



Upgrade existing Optus telecommunications facility, Eagles Nest, Thredbo

Development Application Assessment
DA 22/11021

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Cover image: Main Range, Kosciuszko National Park (Source: Alpine Resorts Team)

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Glossary

Abbreviation	Definition
BCA	Building Code of Australia
BC Act	<i>Biodiversity Conservation Act 2016</i>
BC Regulation	<i>Biodiversity Conservation Regulation 2017</i>
BVM	Biodiversity Values Map
Consent	Development Consent
Department	Department of Planning, Housing and Infrastructure
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2021</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
KNP	Kosciuszko National Park
Minister	Minister for Planning and Public Spaces
NPWS	National Parks & Wildlife Service
Planning Secretary	Secretary of the Department of Planning, Housing and Infrastructure
SEPP	State Environmental Planning Policy

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1 Introduction

The application seeks approval to upgrade an existing Optus telecommunications facility located near the Eagles Nest Restaurant adjacent to the top of the Kosciuszko Express Chairlift Top Station, in the Thredbo Alpine Resort within Kosciuszko National Park (KNP). The proposed upgrade involves the replacement of the existing panel antennas and the installation of three new panel antennas to the existing 9.7-metre-tall monopole tower facility, which is located approximately two (2) kilometres to the northwest of the village of Thredbo – **Figure 1**.



Figure 1 | Location of the development site, northwest of Thredbo (Source: Six Maps)

The Applicant, Service Stream (on behalf of Optus Mobile Pty Ltd), comments that the proposal is being sought to enable the provision of 5G services to improve the Optus network coverage to the area surrounding the facility. Upgrading the facility is proposed to provide an enhanced experience for Optus customers in the alpine area surrounding Thredbo Village and to assist in providing sufficient network capacity to cope with surges in demand.

The Applicant anticipates that the proposal will not result in any adverse environmental impacts as the development relates to the upgrade of existing infrastructure.

1.1 The Site and Surrounding Development

The site is located at an elevation of approximately 1934 metres Australian Height Datum (AHD) on a rocky ridge within boulder outcrops in steep mountainous terrain. There is low, herbaceous alpine vegetation around the rocky outcrops. In winter the area is covered in snow and operates as part of the Thredbo ski resort. At other times of year, Thredbo is a hiking and mountain biking destination.

The works will be contained within Lot 863 DP 1128686, which is an irregular allotment with an area of approximately 3332 square metres in which the Eagles Nest restaurant is located within Thredbo Alpine Resort. The existing Optus tower is located around 20 metres to the north of the restaurant - **Figure 2**.



Figure 2 | Location of existing Optus tower (Source: Six Maps)

The development location can be accessed via the Kosciuszko Express Chairlift throughout the year, and by over-snow vehicles during winter or by authorised vehicles during summer via the track referred to as the Summer track or Kosciuszko Walk.

The existing Optus infrastructure at the development site comprises a 9.7 metre monopole on a 3.0 metre by 3.0 metre concrete footing, on which two (2) omnidirectional antennas, two (2) radiocommunication dishes, three (3) panel antennas and remote radio units are mounted. Electricity cabling from the monopole runs through flexible conduits at ground level to a communications room located within the building shared with the Eagles Nest restaurant.

Several other telecommunications facilities are located adjacent to the site on the same ridge line, including lattice towers, a satellite dish and other monopole structures, as indicated in **Figure 3**.

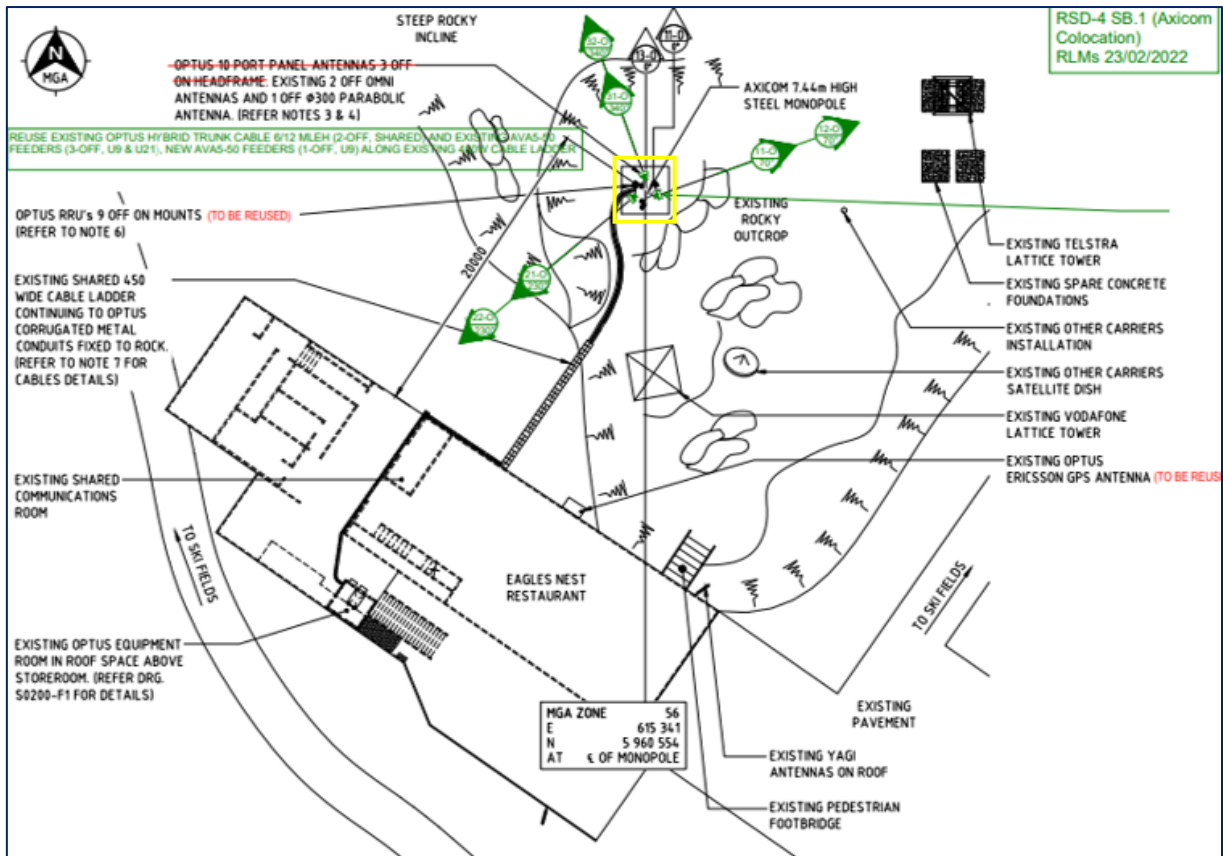


Figure 3 | Location of Optus tower and adjoining installations (Source: Applicant’s documentation)

1.2 Proposed Development

The proposed works include the following:

- Replacement of three (3) existing panel antennas at the top of the existing monopole. Each replacement antenna measures 1.5 metres in length;
- Installation of new base-station equipment within the existing equipment room in the restaurant complex; and
- Installation of new cabling and other ancillary items. The existing flexible insulated steel conduit will be used to run the cable feeders to the monopole.

Works on the existing monopole propose to utilise the existing climbable pole and will not require the use of plant such as an elevated work platform. Large componentry will need to be carried to and from the site (and removed and installed on the monopole) via helicopter.

The Applicant also advises that:

- No earthworks are proposed or required.
- The facility will continue to operate on a continuously uncrewed basis with only periodic visits required for maintenance purposes.
- No change to the supply of power and fibre to the existing Optus facility is required as part of the proposed upgrade.

- The maximum levels of electromagnetic energy from the proposed facility as a result of the upgrade remains within the ACMA EME regulatory thresholds.

The proposed works have an estimated cost of works of approximately \$176,400.

Supporting documents and information relevant to this assessment report can be found on the NSW Planning Portal website at:

<https://www.planningportal.nsw.gov.au/development-assessment/state-significant-applications/projects/state-development-applications>

1.3 Related Development Consents

Development Application (DA 9975) approved on 27 March 2020 for the removal of the previous Optus telecommunications monopole at the site, and the installation of a new 9.7 metre monopole on enlarged footings and associated infrastructure, as well as the reconfiguration of equipment within the existing communications room located in the adjoining Eagles Nest building.

Construction Certificate CC 20200168.0 issued on 27 May 2020 by Kingsley Lunt (BPB3339) of the Hendry Group Pty Ltd for the construction of the telecommunications tower.

Development Application 22/11021 lodged on 6 September 2022 seeking to replace existing equipment on the existing tower with new equipment and add additional panel antennas, together with new cabling and new base-station equipment. Application placed on hold until verification of the suitability of the existing tower for the updated and additional equipment was provided.

Occupation Certificate OC 240228/02 registered on 14 February 2025 by Kingsley Lunt for the tower and works, together with a range of engineers certification for the infrastructure.

Application to amend DA 22/11021 lodged on 30 May 2025, seeking variation in the length and specifications for the replacement of three existing panel antennas on the monopole, deletion of the additional three panel antennas, variation to the installation of new base-station equipment, extension of the service under a Multi-Operator Core Network (MOCN) agreement to share the upgraded facility with TPG Vodafone customers, and an increase in the maximum electromagnetic energy (EME) levels emitted from the facility.

2 Matters for Consideration

2.1 Strategic Context

South East and Tableland Regional Plan 2036

The South East and Tableland Regional Plan 2036 describes the vision, goals and actions that will deliver greater prosperity for those who live, work and visit the region. The plan provides an overarching framework to guide more detailed land use plans, development proposals and infrastructure funding decisions. In relation to the alpine resorts, the Regional Plan seeks to promote more diverse tourism opportunities in the Snowy Mountains that will strengthen long-term resilience while acknowledging the environmental and cultural significance of the locality.

The proposal is considered to be consistent with the Regional Plan as improving access to telecommunication services and coverage within the alpine area will enhance facilities for the benefit of Thredbo Alpine Resort visitors. Better phone and data services contribute to the safety and amenity of visitors to Thredbo, enabling a more positive experience of resort patrons and therefore helping support continued visitation to the NSW alpine resorts.

The impact on the alpine environment is minimised through utilising the existing an Optus monopole facility. Through the recent MOCN agreement (refer to **Section 1.3** of this report), by sharing an existing tower and bolstering services to transmit a fuller spectrum of frequencies, the proposed upgrade (as amended) will benefit a broader range of phone and internet providers (now for both Optus and TPG customers), thereby reducing the impact both on the natural environment and on the visual amenity of the locality by removing the necessity to build a new tower.

Snowy Mountains Special Activation Precinct Master Plan 2022

The Snowy Mountains Special Activation Precinct Master Plan outlines the 40-year vision for the Snowy Mountains as a year-round tourist destination with new business opportunities, services and community infrastructure for the people that live, work and visit the region. The proposal is consistent with Section 13.2 of the Master Plan as it facilitates the upgrading of a telecommunication service which enhances visitor experience and safety. This supports the maintenance of visitation to the Alpine Resorts and local economy as the works help improve and maintain facilities that sustain the Alpine Precinct as key destination for visitors.

Precincts - Regional SEPP

The Department considers the proposal is congruous with Chapter 4 of the Precincts - Regional SEPP where the development contributes to the services available in the Alpine Precinct, supporting regional tourism. The development will be carried out in a manner that is consistent with the principles of ecologically sustainable development, where works will be undertaken in a way that eliminates the need to undertake further ground disturbance. This supports the conservation of ecological processes, natural systems and biodiversity.

The intended works and activity will be subject to conditions to prevent adverse environmental, social or economic impacts on the natural or cultural environment, ensuring that KNP values are being protected and upheld. The potential impacts on the natural environment and cultural heritage have been mitigated through utilising the existing telecommunications monopole infrastructure, whereby the collocation of services also reduces the visual impact of the development within the locality.

Under the provisions of section 4.27 of the Precincts - Regional SEPP, the National Parks and Wildlife Service (NPWS) have a commenting role as the land manager, which includes administering the Plan of Management framework for KNP that incorporates objectives, principles and policies to guide the long-term management of the KNP. NPWS have made recommendations relating to the development, as discussed in **Section 3** of this report.

Draft South East and Tableland Regional Plan 2041

The draft plan identifies the alpine areas as providing important biodiversity to the region and acknowledges the contribution of visitation to the Snowy Mountains to the regional and state tourism economy.

The proposal is consistent with the draft Regional Plan as it will not result in adverse biodiversity impacts and supports visitor experience and the maintenance of visitation to KNP as a tourist destination, along with sustaining the local, regional and state economy.

Alpine Region Development Control Plan 2025

The DCP supports the statutory planning framework of the Alpine Region by outlining objectives and controls to guide development to achieve the aims and objectives of Chapter 4 of the Precincts-Regional SEPP. The DCP seeks to encourage high quality development to support safe and sustainable tourism and ensure opportunities are provided for visitors to undertake a wide range of recreational activities in KNP, while also managing visitation to minimise adverse environmental, social and cultural impacts.

The proposed development will be undertaken in a location where there is an existing tower and does not involve earthworks or disturbance to vegetation. Operation of the infrastructure will need to comply with Federal Government telecommunication facility management protocols that have been put in place to ensure that the service is operated in accordance with safe emission levels. Subject to controls, the development can be installed and operated in a way that is consistent with the planning, design, safety and environmental objectives and controls in the DCP.

2.2 Permissibility

The proposal involves upgrades to a telecommunication facility while maintaining the use of its site consistent with the definition of ‘telecommunication facility’ as defined in Chapter 4 of the Precincts - Regional SEPP. Pursuant to the Land Use Table referenced in section 4.7 of the Precincts - Regional SEPP, *telecommunication facilities* are permissible with consent within the Thredbo Alpine Resort.

2.3 Mandatory Matters for Consideration

Considerations under section 1.3 of the EP&A Act

Table 1 | Section 1.3 - Objects of the EP&A Act

Objects of the Act	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper	The works will improve existing telecommunication services for visitors within Thredbo Alpine Resort. The development will be subject to conditions of consent to

<p>management, development and conservation of the State's natural and other resources,</p>	<p>ensure the project is undertaken in a way to protect the alpine environment during works, and that ongoing EME from the facility is within acceptable levels. The proposal is considered to have a positive social and economic impact, while having minimal impact on the environment.</p>
<p>(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,</p>	<p>The proposal would not have an impact on the environment (as no round disturbance or native vegetation loss is expected) thus being ecologically sustainable development. Mitigation measures during construction and operation to reduce impacts on the natural environment are supported.</p>
<p>(c) to promote the orderly and economic use and development of land,</p>	<p>The development seeks approval for works that are aimed at improving telecommunication facilities within KNP for the benefit of visitors to Thredbo Alpine Resort. enhance visitor experience in the snowfield. This contributes to greater visitor amenity and supports tourism in the Alpine Resorts, thereby promoting the ongoing orderly and economic use of the land.</p>
<p>(d) to promote the delivery and maintenance of affordable housing,</p>	<p>Not applicable.</p>
<p>(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,</p>	<p>The proposed development would not result in the loss of threatened or vulnerable species, populations, communities or significant habitats.</p> <p>The SEMP and recommended conditions of consent outline measures that are considered appropriate to contain and abate construction impacts and minimise impacts on the environment, so impacts on the environment are limited.</p>
<p>(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),</p>	<p>The proposed development is not anticipated to result in any impacts upon built and cultural heritage, including Aboriginal cultural heritage.</p>
<p>(g) to promote good design and amenity of the built environment,</p>	<p>The Department considers the proposal is appropriately designed and built, as supported by the issue of an occupation certificate for the tower, together with the subsequent structural and geotechnical information that has accompanied the application. The proposed construction works to undertake changes to the antenna</p>

and supporting infrastructure will be undertaken in a way to reduce adverse impacts on the built or natural environment.

(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,

The Department has recommended conditions of consent to ensure the works are undertaken in accordance with legislation, guidelines, policies and procedures.

(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,

The Department consulted with the NPWS and considered their response (refer to **Section 3** and **Section 4**).

(j) to provide increased opportunity for community participation in environmental planning and assessment.

The application was made available on the NSW Planning Portal website for public interest. Exhibition of the amended proposal was not required in accordance with the Department's Community Participation Plan (refer to **Section 3**).

Considerations under section 4.15 of the EP&A Act

Table 2 | Section 4.15(1) Matters for Consideration

Section 4.15(1) Evaluation	Consideration
(a)(i) any environmental planning instrument (EPI)	<p>The Precincts - Regional SEPP and the <i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i> (Transport and Infrastructure SEPP) are the principal EPIs which apply to the site for this type of development.</p> <p>An assessment against the requirements of Chapter 4 of the Precincts - Regional SEPP and relevant provisions of Chapter 2 within the Transport and Infrastructure SEPP is provided below.</p> <p>The Department is satisfied that the application is consistent with the requirements of Chapter 4 of the Precincts - Regional SEPP and the Transport and Infrastructure SEPP.</p>
(a)(ii) any proposed instrument	Not applicable to the proposal.
(a)(iii) any development control plan	The Alpine Region DCP 2025 had not been adopted at the time of lodgement of the original application in 2022,

and the works as amended in May 2025 are considered to be consistent with the aims and objectives of the DCP. The application is seeking to undertake development that supports sustainable tourism and recreation through upgrading an existing telecommunications facility in a manner that minimises site disturbance and reduces visual clutter. Impacts from the development will be managed to protect the environment.

(a)(iii) any planning agreement	Not applicable to the proposal.
(a)(iv) the regulations	<p>The application satisfactorily meets the relevant requirements of the EP&A Regulation, particularly the procedures relating to development applications, including content and amendment in accordance with Part 3, considerations in accordance with Part 4, and fees paid pursuant to Part 13.</p> <p>The Department has undertaken its assessment in accordance with all relevant matters as prescribed by the regulations, the findings of which are contained within this report.</p>
(a)(v) any coastal zone management plan	Not applicable to the proposal.
(b) the likely impacts of that development	<p>The Department has considered the likely impacts of the development, where the proposal is considered to have positive economic and social impacts due to the proposed upgrades to the telecommunication facility, while the environmental and cultural values of the site and locality will be maintained. Environmental impacts have been contained where possible, and site activities can be appropriately managed and mitigated through conditions of consent.</p>
(c) the suitability of the site for the development,	<p>The site is suitable for the development, utilising existing infrastructure constructed for the purpose, where the works support the ongoing telecommunication requirements of visitors to Thredbo Alpine Resort.</p>
(d) any submissions made in accordance with this Act or the regulations,	<p>Consideration has been given to agency discussions during the assessment of the application, as discussed in Section 3 and Section 4 of this report.</p>

(e) the public interest.

The works are consistent with the aim and objectives of Chapter 4 of the Precincts - Regional SEPP and Chapter 2 of the Transport and Infrastructure SEPP. The development seeks to provide better service coverage to customers of the Optus and TPG Vodafone networks within Thredbo Alpine Resort and the surrounding alpine area. Improving tourist services supports KNP visitation, which underpins the viability of the Alpine Resorts. The works will be undertaken in a way to avoid adverse impacts on the environment, which can be appropriately managed, mitigated and contained. The development is considered to support the economic viability of the resort while maintaining the health and diversity of the environment, thereby supporting the principles of ESD. As such, approval of the proposal is considered to be consistent with the public interest.

Environmental Planning Instruments

The principal EPIs applicable to the development are:

- *State Environmental Planning Policy (Precincts - Regional) 2021* (Precincts - Regional SEPP) - consideration of the relevant provisions to the proposal relating to development in an Alpine Resort area of KNP. Assessment of the proposal in accordance with Chapter 4 of the Precincts - Regional SEPP is provided in **Table 3**.
- *State Environmental Planning Policy (Transport and Infrastructure) 2021* - Assessment of the telecommunications facility component of the proposal in accordance with Chapter 2 of Transport and Infrastructure SEPP is provided in **Table 4**.
- *State Environmental Planning Policy (Resilience and Hazards) 2021* - No contamination within the site and surrounding area has been identified. There are no further matters under that need to be considered under this SEPP.

Table 3 | Chapter 4 State Environmental Planning Policy (Precincts - Regional) 2021

Chapter 4 - Precincts - Regional SEPP - Kosciusko Alpine Region

Section 4.9 Demolition

The demolition of a building or work on land in the Alpine Region

The proposal does not relate to the demolition of a building or the demolition of work/s on land.

Section 4.10 Temporary use of land

Temporary use of land for up to 52 days in a period of 12 months

The proposal does not relate to the temporary use of land.

Section 4.21 Heritage conservation

European and Aboriginal heritage

The proposal is considered unlikely to impact on any European or Aboriginal heritage. The proposal does not propose excavation or ground works as part of the development, and so any areas archaeological sensitivity or Aboriginal heritage objects that may occur near the work site are unlikely to be disturbed as a result of the project. No further Aboriginal cultural due diligence investigation is considered necessary. Should any Aboriginal objects be uncovered during construction, any works impacting the objects must cease immediately and the NPWS contacted for assessment of the site.

Section 4.24 Flood planning

Development on land in the flood planning area

The development site is located in an elevated area of Thredbo Alpine Resort, where the site is not subject to flooding.

Section 4.25 Earthworks

Impact of earthworks

Earthworks are not required for the removal of existing antenna and replacement with new antenna, nor for the installation of new cabling in the existing above-ground conduit or equipment in the base station room within the Eagles Nest Building. Activities associated with the development will be undertaken once snow has cleared from the site, and the proposed works will not cause the disruption to, or adversely impact on, drainage patterns or soil stability in the locality. No sedimentation and erosion control measures are required.

Section 4.27 Consultation with National Parks and Wildlife Service

Consult with, and consider submissions from, the NPWS

The proposal was referred to NPWS and comments were received. Refer to consideration of NPWS referral comments in **Section 3** and **Section 4** of this report.

Section 4.28(1) – Consideration of master plans and other documents

(a) the aim and objectives of this policy, as set out in section 4.1	The proposal is consistent with the aim and objectives of Chapter 4 of the Precincts – Regional SEPP in that the development will be managed with regard to the principles of ESD. The provision of the updated telecommunications equipment is expected to improve tourist amenity during their visit to Thredbo. The proposal is considered appropriate as it enhances the facilities for resort patrons.
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(b) *(Repealed)*

(c) a conservation agreement under the <i>Environment Protection and Biodiversity Act 1999</i> of the Commonwealth that applies to the land,	Not applicable to the development.
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(d) the Geotechnical Policy - Kosciuszko Alpine Resorts published by the Department in November 2003,	No earthworks are proposed in relation to the application. In considering the Geotechnical Policy, the Applicant has provided a Form 4 wherein a geotechnical engineer has reviewed the application and documents relating to the structural integrity of the tower and associated infrastructure, and certified that the construction works present minimal or no geotechnical impact on the site or related land.
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(e) for development in the Perisher Range Alpine Resort - (i) the Perisher Range Resorts Master Plan, published by the NPWS in November 2001 and (ii) the Perisher Blue Ski Resort Ski Slope Master Plan adopted by the NPWS in May 2002.	The proposed development is not located within the Perisher Range Alpine Resort.
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Section 4.29 Consideration of environmental, geotechnical and other matters

Under section 4.29(1) - In deciding whether to grant development consent to development in the Alpine Region, the consent authority must consider the following -

(a) measures proposed to address geotechnical issues relating to the development,	The site is within the 'G' zone identified on the Department's Geotechnical Policy Map. The Applicant has sought exemption in accordance with Section 3.1(e) the Geotechnical Policy where a development application is not required to be accompanied by a
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geotechnical report where only minor construction works are proposed and a geotechnical engineer has certified the works will present minimal or no geotechnical impacts on the site. In accordance with the Policy, a 'Form 4' has been provided to certify the subject works.

The Department is satisfied that no additional measures with respect to geotechnical matters need to be considered for the proposed works, as they involve minor additions to the existing monopole only that will not impact upon the existing load bearing capacity of the structure.

While noting the above, confirmation was sought from the Applicant during the assessment of the application as to the structural suitability of the existing monopole, including details of how the foundations and the monopole were constructed. These were not available at the time of lodgement of the original application (i.e. prior to amendment) as a copy of the Occupation Certificate for the tower had not been received by the Department. The Applicant has since obtained an Occupation Certificate for the construction of the existing tower and footings, as well as additional structural certification as to the integrity of the existing tower and mounting infrastructure in relation to the installation of the new antennas. Through the provision of the additional engineering and works certification particulars, as has been relied upon by the Principal Certifier for the OC and by the Applicant, the Department can be satisfied that the construction has been appropriately reviewed and endorsed by appropriately qualified professionals, and the tower is suitable to host the replacement antennas.

(b) the extent to which the development will achieve an appropriate balance between -

(i) the conservation of the natural environment, and

(ii) taking measures to mitigate environmental hazards, including geotechnical hazards, bush fires and flooding,

The proposed installation of the updated antennas and associated infrastructure will be undertaken in a way that will help avoid and mitigate impacts on the natural environment. The site is not subject to flooding. While the land is identified as being in an area of geotechnical sensitivity, the development has been assessed by a geotechnical engineer as minor and having no or only a minor impact on geotechnical stability in the locality, and therefore unlikely to cause a geotechnical hazard. The proposed works have been designed to avoid and mitigate impacts on the natural environment. Due to the location and lack of ignitable fuel load in the rocky

setting, no additional measures to protect against bushfire are required.

As the proposal seeks to upgrade an existing telecommunication facility, hazard from exposure to the electromagnetic energy (EME) radiation levels from the cluster of telecommunication towers at the locality are a consideration. Information provided with the application indicates the EME remains within acceptable thresholds. Natural hazards have been adequately addressed.

(c) the visual impact of the proposed development, particularly when viewed from the land identified as the Main Range Management Unit in the Kosciuszko National Park Plan of Management,

The Department considers that the removal of superseded componentry from the monopole and the installation of the new telecommunication antennas and components will not result in an unacceptable visual impact in the locality or when viewed from the Main Range. The visual impact is considered to be negligible in the setting and is not regarded to have an adverse visual impact on KNP.

(d) the cumulative impacts of development and resource use on the environment of the Alpine Subregion in which the development is carried out,

The application proposes to upgrade telecommunications infrastructure which emits Electromagnetic Energy (EME). While the EME levels will increase after installation of the equipment, the maximum cumulative EME level calculated after the proposed Optus (MOCN) upgrade has been completed is calculated as being 40.24%. No significant adverse cumulative impacts are anticipated from the development.

(e) the capacity of existing infrastructure and services for transport to and within the Alpine Region to deal with additional usage generated by the development, including in peak periods,

The purpose of the proposal is to augment the capacity of the existing telecommunications infrastructure to service Thredbo and improve the capacity of the service network to deal with user demand, including in peak periods. The additional telecommunications capacity is not considered likely to increase demand for other resort infrastructure and services as a result of the development.

(f) the capacity of existing waste or resource management facilities to deal with additional waste generated by the development, including in peak periods.

Waste generated by the removal of the existing infrastructure and installation of in the new items in the subject location will be managed by the specialist installers. The development will not create an ongoing waste stream. The development will not result in any changes to resource use, but rather enhance the telecommunication services in place to support visitor patronage in the Alpine resorts. As the proposal seeks

to upgrade an existing telecommunication facility, no additional usage of the infrastructure and transport service network is predicted as a result of the project. The development will not result in any changes to effluent management systems, waste disposal facilities, transfer facilities or water supply.

Under section 4.29(2) - For development involving earthworks or stormwater draining works, the consent authority must also consider -

Measures to mitigate adverse impacts associated with the works

No earthworks or ground disturbance is proposed as part of the development. Sedimentation and erosion control measures are not necessary. Stockpiling of materials will not occur at the site. No negative impacts to stormwater are anticipated.

Under section 4.29(3) - For development the consent authority considers will significantly alter the character of an Alpine Subregion, the consent authority must also consider -

(a) the existing character of the site and immediate surroundings, and

The development will not significantly alter the character of an Alpine Subregion, or the character of the site and immediate surroundings.

(b) how the development will relate to the Alpine Subregion.

The visual impact of the development is considered to be negligible. There will be no easily discernible change to the profile character of the telecommunications pole after the existing antenna are swapped out with the upgraded antenna. The existing character of the site and immediate surroundings will be maintained.

Section 4.30 Kosciuszko National Park Plan of Management

Consistency between the development and the Kosciuszko National Park Plan of Management

The KNP Plan of Management is administered by the NPWS, who raised no objection to the proposal in their review of the application, subject to conditions.

Table 4 | Chapter 2 State Environmental Planning Policy (Transport and Infrastructure) 2021

Chapter 2 – Infrastructure

Section 2.1 Aim of Chapter

The aim of this Chapter is to facilitate the effective delivery of infrastructure across the State.

The proposal seeks to update an existing telecommunications service through redevelopment of the existing facility. The Department is satisfied that approval of the proposal is consistent with the SEPP.

Part 2.3 – Development Controls

Part 2.3 of the SEPP prescribes the development controls for each category of development, where Division 21 of the Part sets out the development controls for a telecommunications facility.

Division 21 Telecommunications and other communication facilities

Section 2.140 Definitions

Telecommunications facility

The proposal relates to works on a telecommunications facility, which includes any part of a telecommunications network and related structures such as antenna, equipment, apparatus and cabling in connection with the network.

Section 2.143 Development permitted with consent

(1) Development for the purpose of telecommunications facilities, other than development in section 2.141 or development that is exempt development under section 2.20 or 2.144, may be carried out by any person with consent on any land.

As discussed in Section 2.140 above, the proposal falls within the definition of a telecommunications facility. It is not development under Section 2.141 of the SEPP and not exempt development under Section 2.20 or 2.144, and is therefore permissible with consent.

(2) Before determining a development application for development to which this section applies, the consent authority must take into consideration any guidelines concerning site selection, design, construction or operating principles for telecommunications facilities that are issued by the Planning Secretary for the purpose of this section and published in the Gazette.

The Department published '*NSW Telecommunications Facilities Guideline Including Broadband*' in July 2010 (updated in October 2022) to supplement the telecommunications facility provisions in the Infrastructure SEPP. An assessment of the proposal against this guideline is provided below in **Appendix A**.

The Department considers the proposal, is consistent with the Guideline.

Ecologically Sustainable Development (ESD)

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. ESD initiatives and sustainability have been adequately considered by the Applicant and mitigation measures are proposed to be incorporated into the design.

The proposal is consistent with ESD principles and the Department is satisfied the proposed upgrade to the telecommunication facility has been developed having regard to ESD principles, in accordance with the objects of the EP&A Act as follows:

- the proposal aims to improve the function and operation of the telecommunication facility, thereby supporting the orderly and economic use of the site;
- the proposal involves the upgrade to an existing telecommunication facility only, and conditions of consent will ensure process will avoid any adverse impact on the environment, thus being consistent with the principles of ecologically sustainable development; and
- the proposal does not impact upon cultural heritage, including Aboriginal cultural heritage.

Biodiversity Conservation Act 2016

Section 1.7 of the EP&A Act requires the application of the *Biodiversity Conservation Act 2016* (BC Act) in connection with the terrestrial environment. The BC Act introduced a Biodiversity Offsets Scheme (BOS) that applies when:

- the amount of native vegetation being cleared exceeds a certain threshold area; or
- the impacts occur within an area mapped on the Biodiversity Values Map (BVM) published by the Minister for Environment; or
- the 'test of significance', in section 7.3 of the BC Act, identifies that the development or activity is likely to significantly effect threatened species or ecological communities, or their habitats; or
- the works are carried out in a declared area of outstanding biodiversity value.

While there is currently no declared area of outstanding biodiversity value within KNP, the development site is within an area mapped on the BVM. No disturbance to vegetation is proposed as part of the development given the nature of the upgrade to the telecommunication facility and measures will be in place to ensure works are carried out in a way to avoid any adverse impacts from the proposal on threatened species or ecological communities, or their habitats. No adverse impacts from the development on biodiversity values within KNP is considered likely due to the minor and contained nature of the works.

2.4 Other approvals

Environment Protection and Biodiversity Conservation Act 1999

Under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), the Commonwealth Government is required to assess and approve a development if it is likely to impact on a matter of national environmental significance.

The Applicant's assessment concluded that the proposal would not result in any substantial adverse impacts on the environment or have any significant effects on threatened species, endangered

populations, ecological communities, or their habitats, listed under the *Biodiversity Conservation Act 2016* (BC Act) or the EPBC Act.

Rural Fires Act 1974

The development site is located on bushfire prone land (BFPL). While the development of telecommunication infrastructure on BFPL does not require the approval from the Rural Fire Service (RFS), the RFS have issued a practice note wherein they provide directions on the application of bush fire protection measures to be applied to 'Telecommunication Towers in Bush Fire Prone Areas'.

Telecommunication towers in bushfire prone areas are considered to be critical infrastructure for firefighting communications and for providing warnings, information and communication channels for people in bush fire prone areas during bush fire emergencies. As such, the RFS recommend a ten (10) metre APZ for all telecommunication towers and associated buildings, as well as recommending that critical infrastructure is made from materials designed to withstand 40kWm² of radiant heat and to withstand ember penetration into the structure and associated infrastructure.

It is noted that the works relate to installing updated infrastructure on an existing steel monopole. Given the nature of the rocky alpine environment in which the work site is located, and the natural lack of trees or significant ignitable fuel sources in the location due to rock cover and high altitude, no disturbance of vegetation is required to establish or maintain the ten (10) metre APZ.

3 Submissions

The Department's Community Participation Plan, November 2019, being the version in place at the time of lodging the original proposal in 2022, was prepared in accordance with Schedule 1 of the EP&A Act. The CPP 2019 generally required applications to be exhibited for a period of fourteen (14) days. Applications under Chapter 4 of the Precincts - Regional SEPP were not required to be public exhibited if the proposal related to works which were wholly internal to a building or where the site is located more than fifty (50) metres away from a tourist accommodation building. The works are not within fifty (50) metres of a tourist accommodation building, and the Department did not undertake formal exhibition or notification of the development. The application was placed on the NSW Planning Portal website from 19 September 2022 to 27 September 2022 to enable any interested parties to have regard to the application.

Following amendment to the application in 2025, the Department's CPP April 2024 version was in place at the time of lodgement of the amended application. The updated CPP still did not require formal exhibition or notification of the development. The documents relating to the amended application were updated on the Planning Portal website, consistent with the intent of the CPP to keep the community informed and to facilitate ease of access to planning decisions.

The application was also referred to the NPWS pursuant to (former) section 4.15 of Chapter 4 of the Precincts – Regional SEPP. The NPWS did not endorse the Site Environmental Management Plan (SEMP) provided with the application at that time, and raised concern that the staging area proposed in the SEMP could result in unnecessary environmental impacts. The following issues were required to be addressed:

- remove the requirement for a staging area at the top of the Kosciuszko Express Chairlift. Rather, it was considered appropriate for contractors to park near the Eagles Nest building (using the existing access road) and walk to the Optus tower to await airlift of the antennas,
- revise the timing of the proposed work, which had proposed works over the winter ski season, and
- remove the exclusion fencing at the proposed helicopter staging area at Friday Flat. Ground personnel are to be provided on site to direct any non-authorized persons away from the site (if required).

The Applicant provided a revised SEMP that included the feedback from the NPWS to ensure that the works would be carried out in an appropriate manner.

On receipt of the amended application in 2025, the revised information was forwarded to the NPWS pursuant to section 4.27 of the Precincts - Regional SEPP. NPWS advised that given there were no additional environmental impacts and no changes to the visual impact, they provided no further comments beyond those made on the original DA.

4 Assessment

The Department has considered the relevant matters for consideration under section 4.15 of the EP&A Act, the SEE and supporting information in its assessment of the proposal. The key issues in the Department's assessment are:

- electromagnetic energy (EME) impacts,
- visual impacts, and
- impacts on the natural environment.

These issues are discussed below and in relevant sections of this report.

4.1 Electromagnetic energy (EME) impacts

The Australian Communications and Media Authority (ACMA) set the standards that limit human exposure to EME. This standard has been prepared by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and is the *Radio communications (Electromagnetic Radiation-Human Exposure) Standard 2003*.

Carriers must comply with standards set down by the ACMA. Therefore, the installation of the new infrastructure onto the existing telecommunications monopole must comply with the ACMA EME regulatory requirements.

An EME report was supplied with the application that indicates the facility will comply with Australian government regulations in relation to emission of electromagnetic energy (EME). Specifically, this is the *Australian Standard Radiation Protection Series S-1 Standard for Limiting Exposure to Radiofrequency Fields – 100 kHz to 300 GHz*, published by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) in 2021. The maximum levels of electromagnetic energy from the intended upgrade to the facility (including cumulative impacts from the Telstra and Vodafone facilities) is estimated at 40.24% of the public exposure limit mandated by the Commonwealth Government, at a distance of 1.5 metres above the ground out to 500 metres from the existing telecommunications monopole.

The Department is satisfied that the facility will comply with the EME exposure standard.

4.2 Visual impacts

The proposal consists of replacing telecommunications infrastructure on the existing monopole and within the existing communications room.

The Department previously formed the view that the visual impact of the current telecommunications facility would be acceptable due to:

- the height of the telecommunications facility did not have any significant additional visual impact upon the environment or when viewed from the adjoining ski slopes, noting that the Telstra facility was higher than the proposed Optus monopole,
- the works would be partly screened by the existing rocky outcrop, Eagles Nest restaurant and the topography of the surrounding area,

- with use of an appropriate colour in a pale eucalypt green colour, the finish of the visible components of the facility was considered complimentary to the existing landscape.

The additional impact associated with the subject proposal is considered to be minor. The swapping of telecommunications equipment comprising the replacement of three existing panel antennas at the top of the existing monopole with replacement antennas measuring approximately 1.5 metres in length will remain similar to the existing (refer to **Figure 4**). The equipment will be finished in the same non-reflective pale eucalypt green colour. The installation of the new base-station equipment within the existing equipment room in the Eagles Nest restaurant complex will not have a visual impact, and nor will the installation of new cabling within existing conduit and other small ancillary items.

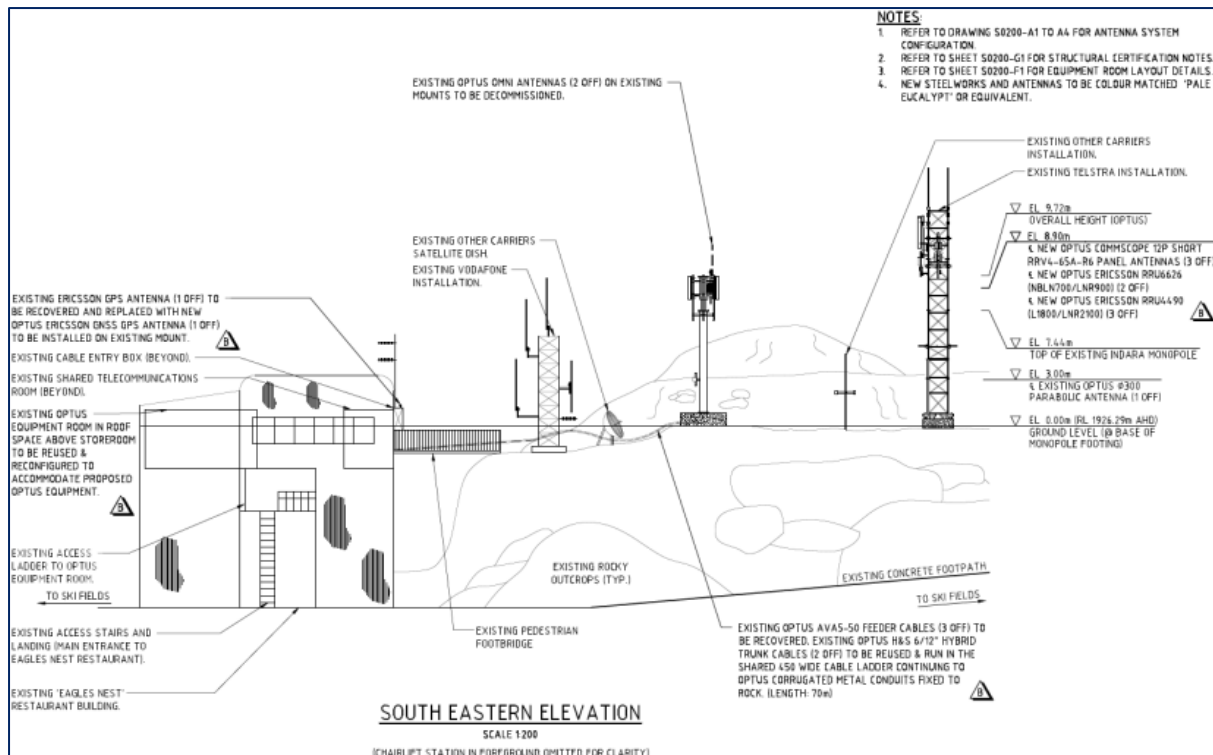


Figure 4 | Elevation of Optus tower and adjoining installations (Source: Applicant’s documentation)

The Department considers the proposal is acceptable as the equipment will not have a significant visual impact upon the environment or when viewed from the Thredbo Village / adjoining ski slopes.

4.3 Impacts on the natural environment

The potential impacts associated with the proposal have been carefully considered by the Department given the location of the site and surroundings within an area of biodiversity sensitivity. While it is noted that there will be no change to the footing of the existing monopole structure and no groundworks are proposed, the activities associated with the project have the potential to cause damage within the fragile alpine environment if works are not done in accordance with appropriate construction methods.

The proposed staging area on the eastern side of the work site was not supported given it is both unnecessary and likely to cause damage to the environment. The updated SEMP relocated the compound to between the Eagles Nest building and the top station building and contained methods and timing of the works suitable for the development.

The Department is satisfied that suitable management and mitigation measures can be adopted to carry out the project while protecting the natural environment, as now detailed in the SEMP that includes these measures will be required as a condition of consent. The Department considers that the disturbance to the environment and natural process will be minimised, and the proposed works will not have an unacceptable impact on the natural environment.

5 Recommendation

The Department has assessed the merits of the proposal in accordance with the relevant requirements of the EP&A Act. The Department's assessment concludes the proposal is acceptable as:

- there will be no significant impact on any threatened species, populations or ecological communities as the works will need to be carried out in a way to prevent damage to the natural environment,
- the proposed upgrade enhances the range and capacity of the existing telecommunication facility, supporting the provision of services to the resorts and thereby supporting visitor experience and regional tourism,
- EME levels as a result of the works will not exceed relevant standards, and
- the proposal is acceptable as the impacts on the surrounding environment and users will be minimised given the proposal relates to the upgrade of an existing telecommunications facility and recommended conditions of consent require effective site management to control impacts during construction.

Overall, the Department is satisfied that the proposal is suitable for the site and in the public interest.

The Department therefore recommends that the application be approved, subject to recommended conditions. In accordance with the Minister's delegation of 9 March 2022, the Team Leader Assessments, Alpine Resorts Team may determine the application as:

- no reportable political donation has been disclosed,
- there are less than fifteen (15) public submissions in which objection to the proposal has been raised,
- the application is in relation to land to which Chapter 4 of the Precincts - Regional SEPP applies.

It is recommended that the Team Leader Assessments, Alpine Resorts Team, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report
- **accepts** and adopts the findings and recommendations in this report as the reasons for making the decision to grant consent to the application
- **agrees** with the key reasons for approval listed in the notice of decision
- **grants** consent for the application in respect of DA 22/11021, subject to the recommended conditions
- **signs** the attached Development Consent (**Appendix B**).

Recommended by:



Sandria Butler
Senior Planning Officer
Alpine Resorts Team

Adopted by:



Mark Brown
Team Leader, Assessments
Alpine Resorts Team
as delegate of the Minister for Planning

Appendices

Appendix A – Guidelines and Industry Codes

NSW Telecommunications Facilities Guideline, Including Broadband (October 2022)

These guidelines were produced by the (former) NSW Department of Planning and Environment to provide a guide to Statewide planning provisions and development controls for telecommunication facilities in NSW contained in the Transport and Infrastructure SEPP.

The Guideline contains five principles in relation to telecommunications facilities, which are listed below along with comment on compatibility of the proposed facility upgrade with the principles.

Section 2 – Site Selection, Design, Construction and Operation Principles for Telecommunications Facilities

Principle 1: Design and site telecommunications facilities to minimise visual impact.

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| (a) As far as practical, integrate a telecommunications facility that is mounted on an existing building or structure with the design and appearance of the building or structure. | The proposal relates to upgrading an existing facility, where the new componentry will be mounted on the existing Optus monopole facility. |
| (b) Minimise the visual impact of telecommunications facilities, reduce visual clutter (particularly on tops of buildings) and ensure physical dimensions (including support mounts) are sympathetic to the scale and height of the building to which it is to be attached and to adjacent buildings. | The proposal involves the replacement of existing panel antennas with similarly dimensioned panel antennas with ostensibly the same appearance. As such, the design of the proposed upgrade has minimised the additional visual impact. The Department's assessment of the proposal considers that the installation of the new antennas will not result in an unacceptable visual impact (refer to Section 4 in this report). |
| (c) If a telecommunications facility protrudes from a building or structure and is predominantly seen against the sky, either match the prevailing colour of the host building or structure or use a neutral colour such as pale grey. | The new equipment (steelworks and antennas) will be colour-matched in non-reflective pale eucalypt green paint finish, which will be consistent with the existing monopole and equipment and blend with the natural landscape. |
| (d) Where possible and practical, screen or house ancillary facilities using the same colour as the prevailing background and consider using existing vegetation or new landscaping. | Ancillary facilities relating to the facility are located within the communication room located within the Eagles Nest restaurant complex. |

(e) Locate and design a telecommunications facility in a way that responds to its setting (rural, residential, industrial or commercial).	The facility is located in a National Park and has responded to its setting as much as is practicable in that the structure will be finished in a light green colour to better blend in with the natural setting. The presentation of the facility is consistent with adjoining telecommunications facilities at the site.
(f) Site and design a telecommunications facility located on or adjacent to a listed heritage item or within a heritage conservation area with external colours, finishes and scale sympathetic to the heritage item or conservation area	The location of the existing monopole will not be changed by the development, and the works will not impact on a listed heritage item or a heritage conservation area.
(g) Locate telecommunications facilities to minimise or avoid obstructing significant views of a heritage item or place, a landmark, a streetscape, vista or a panorama, whether viewed from public or private land.	The development relates to upgrading items on an existing monopole, where the change in antenna are not considered to have an unacceptable visual impact on the locality. Refer to Section 4 in this report.
(h) Consult with relevant council when proposing pruning, lopping or removing any tree or vegetation. Obtain a tree preservation order, permit or development consent if required.	No vegetation management or removal is proposed.
(i) Remove redundant telecommunications facilities and restore the site to the condition it was in prior to the facility's construction.	The existing Optus monopole is being retained.
(j) Remove redundant components of existing facilities after upgrades.	Redundant antenna will be removed from the monopole prior to mounting the new antenna.
(k) Where possible, consolidate telecommunications facilities to reduce visual clutter and work with other users on co-location sites to minimise cumulative visual impact.	Optus and TPG Vodafone (TPG), have entered into an agreement for a regional Multi-Operator Core Network (MOCN). The subject site at Eagles Nest, Thredbo, is one of the selected sites that intends to achieve the MOCN's outcome through the proposed upgrade works at the existing site. Optus will upgrade the existing sites with new equipment capable of transmitting the spectrum frequencies that will be shared.

(l) Accord with all relevant industry design guides when siting and designing telecommunications facilities.	See discussion below this table in relation to the Industry Code C564:2020 Mobile Phone Base Station Deployment (2020).
(m) Assess potential visual impact in alternative site assessments.	The development relates to ongoing use of an existing telecommunications tower. Assessment of alternative sites is not considered necessary.

Principle 2: Co-locate telecommunications facilities wherever practical

(a) As far as practical, locate telecommunications lines underground or within an existing underground conduit or duct.	The telecommunication lines from the monopole facility to the communication room in the Eagles Nest restaurant complex will reuse the existing Optus Hybrid trunk cable and feeders and run new feeders along the existing cable ladder already fixed in place. No underground works or trenching for services is proposed, nor would any be desirable with the subject environment.
(b) Where practical, co-locate or attach overhead lines, antennas and ancillary telecommunications facilities to existing buildings, public utility structures, poles, towers or other radiocommunications equipment to minimise clutter.	The additional antennas will be collocated on the existing Optus structure.
(c) Consider extending an existing tower as a practical co-location solution to new towers.	No extension to the tower is required. The upgraded panel antennas to be installed on the existing Optus tower will benefit both Optus and TPG customers under the MOCN agreement, which is a co-location initiative where the upgraded tower will and transmit a broader spectrum of frequencies that will be shared by the providers.
(d) Demonstrate that co-location is not practicable if choosing not to co-locate a facility.	Co-location has been achieved, as outlined above.
(f) If choosing to co-locate, design, install and operate a telecommunications facility so that resultant cumulative levels of radio frequency emissions are within the maximum human exposure levels set out in RPS S-1.	The maximum level of EME from the proposed facility after the upgrade is estimated at 40.24% of the exposure limits mandated by the Commonwealth Government (including cumulative impacts from the Telstra and Vodafone facilities). Specifically, the facility will comply with Australian Standard Radiation Protection Series S-1 Standard for Limiting Exposure to Radiofrequency Fields – 100 kHz to 300

GHz published by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) in 2021.

Principle 3: Meet health standards for exposure to radio emissions

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| (a) Design, install and operate a telecommunications facility so that maximum human exposure levels to radiofrequency emissions comply with RPS S-1 (see Appendix C). | The application is supported by an EME Environmental Report that predicts the EME levels for the proposed facility will comply with the relevant standards. Refer also to Principle 2(f) above. |
| (b) Using the format required by ARPANSA, report on predicted levels of EME surrounding any development covered by the Industry Code C564:2020 Mobile Phone Base Station Deployment, and how the development will comply with ACMA safety limits and RPS S-1. | As above, refer to Principle 2(f) and Section 4 of this report in relation to the EME Environmental Report. |

Principle 4: Minimise disturbance and risk, and maximise compliance

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| (a) Ensure the siting and height of a telecommunications facility complies with the of the Commonwealth Civil Aviation Regulations 1998 and Airports (Protection of Airspace) Regulations 1996. Avoid penetrating any obstacle limitation surface (OLS) shown on a relevant OLS plan for an aerodrome or airport (as reported to the Civil Aviation Safety Authority) within 30 km of the proposed development. | <p>The Jindabyne Airport is located approximately 28 kilometres from the subject telecommunications site. The proposal does not protrude above any obstacle limitation surface plan for the airport.</p> <p>The proposed height of the telecommunications facility is also lower than the nearby Telstra telecommunication facility located near the site – refer to Figure 4 in the report.</p> |
| (b) Ensure no adverse radio frequency interference with any airport, port or Commonwealth defence navigational or communications equipment, including the Morundah Communication Facility, Riverina. | The subject site is not located close to any airport, port or Commonwealth Defence land. While there should be no adverse radio interference from the proposal, this is a matter for the Applicant to ensure that they are compliant with the relevant carrier and aviation legislation. |
| (c) Carry out the telecommunications facility and ancillary facilities in accordance with any manufacturer’s installation specifications. | This is the responsibility of the Applicant to install the telecommunications facility or ancillary facilities in accordance with manufacturers specifications. |

(d) Protect the structural integrity of any building or structure on which a telecommunications facility is erected.	The works will not compromise the structural integrity of the tower. The Applicant has provided the Department with structural engineers reports to certify the integrity of the tower and mounting components.
(e) Erect the telecommunications facility wholly within the boundaries of a property as approved by the relevant landowner.	The proposed facility is located within the boundaries of Lot 863 DP 1128686 within Thredbo Alpine Resort, with the consent of the Head-Lessee provided.
(f) Ensure all construction of a telecommunications facility accords with Managing Urban Stormwater: Soils and Construction – Volume 1 (Landcom 2004), or its replacement.	While this directive states that works should occur in accordance with Managing Urban Stormwater – Soils and Construction (the ‘Blue Book’), this document is not suitable for works undertaken in KNP. The relevant guidelines for soil containment and rehabilitation in the alpine resort areas of KNP are the <i>Soil Stockpile Guidelines for the Resort Areas of Kosciuszko National Park</i> , October 2017, and the <i>Rehabilitation Guidelines for the Resort Areas of Kosciuszko National Park</i> . While ground works are not proposed as part of the development, and storm water is unlikely to be impacted as a result of the works, if site disturbance occurs, all work must be carried out in accordance with the relevant KNP guidelines.
(g) Mitigate obstruction or risks to pedestrians or vehicles caused by the location of the facility, construction activity or materials used in construction.	The facility is not located in an area easily accessed by any pedestrians or directly impacting a ski run or mountain bike or walking trail due to the rocky nature of the site. Construction activities will need to be carried out in accordance with the approved Site Environmental Management Plan (SEMP), including signposting that restricts site access to site works only.
(h) Where practical, carry out work at times that minimise disruption to adjoining properties and public access and restrict hours of work to 7.00am and 5.00pm, Mondays to Saturdays, with no work on Sundays and public holidays.	The Department has recommended hours of work, as reflected in the conditions in Appendix B .

(i) Employ traffic control measures during construction in accordance with Australian Standard AS1742.3-2002 Manual of uniform traffic control devices – Part 3: Traffic control devices for works on roads.	Pedestrian and vehicular traffic will be managed in accordance with the SEMP referred to in Principle 4(g) above.
(j) Guard open trenching in accordance with Australian Standard Section 93.080 – Road Engineering AS1165 – 1982 – Traffic hazard warning lamps	No trenching is being carried out as part of the development.
(k) Minimise disturbance to flora and fauna and restore land to a condition similar to its condition before the work was carried out.	No disturbance to flora or fauna is proposed in relation to the works - refer to Section 4 of the report .
(l) Identify any potential impacts on threatened species and communities in consultation with relevant authorities and avoid disturbance to identified species and communities where possible.	The NPWS raised no objection to the proposal provided works are carried out in accordance with the SEMP (refer to 4(g)) to protect the natural environment, including native vegetation and fauna habitats.
(m) Identify the likelihood of harming an Aboriginal place and/or Aboriginal object and obtain approval from the Department of Premier and Cabinet if the impact is likely, or Aboriginal objects are found.	No earthworks are proposed and the likelihood of harming an Aboriginal Place and/or Aboriginal object is considered to be low. Should any Aboriginal objects be located during construction, any works impacting the objects must cease immediately and the NPWS contacted for assessment of the site.
(n) Reinstate, at your expense, street furniture, paving or other facilities removed or damaged during construction to at least the same condition as that prior to installation.	Not applicable to the subject development.

Principle 5: Undertake an alternative site assessment for new mobile phone base stations

(a) Include adequate numbers of alternative sites in the alternative site assessment as a demonstration of good faith.	The proposal does not relate to the installation of a new mobile phone base station.
(b) In addition to the new site selection matters in Section 4 of the Industry Code C564:2020 Mobile Phone Base Station Deployment: • only include sites that meet	The proposal does not relate to the installation of a new mobile phone base station.

coverage objectives, and that have been confirmed as available, with an owner agreeable to having the facility on their land • if the preferred site is a site owned by the Carrier, undertake a full assessment of the site • indicate the weight placed on selection criteria • undertake an assessment of each site before any site is dismissed.

INDUSTRY CODE C564:2020 MOBILE PHONE BASE STATION DEPLOYMENT (2020)

This Code supplements the requirements already imposed on Carriers under the existing legislative scheme. Below is an assessment of the siting and design against this Code as relevant, as stipulated in section 2, Principle 1(j) of the *NSW Telecommunications Facilities Guideline including Broadband (2010)*.

Section 4 – Mobile Phone Radiocommunications Infrastructure Site Selection, Design and Operation

4.1 New Site Selection

4.1.4 The procedures must require, as a minimum, that for each site the Carrier have regard to:

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| <p>(a) the reasonable service objectives of the Carrier including:</p> <ul style="list-style-type: none"> (i) the area the planned service must cover; (ii) power levels needed to provide quality of service; (iii) the amount of usage the planned service must handle. | <p>While it is noted that the proposal relates to an existing site, and not a new site, matters relating to Carrier service objectives and usage capacity are considerations for the Applicant.</p> |
| <p>(b) minimisation of EME exposure to the public;</p> | <p>EME exposure levels are predicted to be well below the legislated exposure thresholds. A condition is recommended to ensure compliance with the relevant standards.</p> |
| <p>(c) the likelihood of an area being a community sensitive location (Examples of sites which may be considered to be sensitive include, residential areas, childcare centres,</p> | <p>The Code requires the mobile network companies to take account of Community Sensitive Locations (CSL's), which are reported as 'Other areas of interest' in the EME report. While the facility is not located in close proximity to any of the sensitive land</p> |

schools, aged care centres, hospitals and regional icons);	uses specifically identified in Principle 4.1.4(c), CSL's are also expected to include a small number of floors of a multistorey building if it is close to the antennas and in the direction of significant radiated EME.
(d) the objective of avoiding community sensitive locations;	The original EME report (prior to the application being amended) identified the elevated walkway in the Eagles Nest Café as an area of interest at a height range of 0-3 metres. At this location the percentage of the public exposure limit is reported as 9.53% (maximum cumulative EME level for the proposed configuration). This was well within the permissible exposure levels at the identified location. While the EME was increased when the application was amended, the Applicant explains that over the years from the 2022 EME report to the present 2025 EME report, multiple upgrade works have been carried out by other carriers and the NSW Telco Authority at the subject site. While the updated EME report resulted in higher cumulative EME levels, this is largely due to the intervening works by other carriers. The cumulative EME is still well below permissible thresholds.
(e) relevant state and local government telecommunications planning policies;	The Transport and Infrastructure SEPP has been considered in Section 2 .
(f) the outcomes of consultation processes with Councils and interested and affected parties as set out in Clause 6.4;	The proposal was made available on the Planning Portal website, with no public submissions received.
(g) the heritage significance (built, cultural and natural);	The proposal is considered acceptable.
(h) the physical characteristics of the locality including elevation and terrain;	The site is on an elevated ridgeline, as is necessary for the purposes of situating a communications tower. The development site has an elevation of approximately 1934 metres above sea level, being subordinate to a ridgeline less than one kilometre to the west of the site which has a typical elevation of between 2000 to 2100 metres, including Signature Hill to the west with an elevation 2109 metres. Other landmarks along the spine of the Great Dividing Range include Rams Head 2.5 kilometres to the west

of the site at an elevation of 2191 metres, and Rams Head North at a distance just under 2.0 kilometres to the north-west of the site with an elevation of 2178 metres. The subject site is not the most visually prominent ridge or landform in the locality.

(i) the availability of land and public utilities;	The existing power to the site via cabling from the Eagles Nest restaurant complex will continue to be utilised at the facility.
(j) the availability of transmission to connect the radiocommunications infrastructure with the rest of the network;	This is a consideration for the Applicant.
(k) the radiofrequency interference the planned service may cause to other services;	Facilities for other carriers are located near the Optus facility. Ensuring that services transmit and receive with causing undue interference with other services is a matter for the Applicant and the Regulator.
(l) the radiofrequency interference the planned service could experience at that location from other services or sources of radio emissions;	This is a consideration for the Applicant.
(m) any obligations, and opportunities, to co-locate facilities; and	The installation is upon existing infrastructure.
(n) cost factors.	This is a consideration for the Applicant.

4.2 Mobile Phone Radiocommunications Infrastructure Design

4.2.3 With the objective of minimising unnecessary or incidental RF emissions and exposure, the procedures must ensure that, in designing Mobile Phone Radiocommunications Infrastructure, the Carrier have regard to:

(a) the reason for the installation of the infrastructure, considering – coverage, capacity and quality;	The proposal relates to updating the services provided by an existing Optus telecommunications facility. Accordingly, it is expected that coverage for Optus customers as well as TPG customers will improve within Thredbo Alpine Resort and the surrounding locality.
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(b) the positioning of antennas to minimise obstruction of radio signals;	Considerations to minimise impacts on existing radio signals is a matter for the Applicant and Regulator.
(c) the objective of restricting access to areas where RF exposure may exceed limits of the EME standard;	The EME exposure limits do not exceed the EME standard.
(d) the type and features of the infrastructure that are required to meet service needs including: (i) the need for macro, micro or pico cells; and (i) the need for directional or non-directional antennas.	This is a consideration for Optus/ TPG.
(e) the objective of minimising power whilst meeting service objectives; and	This is a consideration for Optus/ TPG.
(f) whether the costs of achieving this objective are reasonable.	This is a consideration for Optus/ TPG.

4.2.4 The Carrier must make Site EME assessments for Mobile Phone Radiocommunication Infrastructure in accordance with the ARPANSA prediction methodology and report format (as referenced in Appendix B – ARPANSA EME Report Format). Note: The ARPANSA prediction methodology requires cumulative predictions from all Mobile Phone Base Station equipment installed at the site.

The application is supported by a report that establishes EME levels for the proposed facility that complies with the relevant standards. Refer to **Section 4** of this report.

Appendix B – Recommended Instrument of Consent