



ULTRA-FAST BROADBAND, RURAL BROADBAND INITIATIVE PHASE TWO AND MOBILE BLACK SPOT FUND – Q&A

Ultra-Fast Broadband (UFB)

1. What is UFB?

Ultra-Fast Broadband (UFB) uses fibre optic cables to deliver broadband to households and businesses. It is most suitable and cost effective in urban areas with higher dwelling and business densities. UFB users can access speeds of close to 1,000 Megabits per second, which is equivalent to the bandwidth needed to simultaneously stream 40 different ultra-high definition videos and business customers can access speeds close to 10,000 Megabits per second.

2. How many New Zealanders already have access to UFB?

Almost 1.2 million New Zealand households and businesses already have access to UFB, under phase one of the UFB programme. The number of households, business, schools and hospitals connected to UFB is over 400,000, and overall uptake is 35 per cent.

3. How many and which new areas will receive UFB?

Around 190 new towns will receive UFB under this second extension to the UFB programme.

In total, under the full UFB programme, around 390 cities and towns will receive UFB by the end of 2022.

Once the full UFB programme is complete by the end of 2022, 87 per cent of New Zealanders will have access to fibre-to-the-premises.

4. How were these areas chosen?

These areas were chosen according to their dwelling and business density characteristics, which mean they represent good value-for-money for investment in UFB. Their final selection was the result of commercial negotiations with private network deployment companies.

For areas that have lower dwelling and business density, UFB is not the most economic proposition for broadband. Other technologies such as wireless upgrades can be more cost effective, while still delivering fast broadband access.

5. What areas will have their UFB build date brought forward?

The following areas will have their UFB completion date brought forward to enable nationwide completion of UFB deployment by the end of 2022 (instead of 2024):

Region	Area
Northland	Taipa Bay-Mangonui
Auckland	Auckland Fringe
	Matakana
	Omaha
	Piha
	Waiheke Fringe

Region	Area
Waikato	Taupo Fringe
	Taupo Airport
	Turangi
	Tairua
	Whangamata
	Piopio
Bay of Plenty	Rotorua Fringe
	Edgecumbe
Gisborne	N/A (all areas already scheduled for completion of UFB deployment by the end of 2022)
Taranaki	N/A (all areas already scheduled for completion of UFB deployment by the end of 2022)
Hawke's Bay	Otane
	Napier – Hastings Fringe
Manawatu-Whanganui	Shannon
	Bulls
	Ohakune
	Raetihi
	Pahiatua
	Woodville
Wellington	Kapiti Fringe
	Upper Hutt Fringe
	Wellington Fringe
Marlborough	N/A (all areas already scheduled for completion of UFB deployment by the end of 2022)
Nelson	Nelson Fringe
Tasman	Murchison
West Coast	N/A (all areas already scheduled for completion of UFB deployment by the end of 2022)
Canterbury	Diamond Harbour
	Cheviot
	Culverden
	Kaikoura
	Lake Tekapo
	Twizel Community
	Geraldine
	Pleasant Point
	Oxford
	Waimate
Otago	Clyde
	Roxburgh
	Dunedin Fringe
	Outram
	Waikouaiti
	Queenstown Fringe
Southland	Bluff

The timing and order of the UFB rollout for areas that are having their build completion brought forward is based on workflow scheduling by Chorus. The full rollout timetable for UFB will be available on Crown Fibre Holdings' website (www.crownfibre.govt.nz) once advised by UFB deployment partners in the coming months.

6. Once the full UFB build is complete, what percentage of the New Zealand population will have access to fibre?

Once the full UFB programme is complete by the end of 2022, 87 per cent of New Zealanders will have access to fibre-to-the-premises.

Almost 60 per cent of the population (almost 1.2 million households and businesses) already have access to UFB.

7. How many premises in each region will have access to UFB once the full build is complete?

Region	UFB phases 1&2 premises	UFB phase 2+ premises	Total premises with UFB
Northland	39,558	5,547	45,105
Auckland	388,313	3,661	391,974
Waikato	134,253	14,668	148,921
Bay of Plenty	91,686	2,544	94,230
Gisborne	12,731	288	13,019
Taranaki	35,908	989	36,897
Hawke's Bay	47,447	1,597	49,044
Manawatu-Wanganui	75,928	4,634	80,562
Wellington	160,449	758	161,207
Nelson	23,784	3	23,787
Marlborough	14,919	678	15,597
Tasman	6,223	1,762	7,985
West Coast	8,565	2,678	11,243
Canterbury	192,115	8,699	200,814
Otago	73,491	7,380	80,871
Southland	26,638	4,336	30,974
<i>Greenfields (To be built)</i>	42,099	-	42,099
Total across regions	1,374,107	60,222	1,434,329

8. Why do some regions have a higher proportion of UFB coverage than others?

Some regions such as Auckland, Wellington and Nelson have a higher proportion of population in large urban centres compared to more rural regions that have a dispersed population such as

Northland. UFB is most suitable and cost effective in urban areas with higher dwelling and business densities.

9. How much is the Government investing in each region under the UFB programme?

Region	UFB phase 1 investment	UFB phase 2 investment	UFB phase 2+ investment	Total UFB investment
Northland	\$26.3m	\$33.8m	\$11.1m	\$71.2m
Auckland	\$423.8m	\$24.2m	\$7.3m	\$455.3m
Waikato	\$102.1m	\$67.9m	\$29.3m	\$199.3m
Bay of Plenty	\$88.6m	\$17.0m	\$5.1m	\$110.7m
Gisborne/Hawke's Bay	\$59.6m	\$11.5m	\$3.8m	\$74.9m
Taranaki	\$27.7m	\$3.9m	\$2.0m	\$33.6m
Manawatu-Wanganui	\$63.4m	\$31.7m	\$9.3m	\$104.4m
Wellington	\$172.2m	\$14.5m	\$1.5m	\$188.2m
Nelson/Marlborough	\$37.5m	\$6.6m	\$1.4m	\$45.5m
Canterbury	\$183.0m	\$33.5m	\$16.8m	\$233.3m
West Coast / Tasman	\$3.9m	\$19.1m	\$8.9m	\$31.9m
Otago/Southland	\$85.6m	\$43.4m	\$23.4m	\$152.4m
<i>Greenfields (To be built)</i>	\$40.8m	-	-	\$40.8m
Total across regions	\$1,314.5m	\$307.0m	\$119.9m	\$1,741.4m

* Totals may not add up due to rounding.

10. How did the procurement process for further expanding the UFB programme align with the Rural Broadband Initiative (RBI) phase two / Mobile Black Spot Fund (MBSF) tender?

Negotiations for each programme were run in parallel, recognising that the programmes need to complement each other to address gaps in the availability of fast broadband.

The scope of the UFB, RBI and MBSF programmes differ. UFB targets urban areas to improve broadband infrastructure. RBI and MBSF focus on rural areas outside of urban centres where UFB will be available.

11. How can I find out if my area is getting UFB?

Visit Crown Fibre Holding's website (www.crownfibre.govt.nz) for the full list of areas that already have UFB, and areas that will be getting UFB. Timing for this second UFB expansion has not yet been confirmed.

The [National Broadband Map](#), which provides more detailed information about what internet services are available at a specific location, will be updated shortly with the new areas where UFB will be deployed.

12. When will this new UFB build start?

The timing and order of the UFB rollout is based on workflow scheduling by fibre companies. An indicative rollout timetable is available at www.crownfibre.govt.nz. The timetable for the new UFB build announced today will be available in the coming months.

We're aiming for nationwide completion of UFB deployment by the end of 2022.

UFB deployment has already been underway for several years, and almost 1.2 million households and businesses are able to connect to UFB under phase one of the UFB programme.

13. Will there be any installation cost for people wanting to connect to UFB?

Wholesale installation charges will be free for residential customers located within 200 metres from a public road.

Free installation is available until the end of 2019 for residential customers located within 200 metres from a public road in areas that had UFB deployed under phase one of the UFB programme, and until the end of 2025 for residential customers in areas that had UFB deployed under the extension to the UFB programme.

The future application of these wholesale installation charging arrangements (for the period following the completion of the UFB programmes) will be considered as part of the implementation of the new Telecommunications Regulatory Framework. An Amendment Bill specifying this new framework is currently before Parliament.

14. Who is building the UFB network?

Partner fibre companies will engage various contractors through the country to build the UFB network to the contractual specifications.

15. Why is my town being built so late – can I get UFB earlier?

The timing and order of the rollout is based on workflow scheduling by the Government's partner fibre companies. It is in part based on the availability of contractors, as well as the need to build new network contiguously wherever possible. It is inevitable that some towns will come before others in such a large scale nationwide infrastructure deployment programme.

16. What times can customers be expected to wait to be connected to UFB?

Service level agreements are in place with each partner fibre company which govern timely customer provisioning. Service levels differ between the parties.

The Telecommunications (Property Access and Other Matters) Amendment Act, which came into effect in June 2017, introduced a new, simplified consenting regime that has made it quicker and easier for people living down shared driveways or in apartment complexes to connect to UFB.

People living on shared property who might previously have had problems connecting to UFB due to consent issues are encouraged to contact their retail service provider to enquire about placing a new order to connect.

17. Are UFB services the same across all phases of the programme and across all locations – e.g. UFB1 vs UFB2; rural versus urban centres?

Yes the UFB product specification is the same, however your UFB service performance may vary depending on which Retail Service Provider and product you select as UFB is a wholesale service.

18. What is the consenting process for installing UFB?

The Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations (NESTF), which came into effect on 1 January 2017, supports the installation of low impact infrastructure, such as UFB, by telecommunications companies.

The NESTF provides greater national consistency under the Resource Management Act, and removes the requirement for resource consents for deploying equipment such as cabinets, poles, aerials, and telecommunications lines, provided key standards are met. This saves time and money

for both telecommunications companies and local councils, while ensuring any effects on the environment are minimised and managed appropriately.

Alongside this, the Telecommunications (Property Access and Other Matters) Amendment Act, which came into effect in June 2017, introduced a new, simplified process that telecommunications companies must follow when installing modern networks like UFB on private land with multiple owners. The regime establishes two new categories for installation methods depending on the impact each method has on the property that neighbours share.

Further information is available [here](#).

19. Where does New Zealand sit internationally in terms of access to fibre? Is the increased investment going to take us any further?

New Zealand is already starting to stand-out on the world stage in terms of access to connectivity, which is continuing to improve year-on-year. We have advanced in OECD country rankings from 14th in 2015 to 11th in 2016 for percentage of population covered by fibre, and once the UFB programme is complete New Zealand should be well into the top five in the OECD for the proportion of the population with access to fibre.

20. What is the Government doing to ensure that New Zealanders are making the most of this improved connectivity?

In March the Government released the *Building a Digital Nation* action plan, which sets out how the Government is partnering with New Zealand's digital sector, with other sectors of the economy and the wider digital community, to enable New Zealand to become a leading digital nation.

It outlines a range of actions focused on four key areas: continuing to grow the thriving digital sector, growing more technology-enabled businesses, creating more connected and confident digital New Zealanders and accelerating digital government.

21. Where is the additional funding for the UFB extension coming from?

The additional funding will be made available primarily from returns from the Crown's investment in the UFB programme, which include repayments from fibre companies over time from debt and equity securities in the fibre companies held by Crown Fibre Holdings. Funds are provided from the early exit of Ultrafast Fibre in 2016, some repayments as customers connect from Northpower and the vast majority are from repayments of Crown Fibre Holdings debt and equity securities held with fibre companies.

The returned funds are evidence of the success of the Government's UFB programme to date. We've taken the opportunity to use these returned funds to deliver even better connectivity to as many New Zealanders as possible.

Rural Broadband Initiative phase two (RBI2) & Mobile Black Spot Fund (MBSF)

22. Where does this announcement stem from?

The announcement follows the completion of negotiations by Crown Fibre Holdings, which last year released a \$150 million tender for the second phase of the Rural Broadband Initiative (RBI2) and the Mobile Black Spot Fund (MBSF).

23. What is RBI and MBSF?

RBI is a set of infrastructure deployment programmes designed to address the broadband needs of rural New Zealand. UFB is generally not an economic solution for rural communities.

MBSF was set up to improve the availability of mobile services to support safety on state highways and enhance visitor experience at key tourist destinations, which do not currently have coverage from any mobile operator.

24. What did the first phase of RBI achieve?

The Government-funded component for phase one of RBI was completed in 2016, providing over 300,000 rural homes and businesses with access to improved broadband. It also ensured that all but 49 of our most remote schools could access a fibre connection, providing the same level of service as UFB.

A wrap-up report (including information about the upgrades that have been completed in each region) is available [here](#).

25. What percentage of mobile coverage does New Zealand currently have?

Mobile coverage currently covers areas where over 95 per cent of New Zealanders live and work. However, our geographic coverage is currently sitting at around 50 per cent.

Mobile and broadband coverage in New Zealand is provided by private network operators. New Zealand's three mobile network operators each publish an online coverage map, showing where you can expect to receive mobile coverage on their networks.

26. What were the objectives of the second phase of RBI and MBSF?

The second phase of RBI seeks to provide fast broadband to the greatest number of under-served rural homes and businesses within the funding available, and contribute towards achieving similar rates of access to fast broadband by rural end users across all regions of New Zealand.

MBSF will improve the availability of mobile services to support safety on state highways and enhance visitor experience at key tourist destinations, which do not currently have coverage from any mobile operator.

27. Why was the tender for the second phase of RBI combined with MBSF?

A single Request for Proposals was released for both the second phase of RBI and MBSF to maximise the opportunity for synergies between the programmes. Providers were able to bid for either or both programmes.

28. How is RBI and MBSF being funded?

Most of the funding (\$180 million) for RBI2 and the Mobile Black Spot Fund is funded via the Telecommunications Development Levy (TDL) collected from telecommunications service providers. The TDL subsidises telecommunications capabilities in the public interest which are otherwise not expected to be available commercially, or are unaffordable.

Up to \$110 million in additional funding for RBI2 and MBSF is funded from Crown Fibre Holdings capital, i.e. returned funds to Crown Fibre Holdings from UFB investments. The Crown's investment in UFB is paid back by the Government's UFB deployment partners. Under the first phase of the UFB programme the return of investment funding is occurring sooner than planned, mainly as a result of the early exit of Ultrafast Fibre in 2016.

29. How will it work?

Crown Fibre Holdings has entered into contracts with the Rural Connectivity Group (Spark, Vodafone and 2degrees) and with a number of Wireless Internet Service Providers to deliver the programmes.

The contracts provide for:

- improved rural broadband to be extended to more than 70,000 rural households and businesses (including commercial expansion by some of the Mobile Network Operators);
- new mobile coverage for around 1,000 kilometres of state highways and more than 100 tourist destinations;
- lifting nationwide geographic mobile coverage by 20-30 per cent (from approximately 50 per cent currently); and
- open access to Government-funded infrastructure (such as towers), meaning that other operators can share that infrastructure under defined terms (there are some exemptions from these obligations by regional operators).

30. What kind of technology does RBI and MBSF use?

The first phase of RBI was delivered through a combination of fixed line upgrades and new fixed wireless coverage – which has also allowed new mobile coverage to be delivered in rural areas.

For the second phase of RBI, the Government did not specify a specific technology type. Regional operators were encouraged to participate in the tender process with innovative solutions.

Solutions include wireless point-to-point radio links and 4G-based cellular radio technology.

31. Why can't everybody just have UFB?

UFB uses fibre optic cables to deliver broadband to the premises, and is most suitable and cost effective in urban areas with higher dwelling and business densities. Because UFB is not economic for every rural community, RBI is providing faster internet to homes and businesses outside UFB areas.

32. Which new areas will receive coverage under the second phase of RBI and MBSF?

The second phase of RBI will extend improved broadband to more than 70,000 rural households and businesses (including commercial expansion by some of the Mobile Network Operators).

Under MBSF, around 1,000 kilometres of state highways and more than 100 tourist areas will receive new mobile coverage.

The exact locations of New Zealanders who will receive improved coverage cannot be determined with precision at the current point in time, as the new coverage will be delivered using wireless technology.

Site-by-site performance may vary, and final coverage is also dependent on where sites can be secured which may face land owner, access, consent and geotechnical challenges that cannot be known in detail at the planning stage.

The focus is to ensure the overall country-wide objectives for RBI and MBSF are achieved.

Refer to Crown Fibre Holdings website (www.crownfibre.govt.nz) for an indicative list of state highways covered in each region, and a map showing state highways and tourist destinations covered under MBSF.

33. How were these areas chosen?

For identification of areas to be in scope for RBI2, Crown Fibre Holdings obtained coverage/service data from the major telecommunications operators and some regional operators. Crown Fibre Holdings undertook geospatial analysis to determine the approximate location and number of users across the country who could only access relatively low broadband speeds.

The Government decided that all rural users who could not access a terrestrial broadband connection of at least 20 Megabits per second now, or after planned market upgrades, would be in scope for the second phase of RBI. In the Request for Proposals, Crown Fibre Holdings asked respondents to propose covering groups of rural users based on their market knowledge and existing infrastructure. Crown Fibre Holdings has used this information to assist in analysing all of the bids received, and to identify which areas are most feasible to cover given the funding limit – this was the result of commercial negotiations.

Tourist areas were identified by the Government and state highway mobile black spots were identified using mobile coverage information from the mobile operators.

34. How many end users in each region will have coverage under RBI2 once the build is complete?

Region	RBI2 end users covered*
Northland	7,441
Auckland	5,223
Waikato	9,281
Bay of Plenty	5,041
Gisborne	1,982
Taranaki	2,053
Hawke's Bay	4,089
Manawatu-Wanganui	10,300
Wellington	3,742
Nelson	153
Marlborough	1,669
Tasman	1,798
West Coast	2,089
Canterbury and Chatham Islands	9,727
Otago	4,418
Southland	5,287
Total across regions	74,293

Note: RBI2 end users are households and businesses

* includes coverage provided by Mobile Network Operators without Government funding

35. Why do some regions have a higher number of end users receiving improved broadband than others?

The number of end users that will receive improved broadband in a region is determined on the basis of the total number of under-served end users in the region.

Prior to the RBI2/MBSF tender process, Crown Fibre Holdings obtained coverage/service data from the major operators and regional operators. Crown Fibre Holdings undertook geospatial analysis to determine the approximate location and number of users across the country who could only access relatively low broadband speeds.

For example, if a region already has high level of coverage under UFB, the first phase of RBI and by commercial networks, then a lower proportion of its households and businesses were in scope for RBI2 coverage.

The partners have also had their own considerations in determining which areas to bid for under the programme, including how their existing infrastructure could make it easier to provide coverage in a new area.

36. Why can't you be more specific about the areas that will receive coverage under RBI2?

Developing coverage solutions for wireless-based RBI involves more variables than UFB. This means that site-by-site radio performance may vary, making it difficult to be certain at the planning stage about specific locations. The focus is to ensure the overall country-wide objectives for RBI2 and MBSF are achieved.

Final coverage is dependent on where sites can be secured including land owner, access, consent, geographical and geotechnical challenges that cannot be known in detail at the planning stage.

Customers in the areas receiving RBI2 coverage will be advised when the build completes in their areas.

37. Can you provide a regional breakdown of investment under RBI2?

The nature of the RBI wireless-based services do not lend themselves to alignment with district and regional boundaries, as the new infrastructure will span these boundaries in most cases making it difficult to attribute investment per district or region.

The focus is to ensure the overall country-wide objectives for RBI2 and MBSF are achieved within the funding available.

38. What was the process and criteria for evaluating proposals for RBI2 / MBSF?

The Request for Proposals set out the criteria by which Crown Fibre Holdings evaluated proposals, including price, capability and services.

For the second phase of RBI the cost to cover a rural user, and the type of service offered, were of particular interest.

39. Who are the partners that will be delivering the RBI2 / MBSF programmes?

The Rural Connectivity Group (a joint venture comprised on 2degrees, Spark and Vodafone) has received a contract for \$250 million. In addition, there is commercial funded expansion by some of the mobile network operators to provide coverage themselves, with no funding from Government.

Approximately \$8 million in funding has been allocated to regional Wireless Internet Service Providers:

- Gisborne.net (Gisborne and North Hawke's Bay)
- Inspire.net (Manawatu and Whanganui)
- AonNet (King Country, Manawatu and Whanganui)
- Primo Wireless (Taranaki)
- NZ Tech (Central Hawke's Bay)
- Wiz Wireless (Wairarapa, Wellington)
- AmuriNet (North Canterbury)
- Ultimate Broadband (Central/South Canterbury)
- Unifone (Otago).

40. What is happening with the Registration of Interest submissions and Digital Enablement Plans submitted by councils?

MBIE took the information in the Digital Enablement Plans and the Registrations of Interest into account for the policy development of the Government's broadband and mobile programmes. For example, we looked at coverage in areas councils had nominated for RBI2 and MBSF and considered this against other information, like the International Visitor Survey. We also undertook geospatial analysis and examined the needs of other communities that weren't already covered by council submissions.

41. What is happening with the council co-funding process?

In parallel to the RBI2/MBSF tender process, councils have been invited to contribute additional funding in order for their district to receive improved services over and above what their district may be provided under government funding for these programmes. Many councils have already contacted Crown Fibre Holdings and other councils are still welcome to make contact.

This process is ongoing. It was designed to occur after contracts (for the use of Government funding for RBI2 and the Mobile Black Spot Fund) had been negotiated. This ensures that any new coverage funded by councils will be additional to what that area is already receiving.

Through this process, councils are able to take advantage of Crown Fibre Holdings' contract negotiation and project managing services at no cost. The contracts already negotiated by Crown Fibre Holdings have the ability to be expanded to cover new areas with new funding, which the council co-funding process will take advantage of.

Crown Fibre Holdings has already met with nearly all the Councils across the country and will continue to liaise with them in due course.

42. What is the proposed timeline for the rollout of RBI2 and MBSF?

Deployment for RBI2 and MBSF will be completed by the end of 2022. The start date for deployment will be finalised shortly. The precise deployment schedule is determined by the network operators who have been contracted by Crown Fibre Holdings. A number of variables can influence when a site is completed, such as the need to secure land and undergo a consenting process. Additional challenges such as accessing power cannot be known in detail as the planning stage.

The focus is to ensure the overall country-wide objectives for RBI2 and MBSF are achieved, including that all deployment is completed by the end of 2022. Updates on deployment are expected to be provided through the Quarterly Broadband Update, which can be accessed [here](#).

43. How does RBI fit with the Government's UFB programme?

The scope of the UFB, RBI and MBSF programmes are different. UFB targets urban areas to improve existing broadband infrastructure. RBI and MBSF focus on rural areas that are not eligible for UFB.

There are areas where the programmes' scopes overlap to a small extent, for example when a rural user in scope for RBI phase two is situated close to a state highway or tourism area that is in scope for MBSF. Covering both the RBI phase two user and the MBSF location from one site, such as a tower, is efficient. The tender process for RBI phase two and MBSF was run together to be able to capture these synergies.

The different approaches of the initiatives reflect the differing population densities and terrain of these areas, and the different economic dynamics of providing telecommunications services to them.

44. What will New Zealand's level of mobile coverage be once MBSF is complete?

Mobile coverage currently covers areas where over 95 per cent of New Zealand's population live and work. However, our geographic coverage is currently sitting at around 50 per cent.

Deployment under the MBSF programme is expected to improve population mobile coverage from 95 per cent to 98 per cent and geographic mobile coverage by 20-30 per cent (from 50 per cent).

As all three established mobile operators – 2degrees, Spark and Vodafone – will be able to access the MBSF sites all mobile customers will be able to share in the benefits of this improved coverage, regardless of their chosen provider.