village?</p> <ol style="list-style-type: none">2. eir identifies planned Fibre services in the village of Gouldscross, County Tipperary at https://fibredeployment.ie/rollout-map/ under the eir Commitment Agreement (2017) These services are 'planned' and are not yet 'Live'
Grange(Clonmel),	NBP-Commercial Investment Area and Intervention Area
Eir Exchange Area	1. The Village of Grange, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area. <p>(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.</p> <p>Following the completion of the eir t300k RFTTH Project - a substantial number of eircodes remain in this village to be deployed by NBI)</p> <ol style="list-style-type: none">2. eir identifies planned Fibre services in the village of Grange, County Tipperary at https://fibredeployment.ie/rollout-map/ under the eir Commitment Agreement (2017) These services are 'planned' and are not yet 'Live'

Horse & Jockey, NBP-Commercial Investment Area and Intervention Area

1. The Village of Horse & Jockey, County Tipperary is not situated within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Horse & Jockey, County Tipperary at <https://fibredeployment.ie/rollout-map/> under the eir Commitment Agreement (2017) These services are 'planned' and are not yet 'Live'

Kilbarron, NBP-Commercial Investment Area and Intervention Area

1. The Village of Kilbarron, County Tipperary is not situated within a NBP-Commercial Investment 'Blue' Area.

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of Kilbarron, County Tipperary at <https://fibredeployment.ie/rollout-map/> under the eir Commitment Agreement (2017) These services are 'planned' and are not yet 'Live'

Kilcommon, NBP-Commercial Investment Area and Intervention Area

1. the Department has through consumer representations and its own analysis, identified a further circa 46k premises (coloured 'purple') on NBP mapping which to date have been represented as commercial areas i.e. they are represented as blue, but which may not in fact have access to NGA services. A number of Eircodes are shown 'Purple'

eir identifies a Cabinet (s) in the village of Kilcommon as 'Live' shown at <https://fibredeployment.ie/rollout-map/> - can its current status be confirmed with eir in order to ensure that it is 'Live' and fibre enabled?

And required in order to identify for other premises where NGA / FTTC services are/ may not be delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet in the area or other.

2. Resulting from the eir Commitment Agreement (2017) the Department added a further 84.5k premises to the Intervention Area where commercial investment plans previously provided to the Department had failed to materialise. No Eircodes the subject to the NBP-IA are located within this area.

Kileen, Birr NBP-Commercial Investment Area and Intervention Area

1. the Department has through consumer representations and its own analysis, identified a further circa 46k premises (coloured 'purple') on NBP mapping which to date have been represented as commercial areas i.e. they are represented as blue, but which may not in fact have access to NGA services. No Eircodes are shown 'Purple'

eir identifies a Cabinet (s) in the village of Kileen as 'Live' shown at <https://fibredeployment.ie/rollout-map/> - can its current status be confirmed with eir in order to ensure that it is 'Live' and fibre enabled?

And required in order to identify for other premises where NGA / FTTC services are/ may not be delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet in the area or other.

2. Resulting from the eir Commitment Agreement (2017) the Department added a further 84.5k premises to the Intervention Area where commercial investment plans previously provided to the Department had failed to materialise. A substantial number of Eircodes the subject to the NBP-IA are located within this area.

- Killea,** The village of Killea is a Target area of the NBP, which have no existing or planned NGA Networks
- Killusty,** **NBP-Commercial Investment Area and Intervention Area**
- 1. The Village of Killusty, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
 - 2. eir identifies planned Fibre services in the village of Killusty, County Tipperary at <https://fibredeployment.ie/rollout-map/> under the eir Commitment Agreement (2017) These services are 'planned' and are now 'Live'**
- Killoscully,** The village of Killoscully is a Target area of the NBP, which have no existing or planned NGA Networks.
- Kilross,** **NBP-Commercial Investment Area and Intervention Area**
- 1. The Village of Kilross, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
 - 2. eir identifies planned Fibre services in the village of Kilross, County Tipperary at <https://fibredeployment.ie/rollout-map/> under the eir Commitment Agreement (2017) These services are 'planned' and are not yet 'Live'**
- Knock, near Borros-on-Ossory** **NBP-Commercial Investment Area and Intervention Area**
- 1. The Village of Knock, near Borros-on-Ossory, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
 - 2. eir identifies planned Fibre services in the village of Knock, near Borros-on-Ossory, County Tipperary at <https://fibredeployment.ie/rollout-map/> under the eir Commitment Agreement (2017) These services are 'planned' and are not yet 'Live'**
- Knockavilla,** **NBP-Commercial Investment Area and Intervention Area**
- 1. The Village of Knockavilla, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
 - 2. eir identifies planned Fibre services in the village of Knockavilla, County Tipperary at <https://fibredeployment.ie/rollout-map/> under the eir Commitment Agreement (2017) These services are 'planned' and are 'Live'**

- Moycarkey, NBP-Commercial Investment Area and Intervention Area**
1. the Department has through consumer representations and its own analysis, **identified a further circa 46k premises (coloured 'purple') on NBP mapping** which to date have been represented as commercial areas i.e. they are represented as blue, **but which may not in fact have access to NGA services. No Eircodes are shown 'Purple'**

eir identifies a **Cabinet (s)** in the village of Moycarkey as 'Live' shown at <https://fibrerollout.ie/rollout-map/> - can its current status be confirmed with eir in order to ensure that it is 'Live' and fibre enabled?
And required in order to identify for other premises where NGA / FTTC services are/ may not be delivered in the 'blue' commercial area and resulting from i.e. age of copper and distance from cabinet in the area or other.
 2. Resulting from the eir Commitment Agreement (2017) the Department added a **further 84.5k premises to the Intervention Area** where commercial investment plans previously provided to the Department had failed to materialise. **No Eircodes the subject to the NBP-IA are located within this area.**
- Moyglass, NBP-Commercial Investment Area and Intervention Area**
1. **The Village of Moyglass, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The **BLUE areas** are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
 2. eir identifies planned Fibre services in the village of **Moyglass, County Tipperary** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are 'planned' and are 'Live'**
- Moyne, NBP-Commercial Investment Area and Intervention Area**
- Eir Exchange Area**
1. **The Village of Moyne, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The **BLUE areas** are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
 2. eir identifies planned Fibre services in the village of **Moyne, County Tipperary** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are 'planned' and are not yet 'Live'**
- Ninemilehouse, NBP-Commercial Investment Area and Intervention Area**
1. **The Village of Ninemilehouse, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The **BLUE areas** are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
 2. eir identifies planned Fibre services in the village of **Ninemilehouse, County Tipperary** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are 'planned' and are not yet 'Live'**
- Rossadrehid, The village of Rossadrehid is a Target area of the NBP, which have no existing or planned NGA Networks.**
- Rossmore, The village of Rossmore is a Target area of the NBP, which have no existing or planned NGA Networks.**

Sologhead,

NBP-Commercial Investment Area and Intervention Area

- 1. The Village of Sologhead, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
2. eir identifies planned Fibre services in the village of **Sologhead, County Tipperary** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are 'planned' and are not yet 'Live'**

Templederry,

NBP-Commercial Investment Area and Intervention Area

Eir Exchange Area

- 1. The Village of Templederry County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**

(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.

Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of **Templederry County Tipperary** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are 'planned' and are not yet 'Live'**

**The Ragg,
Bouladuff**

NBP-Commercial Investment Area and Intervention Area

- 1. The Village of The Ragg, Bouladuff, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
2. eir identifies planned Fibre services in the village of **The Ragg, Bouladuff, County Tipperary** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are 'planned' and are 'Live'**

Thomastown,

NBP-Commercial Investment Area and Intervention Area

- 1. The Village of Thomastown, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)
Is a Commercial Investment 'Blue' area to be created for this Village?
2. eir identifies planned Fibre services in the village of **Thomastown, County Tipperary** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are 'planned' and are not yet 'Live'**

Toem

NBP-Commercial Investment Area and Intervention Area

- 1. The Village of Toem, County Tipperary is not situate within a NBP-Commercial Investment 'Blue' Area.**
(The BLUE areas are locations where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high speed broadband.
Following the completion of the eir t300k RFTTH Project through the Village - a substantial number of eircodes will remain in this village to be deployed by NBI)

National Broadband Plan - Conclusion of the Mapping Exercise for the Intervention Area pre-Deployment
NBP - Mapping Exercise for the Intervention Area

Is a Commercial Investment 'Blue' area to be created for this Village?

2. eir identifies planned Fibre services in the village of **Toem, County Tipperary** at <https://fibrerollout.ie/rollout-map/> under the eir Commitment Agreement (2017) **These services are 'planned' and are 'Live'**

Open Countryside **The NBP-IA to;**

- Exclude Eir exchange of Gortnagowna** as covered under the eir Commitment Agreement (2017)
- Exclude Eir Exchange Area of Ballymackey** as covered under the eir Commitment Agreement (2017)
- Exclude Eir Exchange Area of Coolbaun** as covered under the eir Commitment Agreement (2017)

From: [REDACTED]
To: NBP Mapping: [REDACTED]
Subject: Inaccurate Representation of Broadband Availability
Date: 09 September 2019 16:09:52

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hello,

I am writing to you on the advice of my local TD [REDACTED] (cc'd) who recently raised a Parliamentary Question on behalf of the residents of my estate [REDACTED] on this issue.

The map you provide on the DCCAE website, which outlines the scope of the NBP, indicates my house ([REDACTED]), and all houses on my estate, do not qualify for the NBP on the grounds that we live in a 'blue' area i.e. an area that is currently serviced with high speed broadband by commercial operators. I can unequivocally say that this is not the case. I can currently obtain a max of 11Mbps download speed from my current provider Eir via an ADSL connection. I have been in touch with Eir and they have indicated verbally and in writing that they have no plans to improve the service to me or my estate in future. Similarly I have been in touch with Siro, Sky, Vodafone and Virgin Media, who have all indicated that they do not currently service my estate with high-speed broadband, and have no plans to do so in the future (I can provide written evidence of these communications if needs be)

The map also indicates that a fibre network is available to homes at the entrance of our estate (<150 yards from the first house in our estate), indicating there is a fibre network in the area.

This issue is of major importance to us as residents of [REDACTED] not least because there are a large number of individuals in the estate who regularly work/study from home and the broadband issue is making this very difficult. I myself regularly have to commute in to my city centre offices simply to conduct overseas skype calls due to the poor quality of the signal I get at home.

I have also made the following suggestions to Eir:

- a) that they run the cable in but charge a higher than standard installation fee to each homeowner in the estate
- b) that they agree to run the cables, but only if a certain number of homes commit to signing up for their service
- c) that we as residents of the estate run the cables around the estate privately, and Eir/OpenEir simply ask their engineers to 'plug in' at the relevant pole/exchange
- d) that Eir/OpenEir provide us with a quote for the installation work, but only initiate the work if/when we agree to foot some or all of the bill ourselves

All of the above suggestions would seem to me to be very reasonable and satisfactory options for resolving this issue to the benefit of all parties involved. They would also have the added benefit of negating the need for all the houses in the estate to be added to the NBP list. However, the challenge, as always with these things, is to get these proposals in front of the correct decision-maker within Eir/OpenEir so that these suggestions get fair consideration, or that alternative options are explored.

My first request is for someone in DCCAE to contact Eir and examine whether they intend

to live up to the commitment that they presumably have given DCCAE (judging by the 'blue' colour of our estate on your map) to provide high-speed broadband in our estate?

Secondly, in the event that Eir continue to refuse to service the estate with high-speed broadband, and given that no other provider has the required cabling in the area (to the best of my knowledge), I would ask that you ensure our estate is added to the intervention area for the NBP as soon as possible.

If you require any more details, or wish to discuss this further, please just let me know.,

Regards,

[Redacted signature block]

From: [REDACTED]
To: NBP Mapping
Subject: Submission no broadband service
Date: 27 September 2019 11:05:12

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi I am currently living in a blue area for broadband [REDACTED]
[REDACTED]

There is no service for broadband at all.

Eir

I have had a number of orders for broadband since last December with a number of engineer's calling out on behalf of Eir/sky there they can't install copper line so they haven't successfully completed broadband order , I have to wait till they do the fiber but there is not happening any time soon there is no timeframe , so I have no service from Eir.

Virgin media

Virgin media were waiting on private wayleave permission alternative route 5 months ago so they can provide service into the housing estate and that has not happened and there is no time frame for that either. I have a case I'd for virgin media that is [REDACTED] no recent updates on case

At the moment we have no broadband service at all and dose not look like it's going to happen in near future and we are living in blue area that is showing services.



Sky response to consultation on Conclusion of the NBP Mapping Exercise for the Intervention Area

1. We are of the view that that NBP should proceed at the earliest opportunity. In this regard it is worth noting that Sky (and potentially other retail operators) have already invested significantly in preparation for the roll-out of NBP. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]. The significant delays in the process have been frustrating for the retail operators that will be crucial to the success of the project. Operators like Sky have been effectively on standby for well over a year at this stage and any further significant delay in the process appears unwarranted and has the potential to cause a number of difficulties.
2. Operators have now had several years to identify any premises where a commercial solution in the existing Intervention Area offers an alternative to state intervention. It is equally clear, based on expert analysis, including by ComReg, that a fixed fibre solution is the only appropriate technology that can deliver in terms of uncontended speeds and which is future proofed.
3. Sky are concerned that the reopening the mapping exercise at this late stage may be used by entities that have a commercial interest in NBP not going ahead, to disrupt the process, even where those entities are incapable of meeting the objectives of NBP. In this regard, the Department should consider the broader commercial incentives of entities claiming to be in a position to take further addresses out of the NBP IA. Commercial entities that have customers on existing inferior infrastructure are understandably not going to welcome those services potentially being made redundant, but equally, any such claims should be only be considered seriously if they come with "concrete" commitments in terms of the underlying technologies, the roll out timelines and the necessary financial backing.
4. Sky proposes that any further alterations to the NBP IA via the removal of addresses from the project should come with binding financial commitments and penalties in order to establish the *bona fides* of any such commitments. Additionally, Sky would strongly suggest, at this juncture in the process, that merely focussing on Eircodes should not be sufficient basis for reducing the





size of the NBP IA. Where any operator claims to be able to make commercial investments that meet the objectives of the NBP it ought to be on an area by area basis rather than on batches of Eircodes.

5. In this regard Sky consider it reasonable for the government to take an approach whereby any further reduction of the NBP IA should only be on an area/exchange/nodal basis with 100% premises committed to within those areas/exchanges/nodes by the committing commercial entity. Any further removal of isolated or batches of premises within areas/exchanges/nodes that do not cover all premises is likely to significantly increase the overall cost of NBP and be socially sub-optimal.
6. There are also important practical considerations that need to be considered when particular Eircodes (but not all) are cherry picked for removal from NBP. Sky know from experience that it is source of considerable frustration to customers when they see services advertised in regional media (for example) when those services are not available to many prospective customers in those regions. Where particular Eircodes rather than full area coverage drives what has been removed from NBP, as has happened with respect to the 300k, households will observe their neighbouring premises being able to purchase up to 1Gbps services while comparable services are not available to them. This phenomenon results in brand and reputational damage to retail providers as customers do not typically associate the shortcoming/restriction with the wholesale provider. Any further dilution of the NBP IA would only serve to exacerbate this problem and may make retail providers reluctant to actively pursue customers in areas where they cannot deploy a harmonised marketing approach/sales strategy.

Problems with Eircom's 300k Commitment Agreement (from a retail operator's perspective)

7. We wish to bring evidence to the Department's attention that raises concerns about Eircom's delivery on its commitments to the government in respect of the 300k footprint. Since May 2019, Sky has been monitoring the status of orders (sales) of FTTH in the 300k footprint where Eircom's systems claim FTTH is available to specific Eircodes. We have observed that up to [REDACTED] of sales that Sky has made to customers in this footprint cannot be delivered by Eircom because there is no fibre available despite it being presented on Eircom's systems that this is the case.





8. In these scenarios Sky sales agents make a sale to a customer and understand that the order is being progressed and is awaiting install by an Eircom engineer. Some time later the order gets placed on hold as a "non-standard" order with reason codes explaining why the order cannot be delivered including "no light at DP", "no DP installed" and "DP not activated". These reason codes all amount to the same thing- i.e. that customers cannot receive FTTH because the necessary infrastructure is not in place. As such these Eircodes should not be included in the list in Eircom's ordering handling system as addresses that can receive FTTH.
9. Sky has not reviewed the particulars of the Government's commitment agreement with Eircom, and any associated penalties, but one reason the disconnect may be occurring is to do with Eircom's incentive to 'demonstrate' that they have achieved particular milestones in order to honour the Commitment Agreement.
10. Sky has raised the issue with Eircom and asked it to remove such addresses from the relevant order handling system datafile. The issue was raised (and not for the first time) on 18 September at a public Product Development Workshop ("PDW") held by Eircom's wholesale division, Open Eir. While Open Eir accepted that such addresses were wrongly included in its database it has not yet committed to any proposal around a solution to the problem. We attach (Annex 1) a list of ■ Eircodes that have not been connected since May 2019 as a consequence of fibre not being accessible to the Eircode. Many of the customers Sky made sales to on this list have cancelled service which has resulted in brand and reputational damage to Sky. A number of other customer's orders are effectively in "limbo" as they wait for several months for an uncertain delivery date on the service.
11. Considering the damage that is done to retail operators in this scenario, we consider it appropriate that where penalties exist for failing to honour the commitment agreement, that such penalties are indeed imposed on the party that has entered into it. Any failure to pursue such penalties creates a moral hazard whereby entities are incentivised to make commitments to the Government for the purposes of taking homes out of the intervention area but do not have to absorb the full cost of any failure to meet the terms of such commitments. Sky would further propose that for any potential future commitments sought by the government that penalties should equally apply to incidences as described, where the committing provider claims to have reached targets but in reality has not done so.



sky

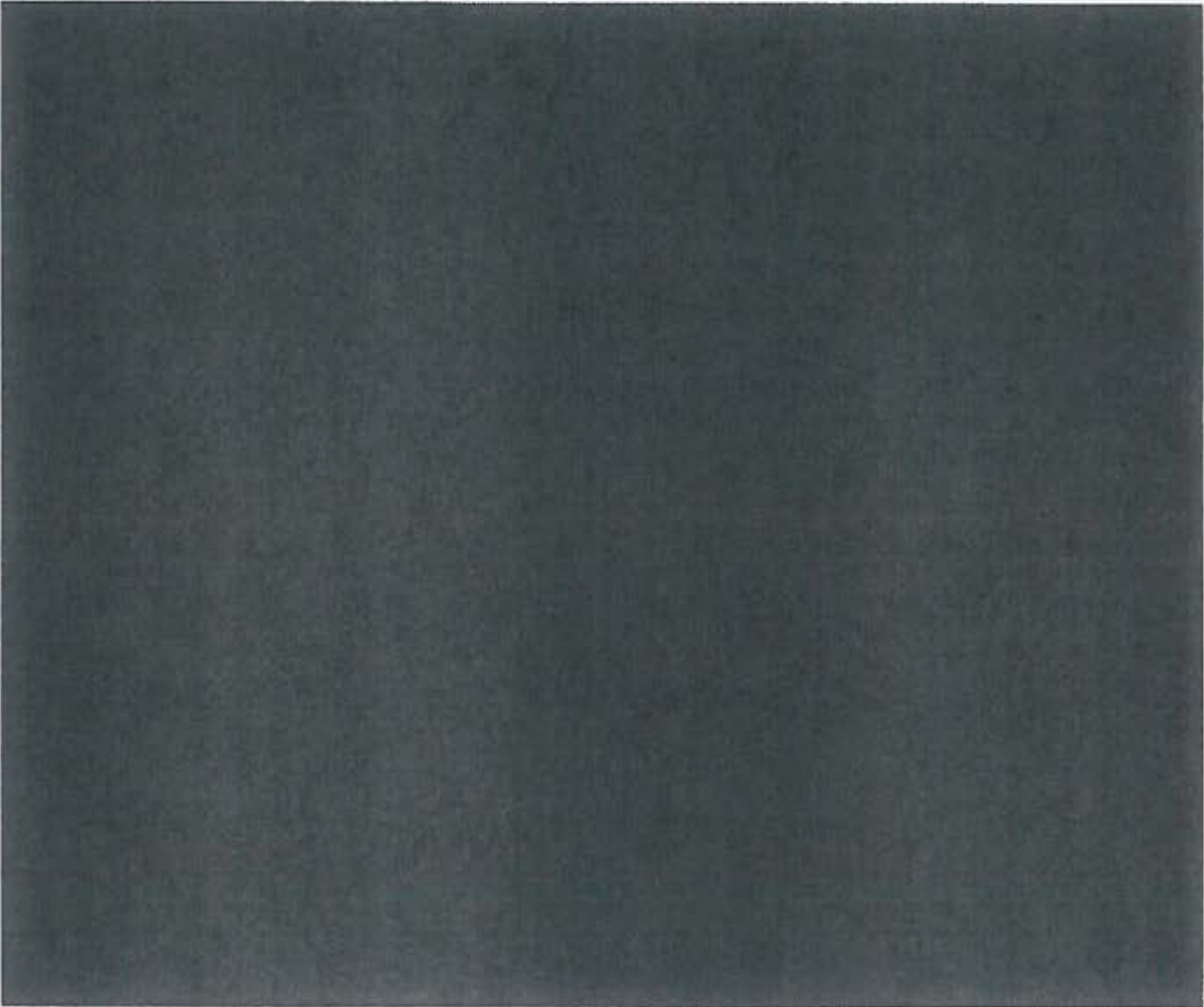
Sky, 19 September 2019



Correspondence Address: Sky Ireland, One Burlington Plaza, Dublin 4, Ireland

Sky Subscriber Services Limited (Irish branch), Great Key, Howorth, Middlesex TW7 5DD Registered in England No. 02540150

sky



Correspondence Address: Sky Ireland, One Burlington Plaza, Dublin 4, Ireland

Sky Subscriber Services Limited (Irish branch), Grant Way, Isleworth, Middlesex TW7 9QQ Registered in England No. 02340150



SKYTEL
IRELAND

Skytel Networks Ireland Ltd
NGA Mapping Submission

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Preliminary

We regret that due to the very short space of time allowed by the Department for this Consultation and due to the very large and time-consuming amount of data required to fully comply with its requirements we have been unable to address the totality required. We and other -SME FWA ISPs have written to the Department in September explaining the problems that this short time-scale holiday-centred consultation has caused and seeking an extension of time. It is most regrettable that to-date none has been forthcoming.

A1 Technical Information

1 Introduction

We have built our network around having good bandwidth with consistent and low latency, to support all converged IP services. We support many businesses and homes with Voice over IP (VoIP) telephony services. In fact, our clients have a wider choice of telephony offerings with Voice over IP which helps our customers access other services and reduce cost, all of which is great our customers.

The advances in wireless broadband technology in the past 15 years has been very considerable and particularly significant in the last 4-5 years. In that time, by our company keeping up with the latest in wireless technology we have been able to deliver the benefits of reliable high-speed broadband to Rural Ireland and, as a result, there is a wide variety of converged services available to our customers. In fact, more than half of our customer internet traffic is now video based, such as streaming video content from:

- RTE
- Apple TV
- YouTube
- Netflix
- High Resolution CCTV for our customers peace of mind and security and indeed farmers for monitoring their animals' welfare

In addition to this we support many businesses / homes with Voice over IP VoIP telephony services.

A number of our regional ISP colleagues have deployed their own IPTV distribution platforms for their ISP Customers, these operators include:

- Airwire Ltd.
- Real Broadband Ltd.
- Kerry Broadband Ltd.

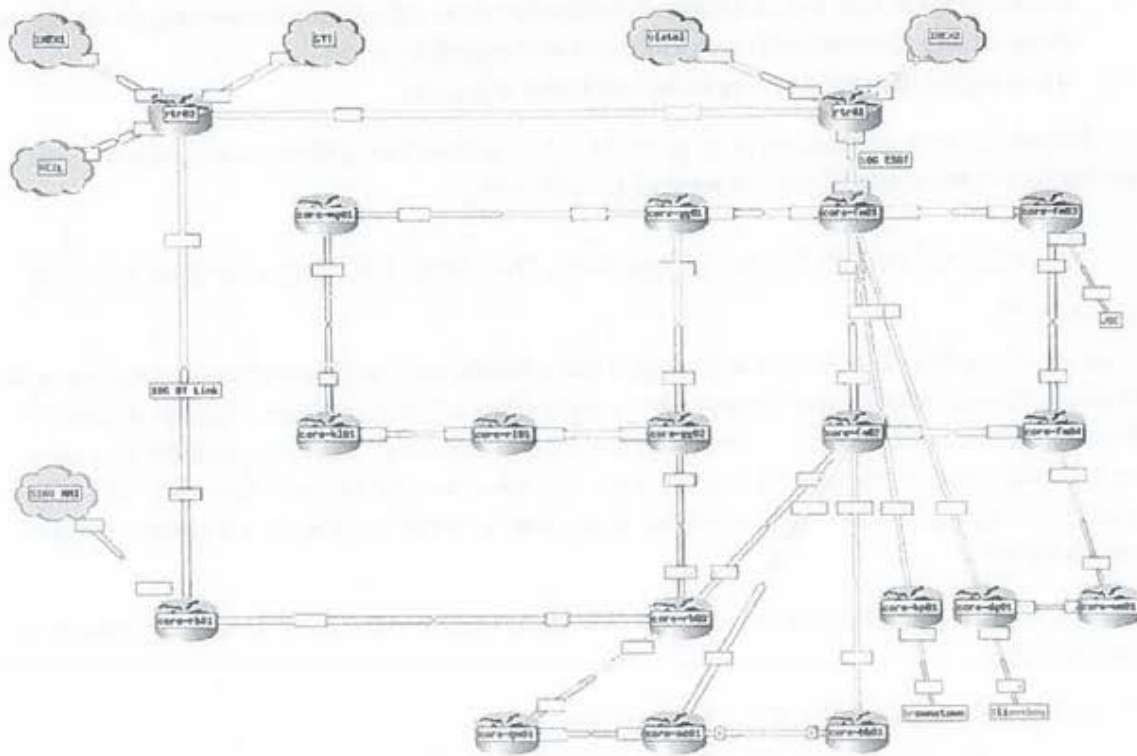
They are very pleased with the results and we are actively considering collaborating with them and other operators to bring IPTV over our own high-quality, high-speed broadband network.

We also support business users with remote working solutions through VPNs, Remote Desktop Environment and cloud-based productivity suites. Our customers report excellent results with video

conferencing which allows for more remote working less commuting, less traffic congestion, reduced carbon footprint and a greater quality of life for our customers in Rural Ireland. We are delighted that our customers reap the benefits of high-speed broadband in Rural Ireland today, benefits, we might add, that exist at no cost to the taxpayer.

1.1 Description of network Architecture

From the core of our network in the South East, we currently have redundant 10Gbps fibre circuits from two independent providers providing transit to our datacentre in Dublin. From there, we have direct interconnects with Viatel and GTT. We are also a member of INEX and have direct interconnects with both LAN1 and LAN2 in INEX from this datacentre.



From the above diagram, you can see we have built redundancy into our network, with most of our POP's connected via two or more licensed microwave links or dark fibre circuits.

1.2. Access network technology

We operate a Fixed Wireless Access (FWA) Network in the ISM 5GHz & License Exempt 5.8GHz bands. We use Ethernet based data link layer technology. For our NGA Access Deployment we have chosen Cambium 450m, Radwin Jet and ePMP3000 sectors and client units.

On our Base station sites, we have deployed Sectors with the technical specifications as outlined in the following section. They have already been deployed following the deployment strategy which allows for self-funded organic growth and infill as the site matures and consumers become aware of the improved new service offering available to them.

On a given site that has 360 Degrees field of view (on top of a hill / mountain) we have deployed 4x 90-degree advanced sector antennas to provide coverage in the area. On a Base station site that has less of a field of view, in that case we have deployed the requisite number of 90-degree advanced sector antennas to cover that area. Additional capacity has been added by

- using additional sectors in the form of tightly focused sector antennas to maintain NGA levels of speeds that the customers are accustomed to. The tightly focused sector antennas serve to minimise external noise and facilitate frequency reuse.
- Using additional beamforming advanced sector antennas.

The additional capacity is added on an ongoing basis to maintain the performance in-line with User expectations to ensure NGA Performance during peak times.

1.2.1 Access network technology and the Specification of the access equipment

We operate in the ISM 5GHz & License Exempt 5.8GHz bands. We use Ethernet based data link layer technology. For our NGA Access Deployment we have chosen Cambium 450m, Radwin Jet and ePMP3000 sectors and client units. The Cambium 450m, Radwin Jet, and ePMP3000 sectors are powered using Power over Ethernet PoE switches from Netonix. And Mikrotik RouterOS CCR Routers are used to forward customer Internet traffic inside Layer 2 Tunnel Overlay on a Redundant layer 3 Routed network.

A schedule of Routers used at each base station would be one or more of the following (depending on the site size:

- Mikrotik Cloud Core CCR1036-12G-4S Router
 - https://i.mt.lv/cdn/rb_files/CCR1036-12G-4S-190612120440.pdf
- Mikrotik Cloud Core CCR1036-8G-2S+ Router
 - https://i.mt.lv/cdn/rb_files/CCR1036-8G-2S-190211152400.pdf

A Schedule of PoE Switches on base stations are outlined below.

- Netonix WS-26-400-IDC
 - <https://www.netonix.com/wisp-switch/ws-26-400-idc.html>

1.2.2 Sector Technology Deployed

1.2.2.1 Cambium Networks

We deploy sectoral transmitters according to the design and strategy outlined earlier. We utilise Cambium 450m Sectors with beamforming & GPS synchronisation to actively mitigate against interference. The GPS Sync allows all sectors at a given base station site to transmit simultaneously and receive simultaneously, thereby eliminating self-interference & co-located interference. When GPS sync is combined with Advanced Antenna Designs it allows an operator to reuse frequencies to increase capacity at a site. The Upload download ratio on the access network is fixed at 25% Up, 75% down. This allows for even better ratio than what is required for NGA. There are other active technologies deployed in the electronics to mitigate against interference through the use of:

- Integrated Static RF filters
- Integrated Dynamic tuneable RF filters
- Advanced digital signal processors
- Forward error correction FEC mechanisms
- Adaptive Coding Modulation (ACM)
- Transmit Power Control (TPC)
- Subscriber isolation

A schedule of the sector equipment used is outlined below:

- GPS Synchronised dynamic filtering EPMP 3000 4x4 MUMIMO with 90deg Sectors with smart beamforming antenna.
 - https://cdn.cambiumnetworks.com/wp-content/uploads/2018/10/SS_ePMP_3000_10032018-1.pdf
 - https://cdn.cambiumnetworks.com/wp-content/uploads/2018/10/SS_ePMP3000_SectorAntenna_10032018_bleed.pdf
- Smart Beamforming Antenna that is used in the EPMP3000
 - https://cdn.cambiumnetworks.com/wp-content/uploads/2017/09/SS_ePMP_SmartAntenna01032017.pdf
- GPS Synchronised dynamic filtering PMP450 Medusa 4x4 MU-MIMO with integrated beamforming 90deg sector antennas:
 - https://cdn.cambiumnetworks.com/wp-content/uploads/2016/06/Spec_PMP_450m_cam-10046_000v016.pdf
 - https://cdn.cambiumnetworks.com/wp-content/uploads/2017/09/CAM_brochure_Medusa_04062017.pdf

1.2.2.2 Radwin

The RADWIN JET beamforming offers service providers a unique set of benefits; high service performance that is applicable to a wider range of customer segments, and low TCO (total cost of ownership). RADWIN JET beamforming delivers reliable connectivity in the licence-exempt 5GHz band.

RADWIN JET PtMP beamforming antennae have a very narrow beam width (8°) which imitates PtP transmission to end-users. Combined with RADWIN's air-interface capabilities (i.e. fast-ARQ, unique adaptive code-modulation, adaptive MIMO-diversity and dynamic channel bandwidth per end-user)

RADWIN JET is second-to-none in radio interference mitigation, which ensures reliable connectivity in tough congested spectrums.

RADWIN JET delivers the highest possible capacity per given distance. It supports broadband connectivity of up to 3Gbps per 4-sector site and enables 'triple-play' services with HD/4K quality. The RADWIN JET sector antenna's high gain, achieved with beamforming technology, combined with its wide channel bandwidth support and constant transmit power in all modulations, increases the actual end-user capacity for a given distance while maximizing the distance per given capacity.

JET Beamforming enables service providers to deliver greater network capacity with less spectrum and less wireless infrastructure. RADWIN JET's ability to use only two (2) frequency channels per network, combined with high spectrum efficiency, enables it to deliver the highest capacity per available clear spectrum in unlicensed bands. A built-in GPS receiver assures TDD synchronization between all sites, minimizing self-interference and maximizing spectrum utilisation. Its superiority in spectrum efficiency and the extra distance it supports, reduces the number of towers, base stations and backhaul required per network

RADWIN JET's dynamic bandwidth allocation (DBA) ensures a Committed Information Rate (CIR) for heavy bandwidth applications, business customers and IPTV service. JET's dynamic bandwidth management allows residential oversubscription, while maintaining overall high sector capacity without capacity reduction. RADWIN DBA guarantees that not only will the throughput not be degraded when more subscriber units are integrated into the system, but on the contrary – performance (throughput and latency) can be improved when such scenarios occur.

The DBA algorithm is responsible for allocating the radio frames to the remote radios. The purpose of this allocation is to ensure the quality of service to each of the remote unit in terms of delay and throughput and in parallel provide the maximum possible peak rate.

The pre-allocated bandwidth defines the assured capacity and delay for each radio. The DBA is responsible for assigning additional bandwidth to a radio by either using the unallocated bandwidth or re-assign "unused" downlink bandwidth between different radios.

When more subscriber units are integrated into the system, they can be defined as "Best-Effort" users, or to be assigned with "committed" resources (percentage of the sector capacity) in order to guaranty SLA under congestion. When DBA comes into action, minimum service is maintained while peak rates are granted when conditions apply.

Under no circumstances or conditions, will there be service degradation due to newly added subscribers into the sector.

At the core of the RADWIN JET is a proprietary air interface protocol that enables carrier-class wireless Ethernet services in licence-exempt bands. To ensure high quality and reliable delivery of these services, RADWIN radio systems employ several mechanisms that work together to mitigate interference:

- Automatic Adaptive Rate
- Forward Error Correction (FEC)
- Advanced Automatic Repeat Request (ARQ) Mechanism
- Non-interrupted transmission
- Orthogonal Frequency Division Multiplexing (OFDM)
- Automatic Channel Selection (ACS)
- Network Synchronisation (GPS) (TDD sync)

- Dynamic Channel Bandwidth Allocation (D-CBA)
 - Smart BEAMFORMING & BEAMSTEERING (2nd Gen)
- RADWIN Jet Air 250Mbps Integrated Base Station / Beamforming Sector with built-in GPS sync
 - PDF Datasheet attached "RW-5AB5-2654.pdf"
- RADWIN Jet PtMP Brochure
 - PDF Datasheet attached "RADWIN JET PtMP Brochure"
- Explainer video on RADWIN Jet Beamforming
 - https://youtu.be/r6X_qZrqY_0

1.2.3 Client Premises Equipment(CPE) Technology Deployed.

1.2.3.1 Cambium Networks

The Client units were chosen because they had the following features to maximise performance, minimise interference:

- Maximise spectral efficiency by utilising a minimum of 2 streams MIMO (on horizontal and Vertical Polarization)
- High Gain Focused Antennas
- Maximise client performance by ensuring adequate processor specification
- Adaptive Coding Modulation (ACM)
- Forward Error Correction (FEC)
- Transmit power Control (TPC)

We minimise interference by using high gain focused antennas that have the effect of maximising the signal through accurate alignment (by a professionally trained installer) of the antenna's centre line with the base station. Utilising High gain Focused antennas has the following effects:

- Noise behind and beside the antenna minimised to a great extent.
- Minimises interference to other operators because the signal is focused on the base station (being a good neighbour)
- Minimises interference from other operators because the signal is focused on the base station (protection from noisy neighbours)
- Maximises signal to noise ratio (SNR)

A schedule of Client unit equipment deployed:

- Cambium Force 200 25dBi 5GHz Client units supporting throughputs of 80Mb/s down and 27Mb up on 20MHz
 - https://cdn.cambiumnetworks.com/wp-content/uploads/2017/10/SS_ePMP_Force200_06262018.pdf
- Cambium Force 300 25dBi 5Ghz supporting throughputs of up to 125Mb/s down and 36Mb/s up on 20MHz
 - https://cdn.cambiumnetworks.com/wp-content/uploads/2018/10/SS_ePMP_Force300-25_08212019.pdf
- Cambium PMP450b High-Gain 5GHz supporting throughputs of up to 125Mb/s down and 36Mb/s up on 20MHz
 - https://cdn.cambiumnetworks.com/wp-content/uploads/2018/11/SS_450b_04102019.pdf
- Cambium 450d 25dBi 5GHz supporting throughputs of up to 80Mb/s down and 36Mb/s up on 20MHz
 - https://cdn.cambiumnetworks.com/wp-content/uploads/2017/09/Spec_PMP_450d_05042017.pdf

1.2.3.2 Radwin

RADWIN's powerful Subscriber Unit (SU) deliver fibre-like connectivity with high Packet-Per-Second (PPS) processing power to maintain the highest capacity even in small packet applications.

RADWIN's proprietary PtMP system ensures that RADWIN custom design of it's hardware and software ensures unrivalled performance.

Also designed for low visual impact, RADWIN's ruggedized SUs assure long-lasting operation even in the harshest conditions.

The RADWIN SU features include:

- SU-AIR: Up to 100Mbps
- SU-PRO: Up to 500Mbps
- 16 / 22dBi integrated antenna
- High durability – IP67 enclosure
- Compatible with all RADWIN base stations
- SU AIR: Designed for residential subscribers (best effort)
- SU PRO: Offers SLA for enterprise and bandwidth demanding applications, based on CIR

RADWIN SU-AIR 100 Series

- PDF Datasheet "RW-5H00-2A54.pdf"

1.3 Backhaul Network Technology and specification of Backhaul Technologies

Our Backhaul is heavily dependent on fibre. We use high Capacity FDD Links to transfer bandwidth from a fibre POH to a high site.

1.3.1 Short Range Radio Backhaul Network Technology

We make use of high frequency narrow beam links to bridge short gaps between fibre POHs and high sites. We make use of 17GHz / 24GHz / 60GHz License Exempt bands and Licenced bands for delivery of bandwidth from site to site or from Fibre POH to Site.

- SIAE Microelettronica ALFOplus 80HD 80GHz 2Gbps FDX FDD Licenced Radio Link
 - <https://www.siaemic.com/index.php/products-services/telecommunication-systems/microwave-product-portfolio/alfo-plus-80hdx>
- SIAE Microelettronica ALFOplus 80HDx 80GHz 10Gbps FDX FDD Licenced Radio Link
 - <https://www.siaemic.com/index.php/products-services/telecommunication-systems/microwave-product-portfolio/alfo-plus-80hdx>
- SIAE ALFOplus 17/17GHz 500Mbps FDD FDX Radio Link for Links up to 10km
 - <https://www.siaemic.com/index.php/products-services/telecommunication-systems/microwave-product-portfolio/alfo-plus>

All of these connections allow for increased bandwidth for our customers, we monitor the usage and as soon as usage on any of these links are regularly and consistently over 75% we start a procurement process to upgrade the links, this is ensured that upgrades either soft or hard are implemented in time so as to keep our capacity always 20% above of Peak Demand. We monitor our usage using various SNMP graphing and Latency Testing Tools in our NMS system.

1.3.2 Long Range Licensed Radio Backhaul Network Technology

- SIAE Microelettronica ALFOplus2 6-42GHz 2+0 XPIC 2Gbps Licensed Radio
 - <https://www.siaemic.com/index.php/products-services/telecommunication-systems/microwave-product-portfolio/alfo-plus2>

All of these connections allow for increased bandwidth for our customers, we monitor the usage and as soon as usage on any of these links are regularly and consistently over 75% we start a procurement process to upgrade the links, this is ensured that upgrades either soft or hard are implemented in time so as to keep our capacity always 20% above of Peak Demand. We monitor our usage using various SNMP graphing and Latency Testing Tools in our NMS system.

1.3.3 Wired / Fibre Backhaul Network Technology

For sites and POPS that have 10Gb/s + Capacity we utilise the following routers to forward traffic onto High sites via the Radio Point to Point links described earlier

- Mikrotik CCR1072-1G-8S+ with a forwarding capacity of 50Gb/s
 - https://i.mt.lv/cdn/rb_files/CCR1072-1G-8Splus-1564987483.pdf

For sites with 10G+ we use the following switches

- Juniper EX3300-24T
 - http://www.networkscreen.com/datasheets/EX-Series/EX3300_Ethernet_Switch_DS.pdf

For smaller POPS and for POPS with PoE demands we deploy the following schedule of equipment

- Mikrotik Cloud Core CCR1036-12G-4S Router
 - https://i.mt.lv/cdn/rb_files/CCR1036-12G-4S-190612120440.pdf
- Mikrotik Cloud Core CCR1036-8G-2S+ Router
 - https://i.mt.lv/cdn/rb_files/CCR1036-8G-2S-190211152400.pdf

A Schedule of PoE Switches on base stations are outlined below.

- Netonix WS-26-400-IDC
 - <https://www.netonix.com/wisp-switch/ws-26-400-idc.html>

1.3.4 Backhaul Network Technology (National, and Metro) and the specification of the Backhaul Providers

We have several Circuits from national backhaul provider partners

1.3.4.1 ESB Telecom Backhaul

We have a 10G point to point circuit from Barntown, Wexford to Equinix DB3, Ballycoolin, Dublin.

1.3.4.2 BT Backhaul

We have a 10G point to point circuit from Wexford Town, Wexford to Equinix DB3, Ballycoolin, Dublin.

All of these connections allow for increased bandwidth for our customers, we monitor the usage and as soon as usage on any of these links are regularly and consistently over 75% we start a procurement process to upgrade the links, this is ensured that upgrades either soft or hard are implemented in time so as to keep our capacity always 20% above of Peak Demand. We monitor our usage using various SNMP graphing and Latency Testing Tools in our NMS system.

1.3.5 External Edge Capacity

We have an External Edge capacity of 20 GB/s consisting of 10Gbps IP Transit from GTT/Hibernia and a further 10Gbps of IP Transit from Viatel.

As well as this we have two 10Gbps interconnects to INEX: one to LAN1 and the other to LAN2.

These all interconnect with our edge infrastructure in Equinix DB3 in Ballycoolin, Dublin.

1.4. Design for the national backhaul network including any traffic and capacity assumptions

The Backhaul network we have built has been designed around using quality backhaul from providers with an SLA that is appropriate for what are considered arterial paths for our network.

We use multiple Links spread across providers from Datacentres in Urban Population centres to provincial towns around our network. From these provincial towns we utilise our own infrastructure built with high capacity ethernet radio links to get the bandwidth up to the nearest high site. We design the Radio links with adequate fade margins to achieve 99.99% availability where feasible.

We introduce redundant paths between high sites using radio links so that if there is a fibre break in one provincial town we can fail over via a number of radio links to a fibre link in another provincial town.

1.5 Coverage data as illustrated in the form of Polygonised Data set

1.5.1 Table of Location of Base stations

N.B. Section removed due to commercially sensitive information.

1.5.2 Table of Location of Premises Passed based on High Resolution LIDAR and DSM data

Please see attached document which lists eircodes of properties that we have 'passed'. These properties are eligible for Skytel NGA FWA service.

REF Filename: Skytel_NGA_eircodes_.xlsx

Also attached as a .KML file. Ref: Skytel_NGA_detail.kml

1.6 LIDAR LOS testing and Methodology

We have engaged WirelessCoverage.com to build a Digital surface model based on high quality LIDAR / DSM data. We have supplied Wirelesscoverage.com a list of Sites and height of sectors to produce a list of premises that would be covered with clear line of sight

Approach according to WirelessCoverage.com

The approach used for this project was designed to be as comprehensive and detailed as possible, using the best quality data and modelling tools available.

Detailed data was prepared to perform this analysis comprising of: -

- The latest EIRCODE dataset, purchased in August 2019
- A Digital Surface Model (DSM) for the whole country from Bluesky International, who have the most contemporary dataset currently available. They hold data at 1m resolution, which
- was scaled to 2.5m resolution using a bilinear interpolation method. Where any gaps in their coverage were identified SRTM data was used and interpolated to avoid any hard edges in the height data. More information on the data is available below.
- Mast Site Data from our ISP
- WISDM Wireless Modelling system, which performs detailed line of sight tests between all properties and all tower sites. Further details on the WISDM Line of Sight Engine are included in below.

Method according to WirelessCoverage.com

Data from our ISP was collected in September 2019 and imported into WISDM. Sites were classified as Standard or NGA and we also gathered details on future planned sites. The distinction between Standard and NGA sites is based upon the quality and style of equipment currently installed at these sites, along with the backhaul feeds. Those classified as NGA are capable of connecting premises at NGA speeds of 30Mbps download.

Using WISDM, wirelesscoverage ran several coverage passes to all EIRCODE centroids: -

1. All Sites from our ISP at NGA
2. All Sites from our ISP at non-NGA

Within each pass, WISDM takes each Site within the test and performs a Wireless Line of Sight test to each property within a given radius. It is important to note that a Wireless Line of Sight Test differs from an optical test, as it takes into account the Fresnel 1 Zone around the direct (optical) path. This is a more robust means of determining line of sight. In this exercise, we discounted all properties that had more than 15% Fresnel 1 incursion, and therefore does not include properties with Near Line of Sight, which in many cases could successfully be connected.

Where a property does have Wireless Line of Sight, it is excluded from further tests within that pass, in order to avoid double-counting properties.

We then performed analysis of the coverage list from each operator with NGA coverage to identify those properties that could receive NGA service from more than one operator.

NGA Assumptions

Due to the variety of equipment mounted at each site for different operators, we have taken a cautious approach to whether a site is capable of delivering NGA speeds. As such, we have taken a worst-case assumption of the type of equipment used for access points or base stations.

We considered the signal level that would be required to get the full modulation rates on the most basic of commonly installed fixed wireless equipment, as well as a significant fade margin. Assuming a nominal operating frequency of 5.7 GHz with regulatory compliant power output (EIRP) from a base station of 33 dBm (2 Watts) and a client receiver with 30cm diameter antenna providing 23 dBi gain, the receive signal level (RSL) with clear line of sight would be -70.1 dBm at 7.5 km. Using a basic radio system, such as the Ubiquiti Rocket M5 access points and associated M5 customer receiver such as NanoBeam M5 system on a 20 MHz channel, and an assumed noise floor of 90 dBm, a client would connect at MCS13, providing a physical interface rate of 104 Mbps and a typical throughput rate of approximately 54 Mbps, which is safely above the NGA threshold and leaves a considerable fade margin assuming the access point is not over-subscribed.

Assumptions and Constraints

As with all modelling approaches to wireless coverage, there are factors which could over-state or under-state coverage. Here is a summary of the key factors as they relate to this project: -

Over-statement factors

- A small percentage of the national map data used was derived from low-resolution (10 to 30m) data, which could mean that obstructions to the wireless signal path calculations were missed. We estimate an error rate of <2% over-statement.
- Since the high-resolution data was produced between 2015 and 2017, it is likely that additional tree growth and new building works will have occurred in the intervening period which means that some wireless paths are now blocked. We estimate a resultant over-statement of <1% from this.
- Whilst it may be possible to receive a high-quality signal at a given property, it is possible that there is no suitable location on the property to mount a receiver due to the construction or location of the property. For example, waterside properties or those with unusual construction such as all-glass exterior can be very challenging.

Under-statement factors

- In this exercise, we performed single-point line of sight tests to each EIRCODE property. In reality, it is possible that the Wireless Line of Sight to that one point may be obscured and therefore reported as no coverage, but if a receiver was mounted at a different point on the

property, a connection could be established. We estimate an under-statement of 3-4% from this factor.

- We used a watershed method for wireless line of sight calculation which allows for little or no Near Line of Sight connections. Many modern radio systems using the diversity associated with MIMO transmission allows for high quality connections to be established in Near Line of Sight operation and these have not been incorporated in the model. This is estimated to have an affect of <10%, but it is highly dependent on the technology used by the operator.
- We have assumed that 30cm dishes are used at the customer property to achieve an appropriate signal level. It is common practice to install 40cm dishes or larger, which have higher gain and therefore can receive a good signal at a longer range. Using larger dishes could increase the coverage from each access point substantially.

Multi Dwelling Units (MDUs)

WISDM currently has a design constraint which means that the premises counted in coverage checks shows the same EIRCODE for all properties that have the same physical location (ie. Multi-dwelling units). This means that the coverage lists appear to have duplications. It was not possible to resolve this issue in the time available to complete the project.

LIDAR DSM Data Source coverage according to wirelesscoverage.com

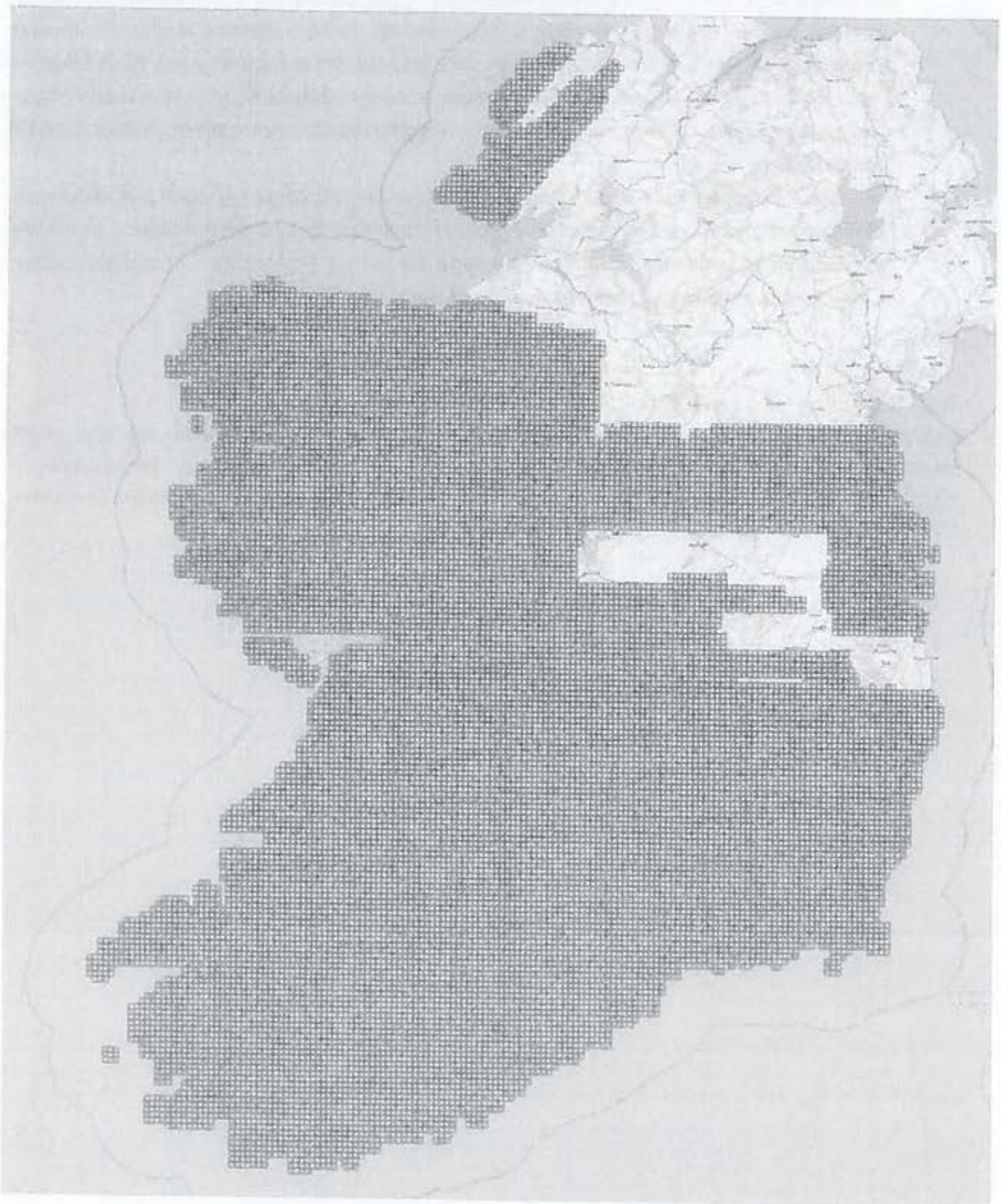


Figure 1. Map of 1m DSM Data from Bluesky International, collected between 2015 and 2017



Figure 2. Example render of DSM Data showing trees, buildings and other surface features.

Wirelesscoverage.com WISDM™ Line of Sight Engine

Highlights

Wireless coverage WISDM comprises of a family of ultra-high performance wireless planning systems developed by Boundless Networks Ltd.

WISDM WISP Edition is an interactive planning and design system built to facilitate the creation of scalable, robust and performant fixed wireless networks for Wireless ISPs. It enables the rapid creation of 'Ideal' wireless networks over very large areas of thousands of square kilometres. It is well suited to rural expanses as well as mixed and urban environments too. Once an Ideal network has been designed, the network can be fine-tuned to consider build constraints and resiliency in real time.

WISDM can also be used to analyse the coverage of an existing wireless network and perform 'what-if' tests to plan ad-hoc extensions to a network to verify potential coverage and backhaul.

Using WISDM, a predictable coverage model can be prepared in hours and **detailed coverage of individual properties** can be predicted with an extremely high level of accuracy. Site planning and acquisition is accelerated by use of the interactive planning tools, allowing rapid decisions about mast location to be made with instant coverage impact reporting.

Overview

WISDM comprises of several components and processes to complete the overall solution. At the heart of the system is a very high performance wireless Line of Sight (LoS) calculation engine. The

LoS engine can calculate over 150 million wireless line of sight tests per second and can use a wide variety of terrain and surface obstruction data sets at any resolution.

Overall, WISDM WISP Edition performs the following tasks: -

1. **Site Finder.** This creates an 'Ideal' list of sites where masts could be located for optimum coverage for a given number of target premises passed from a target premises dataset. Target premises can be a list of all properties from a comprehensive source, such as Ordnance Survey AddressBase, or a subset of premises in say, a Government Intervention area. Assumptions can be used to set mast profiles which would include mast height and effective wireless range. For example, the Site Finder can be run with parameters which state that 20 locations could be built with 30m towers, then calculate how many 15m towers would be needed to pass a certain quantity of target premises.
2. **Backhaul Modelling.** The Backhaul Modeller analyses a Site Location dataset and performs line of sight tests between them to create microwave backhaul. Assumptions can be used to help plan for the style of links to be used. For example, links up to 5km can be coloured differently than links from 5km to 17km. This helps when planning a network that has optimum resilience, performance and operating costs due to the potential costs incurred to run licensed microwave links or fibre backbone.
3. **Wide Area Network (WAN) Visualizer.** The WAN Visualizer provides full-screen mapping to allow users to see the overall shape of a network and the distribution of different sized towers and backhaul connections between sites. The WAN Visualizer can be called from the Site Coverage and Modelling system.
4. **Site Coverage and Modelling System.** This is an interactive web-based tool that allows planners to review the calculated Ideal Sites and move them on a map. At each point, the user can see instantly the impact of changes to coverage of Target Premises, as well as backhaul connections to other sites.
5. **Backhaul Link Capacity Planning.** Backhaul links can be described in terms of capacity and latency. Client connection volumes can also be applied to sites and WISDM will predict traffic load and volumes relative to transit or fibre injection points.

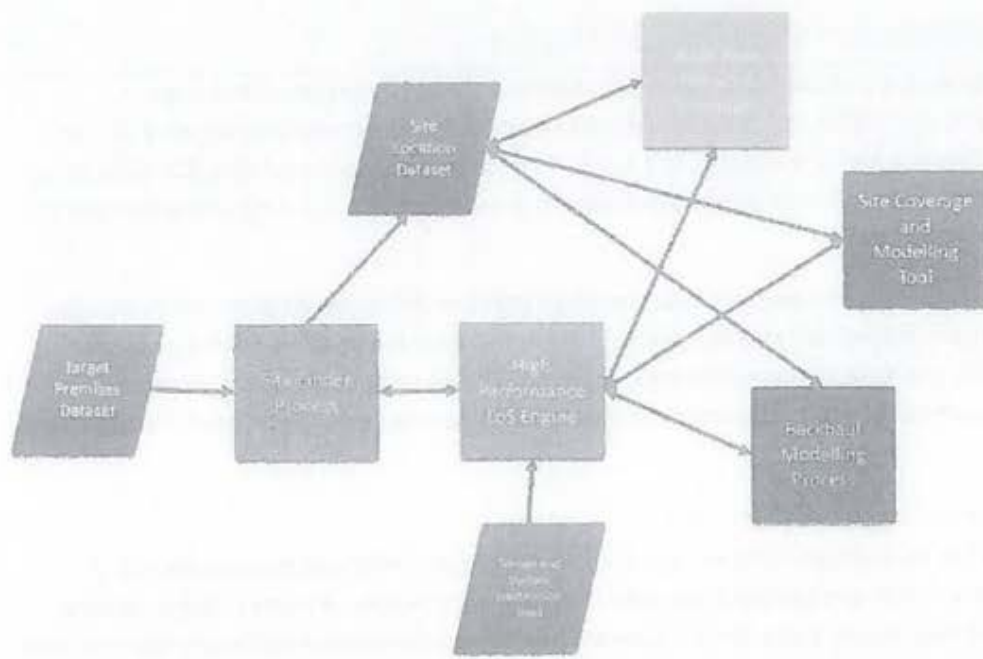


FIGURE 1 WISDM SCHEMATIC SYSTEM OVERVIEW

Wirelesscoverage.com WISDM LoS Engine

The WISDM LoS Engine is a custom-built high performance wireless propagation calculator developed in Native C and CUDA. It is a multi-threaded application, currently running on a server farm at Wireless Coverage and is accessed via a C API. This currently operates with 5,000 GPU cores to achieve around 500 million line of sight transactions per second when creating viewsheds but can be scaled further as required.

The LoS Engine has forward and reverse lookup features that are optimised to illustrate coverage from a single point, or supply from multiple points. These features are so fast that they can be operated in real time and take into consideration precision line of sight calculations as well as frequency, loss (according to ITU recommendations) and 3d antenna patterns for both transmitter and receiver.

Line of Sight Engine Technical Overview

Specific variants of the Line of Sight Engine exist for Forward (Viewshed) and Reverse (Best AP) coverage over large areas at any sample resolution. Below is an example of point to point request, but this is replicated over larger areas for the Forward and Reverse viewshed methods, where a map grid is also specified. The application uses the following parameters as input to each request via an API: -

- Site A Lat/Lon
- Site A transmitter height above ground in metres
- Site A transmitter power dBm
- Site A transmitter antenna gain in dBi
- Transmit frequency in MHz
- Scanning resolution in metres
- Site B Lat/Lon
- Site B receiver height above ground in metres
- Site B receiver antenna gain in dBi
- Percentage of first Fresnel required for partial line of sight in %
- Percentage of first Fresnel required for no line of sight in %
- Antenna Model (used for beam pattern)

The response for each request includes the following: -

- Link distance in metres
- Pass Status (Full Line of Sight, Partial Line of Sight or No Line of Sight)
- Predicted Receive Signal Strength (RSL) in dBm, assuming full Line of Sight
- Azimuth from Site A in degrees from true North
- Azimuth from Site B in degrees from true North
- Elevation from Site A in degrees
- Elevation from Site B in degrees
- Antenna Model (used for beam pattern)
- Optional link ground profile .PNG image file, illustrating the link profile and first Fresnel shape

Point A name: Point A
 Point B name: Point B
 Coordinates of A: 53.673302°, -2.664143°
 Coordinates of B: 53.645783°, -2.573456°
 Height of A: 20 m
 Height of B: 10 m
 Power: 20 dBm
 Antenna gain of A: 13 dBi
 Antenna gain of B: 23 dBi
 RF frequency: 5825 MHz

Estimated RSSI: **-69.37 dBm**

Azimuth from A: **117.05°**

Azimuth from B: **297.05°**

Elevation from A: **1.38°**

Elevation from B: **-1.38°**

Link distance: **6734.22 m**

FIGURE 2 SAMPLE LOS ENGINE INPUT AND OUTPUT

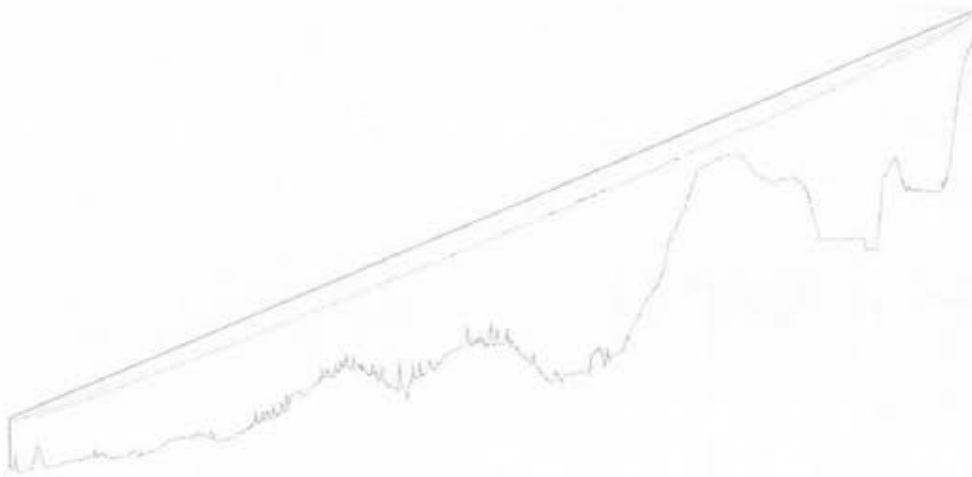


FIGURE 3 SAMPLE LOS GROUND PROFILE IMAGE

Mathematical and Technical LoS Model

A DSM elevation raster (of chosen resolution) of the target area is loaded into memory (~11GB GeoTIFF file equates to around 6,500 sq miles, imported with GDAL C library) into a flat array of 32-bit floats in a geodetic WGS84 latitude / longitude grid. This stays loaded in memory for every call of the function. A function exists to return the height in metres above sea level for any given latitude + longitude using bilinear interpolation in the grid. This allows for very fast indexed surface elevation lookups for any point in target area with high resolution.

64-bit integers are used for indexing coordinates and x87 80-bit floating-point numbers are used in coordinate calculations.

2 functions exist, `geodetic_to_ecef` and `ecef_to_geodetic` for converting between ellipsoidal WGS84 coordinates and cartesian ECEF coordinates.

`geodetic_to_ecef` is an implementation of Section 10.2.1 from B. Hofmann-Wellenhof, H. Lichtenegger, J. Collins' GPS - theory and practice as follows:

$$N(\phi) = \frac{a^2}{\sqrt{a^2 \cos^2 \phi + b^2 \sin^2 \phi}}$$

$$X = (N(\phi) + h) \cos \phi \cos \lambda$$

$$Y = (N(\phi) + h) \cos \phi \sin \lambda$$

$$Z = \left(\frac{b^2}{a^2} N(\phi) + h \right) \sin \phi$$

where h is height in metres; ϕ is latitude; λ is longitude; a is the Earth's equatorial radius in metres; b is the Earth's polar radius in metres; (X, Y, Z) is the cartesian ECEF coordinate.

`ecef_to_geodetic` is an implementation of J. Zhu's "Exact conversion of earth-centred, earth-fixed coordinates to geodetic coordinates" formula as follows:

$$r = \sqrt{X^2 + Y^2}$$

$$E^2 = a^2 - b^2$$

$$F = 54b^2 Z^2$$

$$G = r^2 + (1 - e^2)Z^2 - e^2 E^2$$

$$C = \frac{e^4 F r^2}{G^3}$$

$$S = \sqrt[3]{1 + C + \sqrt{C^2 + 2C}}$$

$$P = \frac{F}{3\left(S + \frac{1}{S} + 1\right)^2 G^2}$$

$$Q = \sqrt{1 + 2e^4 P}$$

$$r_0 = \frac{-(Pe^2 r)}{1 + Q} + \sqrt{\frac{1}{2}a^2(1 + 1/Q) - \frac{P(1 - e^2)Z^2}{Q(1 + Q)} - \frac{1}{2}Pr^2}$$

$$U = \sqrt{(r - e^2 r_0)^2 + Z^2}$$

$$V = \sqrt{(r - e^2 r_0)^2 + (1 - e^2)Z^2}$$

$$Z_0 = \frac{b^2 Z}{aV}$$

$$h = U \left(1 - \frac{b^2}{aV}\right)$$

$$\phi = \arctan\left(\frac{Z + e^2 Z_0}{r}\right)$$

$$\lambda = \arctan2(Y, X)$$

where (X, Y, Z) is the cartesian ECEF coordinate; h is height in metres; ϕ is latitude; λ is longitude; a is the Earth's equatorial radius in metres; b is the Earth's polar radius in metres; e is the Earth's first orbital eccentricity; e' is the Earth's second orbital eccentricity.

The 3D cartesian coordinates of each radio is found by sampling the ground elevation of the two points and adding on the mast heights, and then using `geodetic_to_ecef`. The accurate straight-line distance between the two radios can be found by using $\sqrt{dx^2 + dy^2 + dz^2}$.

The straight line between each (x, y, z) position is divided into linear interval points at the desired scan resolution. These points are then converted back into (latitude, longitude, height) WGS84 coordinates using `ecef_to_geodetic`.

The surface elevation at each of these WGS84 points is sampled and the resulting coordinates + height are converted back into ECEF coordinates.

The resulting 3D ECEF coordinates should mostly be in a flat plane and represent the elevation profile of the terrain under the line between the two radios, including the curvature of the Earth.

These coordinates are transformed into flat 2D coordinates by rotating them through 3 axes using transformation matrices. Once they are rotated to a flat plane against the axes, the resulting Z coordinate will be approximately zero and is discarded to produce 2D coordinates.

A 2D straight line is plotted between the two radio coordinates and perpendicular to this line, points are calculated and plotted for the first Fresnel zone and given threshold percentages within the Fresnel zone. The radius r in metres of the first fresnel zone is calculated using:

$$r = \sqrt{\frac{cd(t-d)}{1000000ft}}$$

where c is the speed of light in ms^{-1} ; d is the distance along the line in metres; t is the total distance between the two radios; f is the frequency in megahertz.

Intersection with the surface profile polygon and the plotted Fresnel threshold points is tested using binary search + linear interpolation.

The basic RSL s in decibels is calculated using:

$$l = 92.5 + 20 \log_{10} \left(\frac{d}{1000} \right) + 20 \log_{10} \left(\frac{f}{1000} \right)$$

$$s = p + g_1 + g_2 - l - t$$

where l is the free-space path loss in decibels; d is the distance in metres; f is the frequency in megahertz; p is the power of the transmitter; g_1 and g_2 are the antenna gains of each antenna; t is the transmission line loss, assumed to be 1 decibel. Further ITU-R attenuation models are applied for appropriate bands, but not described in this document.

Appendix 1: Future Deployment Information

Due to the lack of notice, timing of the consultation period in peak holiday season, short initial consultation period and short extensions to the consultation period we have had insufficient time to present our exciting future plans for expanding our network. We will continue to grow our network and invest in new technologies in the same manner as we have done in the past. It is profoundly regrettable that the DCCAE NBP Team wilfully disregarded the best practices document on public consultations that another government department DPER had gone to the trouble of issuing on the topic of running a public consultation. Specifically, DCCAE's NBP Team ignored the guidelines around giving more time for a consultation period so that smaller businesses would be given a fair opportunity to respond given the inherent constraints on resources that small business have. A copy of the DPER guidelines can be downloaded from the following url;

<https://www.gov.ie/en/publication/e9b052-consultation-principles-and-guidance/>

Appendix 2: Future Financial Information

The comments made in A2 are repeated here. More importantly, it is impossible for us and other similarly placed FWA operators to obtain the certainty of financing required by DCCAE's Assessment Criteria until DCCAE has accepted that we are providing NGA service and ruled our coverage area out of the currently proposed NBP Intervention Area. Therefore, because the DCCAE has placed this impossibly high bar in our way, we are blocked as a result from being able to comply with DCCAE's requirements for future plans and therefore any future plans we and other existing FWA operators have can be totally disregarded by DCCAE. We cannot and do not accept that the EU's State Aid Guidelines are intended to be applied in this way.

From: [REDACTED]
To: NBP Mapping
Cc: [REDACTED]
Subject: FW: RE: broadband [REDACTED]
Date: 29 August 2019 11:33:52

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Dear reader,

Would you be able to assist me with the following email communication?

Kind Regards,
[REDACTED]

PS: to ALL cc'ed you are added for visibility.

From: Broadband
Sent: 29 August 2019 11:18
To: [REDACTED]
Subject: RE: RE: broadband [REDACTED]

Hi [REDACTED]

As advised in my previous email I would suggest looking [REDACTED] on our website and then emailing all relevant information regarding your low speed connection to nbpmapping@dccae.gov.ie

Regards
[REDACTED]

From: [REDACTED]
Sent: 28 August 2019 15:10
To: Broadband
Subject: Re: RE: broadband [REDACTED]

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Dear [REDACTED]

Thank you for your reply.

Right now i have a 4g internet because I do now want to pay 60,-/m for an *ADSL* connection in where ill only get a max of 8Mbps in the middle of [REDACTED]

The thing is everywhere around our building there is high speed internet.

But when the apartment block was build the building company was unable to finish the apartment and a new company took over the building an finished the construction.

By doing so they did not include the internet connection. witch means we are still stuck on ADSL from 1990.

What would i need to do in order to get us connected to 2019?

Looking forward to your reply.

Kind Regards,
[REDACTED]

From: Broadband <Broadband@DCCAE.gov.ie>
Sent: 28 August 2019 14:56

To: [REDACTED]

Subject: RE:

Dear [REDACTED]

Thank you for your email regarding broadband connection to your premises.

According to the Department's High Speed Broadband Map, available at www.broadband.gov.ie, your premises is in a BLUE area.

BLUE areas are parts of the country where commercial operators are already providing high speed broadband or have indicated future plans to do so. The Department defines high speed broadband as a connection with minimum speeds of 30Mbps download and 6Mbps upload. Please note that the installation of telecommunications infrastructure and delivery of services via same is undertaken by private companies operating on a commercial basis in a liberalised market. The Department has no input in the planning of commercial operators and does not have access to their specific deployment plans.

The Department is currently engaged in a Consultation Process where consumers of broadband services that reside in areas marked as BLUE are being requested to submit information on the broadband service they are receiving. You have mentioned that the speed of your broadband connection is less than the minimum of 30Mbps. Please see the [Consultation page](#) on our website for further information. Please forward details of any correspondence with service providers where you requested a broadband service, the eircode of your premises and any other relevant information to the email address referenced on the Consultation page which is nbpmapping@dcca.gov.ie.

Kind Regards

[REDACTED]
National Broadband Plan

Roinn Cumarsáide, Gníomhaíthe ar son na hAeráide & Comhshaoil

Department of Communications, Climate Action & Environment

29-31 Bóthar Adelaide, Baile Átha Cliath, D02 X285

29-31 Adelaide Road, Dublin 2, D02 X285

[REDACTED]
From: [REDACTED]

Sent: 27 August 2019 20:48

To: Broadband

Cc: [REDACTED]

Subject:

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Dear reader,

Could you please assist me with resolving the internet problem on this apartment block?

[REDACTED]
The current internet speeds at 3 Mbps at best and this is not on a line but on a 4g sim cart. There is not way ill be able to ever work from home with these speeds as a desktop connection needs to be set up

The minimum requirements for effective video calls is 8 Mbps download / 1.5 Mbps upload.

I have been in contact with the building owner and a ISP (Virgin Media)

I have now been talking to them for around 3 months and they are unable to assist me.

And I'm getting the following reply from Virgin media.

[REDACTED]
Our network does not connect to the apartment block, it will require civil works.

Regards
[REDACTED]

The letting agency also send the following statement as a pain point to move forward.

'Also have to be aware of agreements with other providers within the building''

Hoping you can help or assist me!

Kind Regards,

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Deimhnítear leis seo freisin

nár aims odh víreas sa phost seo tar éis a scanadh.

From: [REDACTED]
To: NRP Mapping
Subject: No high-speed service at Blue area
Date: 28 August 2019 16:13:11

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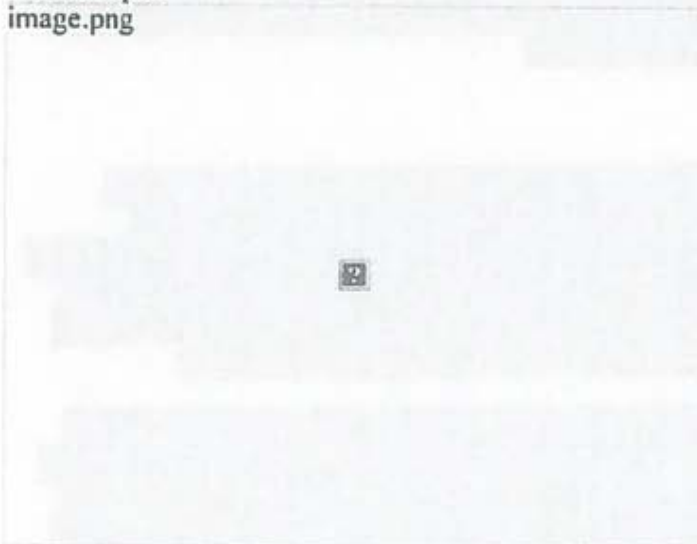
Hi there,

I was told i should send this information:

I live at [REDACTED]
[REDACTED]

I've contacted pretty much all providers, and none was able to provide High-speed service.

For example:
image.png



I don't know if this will be helpful in any sense, but I would like at least to be updated on any information regarding this situation.

Please let me know if I can be of further assistance. Kind regards,

[REDACTED]

From: [REDACTED]
To: NBP Mapping
Subject: Fibre connection
Date: 16 September 2019 14:08:13

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Why why why can't I get a answer or the opportunity to state my case regarding fibre connection to my house.... my address is [REDACTED] pole number [REDACTED] is where eir stopped with the cable.... I've had a phone line to my house for the last 14 years and every year was promised by eircom that they would upgrade the cable and finally when they did they chose not to include my house.... my house is 160 meters from the pole.... all the pipe work is already in the ground as my phone line is in this pipe.... I've sent so many emails to 'fibrepower@opereir.ie' and have never received any contact from them.... somebody somewhere had to make a decision to stop at the pole at which they did.... all I want to know is why'????.... the eir crew said they couldn't understand why as did the K&n contractor.... I've been paying for a phone line to my house for over 14 years and to think someone thought that my house wasn't worth coming another 160 meters is insulting.... if there were digging works etc costs etc to get my connected then I'd take my beating but there are NO costs as all the necessary work is already in place.... regards [REDACTED]

[REDACTED]

[REDACTED]

From: [REDACTED]
To: NRP Mapping
Subject: National broadband network
Date: 17 August 2019 11:51:40

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Hello,

Just a quick mail to say that for years we have been connected to three mobile broadband as no landline broadband is available in our area. Our postcode is [REDACTED].

As far as i am aware, none of our neighbours have land based broadband.

Kind Regards

[REDACTED]