

NETWORK FACILITIES – WHS RISK PROFILE



The following tables present a limited list of known hazards and risks for working on the Optus Network. The list is not exhaustive but assists contractors in identifying, assessing and developing controls during the development of their Safe Work Practices or Safe Work method Statements. Optus Contractor WHS Standards are available on: [http:// www.optus.com.au/ contractor-health-safety](http://www.optus.com.au/contractor-health-safety)

Site specific risks are available in Site Risk Registers (Exchanges & Data Centres) or through Q-Trac.

Hazard Type	Example	Risks	Contractor WHS Hazard Standard
1. Optus Exchanges & Data Centres			
Plant	• Cable supporting structures • Lifting hoists • HVAC systems • Access Walkways • Fixed ladder systems • Emergency Power Plant • AC and DC power distribution systems • Secondary batteries • Fire detection and suppression systems • Electric and electronic equipment such as telecommunications network equipment, radio transmitters, etc • Pallet Jacks & Trolleys	Impact injuries from striking supporting structures, electric shock, manual handling injuries, burns, crushing, lacerations and noise induced hearing loss	• Ladders fixed and portable • Heavy Lifting • Plant and associated equipment • Electrical Work
Electrical	• AC and DC Power distribution systems, power feeds on network cabling systems	Electric shock, burns and fire	• Electrical Work
Kinetic	• Traffic & Pedestrian management • Vehicles & Car Parks • Optic fibre	Impacts, collisions, crashes, injury	• Traffic Management • Safe operation of light vehicles • Mobile powered plant • Loading and unloading operations
Gravitational	• Working at heights • Use of ladders	Fall, trips & slips	• Ladders fixed and portable

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	- Subfloor areas with access pits - Slippery / uneven surfaces - Falling objects	Injury through impact with person	Work at Heights
Radiation	- Working outdoors i.e. UV - Radio Frequency Radiation - Laser light	Burns, sickness, eye sight injury	- Heat, cold, solar, ultraviolet and inclement weather - Laser Safety - Electromagnetic Energy
Biological	- Sharps - Pests - Airborne contaminants - Animals (e.g. snakes, birds, etc)	Infections, diseases, stings and bites	Nil.
Psychosocial	- Employee safety - Customer aggression - Working alone	Injury or mental health illness	Remote & Isolated Work
Chemical	Pest extermination products, petroleum products, battery electrolytes, gases, other chemicals	Effects from inhalation, ingestion, absorption of chemicals	Hazardous Chemicals
Environmental	- Asbestos - Confined spaces - Extreme heat or cold	Injury / illness due to exposure to unsafe levels	- Asbestos - Confined Spaces - Heat, cold, solar, ultraviolet and inclement weather
Manual Tasks	- Manual handling - Limited access / egress to work area - Limited space in work area	Injury	- Hazardous Manual Tasks - Loading and unloading operations
Noise	Operating plant	Noise Induced Hearing Loss	Mobile Powered Plant
2. Mobile Networks Sites			
Plant	- Antenna supporting structures - Towers	Impact injuries from striking supporting structures, electric	- Ladders fixed and portable - Heavy Lifting

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Hazard Type	Example	Risks	Contractor WHS Hazard Standard
	• Cable supporting structures • Lifting hoists • HVAC systems • Access Walkways • Fixed ladder systems • AC and DC power distribution systems • Secondary batteries • Electric and electronic equipment such as telecommunications network equipment, radio transmitters, etc	shock, manual handling injuries, burns, crushing, lacerations and noise induced hearing loss	• Plant and associated equipment • Electrical Work • Working at Height • Work on telecommunication towers • Work in the vicinity of power poles and overhead lines
Electrical	• AC / DC Power distribution systems • Overhead power cables (Low & High Voltage) • Lightning strikes	Electric shock, burns and fire	• Work in the vicinity of power poles and overhead lines • Electrical Work
Gravitational	• Use of portable / fixed ladders • Use of EWP • Use of mobile crane • Slippery / uneven surfaces • Falling Objects / Debris • Climbing towers • Working near roof edge	Fall, trips & slips Injury through impact with person	• Working at Height • Work on telecommunication towers
Radiation	• Working outdoors i.e. UV • Radio Frequency Radiation	Burns, sickness, eye sight injury	• Heat, cold, solar, ultraviolet and inclement weather • Laser Safety • Electromagnetic Energy
Biological	• Sharps • Body fluids • Pests • Contaminated water	Infections, diseases, stings and bites	• Nil.

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Hazard Type	Example	Risks	Contractor WHS Hazard Standard
Psychosocial	Customer / Public aggression	Injury or mental health illness	Remote & Isolated Work
Object / Kinetic	- Traffic & Pedestrian management - Vehicles - Cuts from handling cables and ties	Impacts, collisions, crashes, injury	- Traffic Management - Safe operation of light vehicles - Mobile powered plant - Loading and unloading operations
Chemical	Pest extermination products, petroleum products, battery electrolytes, gases, other chemicals	Effects from inhalation, ingestion, absorption of chemicals	Hazardous Chemicals
Environmental	- Asbestos in existing facilities - Extreme heat or cold	Injury / illness due to exposure to unsafe levels	- Asbestos - Confined Spaces - Heat, cold, solar, ultraviolet and inclement weather
Manual Tasks	- Manual handling - Limited access / egress to work area - Limited space in work area	Injury	- Hazardous Manual Tasks - Loading and unloading operations
Noise	Operating plant	Noise Induced Hearing Loss	Mobile Powered Plant
3. Underground Structures			
Plant	- Cable supporting structures - Electric & Electronic Equipment such as repeaters, etc	Impact injuries from striking supporting structures, electric shock, manual handling injuries, burns, crushing, lacerations and noise induced hearing loss	- Plant and associated equipment - Electrical Work - Work in the vicinity of underground assets
Electrical	- Energised underground cabling (Optus or other utilities) - Using electrical equipment/ tools	Electric shock, burns and fire	- Electrical Work - Work in the vicinity of underground assets
Gravitational	Use of ladders	Fall, trips & slips	Work at Height

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Hazard Type	Example	Risks	Contractor WHS Hazard Standard
	- Trench benching - Open manholes/ pits - Slippery / uneven surfaces - Flooding - Falling Debris	Injury through impact with person	Trenching excavation
Radiation	- Working outdoors (UV) - Laser light emitted from optical fibre cable	Burns, sickness, eye sight injury	- Heat, cold, solar, ultraviolet and inclement weather - Laser Safety - Electromagnetic Energy
Biological	- Sharps - Body fluids - Pests - Wildlife (snakes etc) - Contaminated water	Infections, diseases, stings and bites	Nil.
Psychosocial	- Customer / Public aggression - Working alone	Injury or mental health illness	- Remote & Isolated Work - Fatigue
Object / Kinetic	- Traffic & Pedestrian management - Vehicles - Mobile Plant & Equipment	Impacts, collisions, crashes, injury	- Traffic Management - Safe operation of light vehicles - Mobile powered plant - Loading and unloading operations
Chemical / Exposure	- Damaged asbestos containing materials - Pest extermination products - Petroleum products - Drilling compounds - Jointing compounds/glues	Effects from inhalation, ingestion, absorption of chemicals	- Hazardous Chemicals - Asbestos
Environmental	- Plant Operating (e.g. excavation, drilling, etc) - Excavation / drilling near underground	Noise pollution, air pollution, resource usage, spread of environmental pests, introduction	- Asbestos - Confined Spaces - Heat, cold, solar, ultraviolet and

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Hazard Type	Example	Risks	Contractor WHS Hazard Standard
	- utilities - Working in Aboriginal / European heritage areas - Working in areas with environmental significance - Public areas - Working at night	of weeds, soil contamination, aesthetic impact, erosion, pollution of waterways, waste disposal, site disturbance.	inclement weather
Manual Tasks	- Manual handling (lifting pit lids, etc) - Limited access / egress to work area - Cramped work areas - Hauling cable - Laying conduits	Injury	- Hazardous Manual Tasks - Loading and unloading operations
Noise	- Plant operating in the workarea - Railways - Roadways	Noise Induced Hearing Loss	Mobile Powered Plant
Confined Spaces	- Check the nature of possible contaminants and the possible route of escape - Submerged in Fibre splice pits - Tunnels - Manholes - Trenches and excavations	Injury / illness due to exposure to unsafe levels engulfment	- Confined Spaces - Trenching excavation - Work in Tunnels
4. Aerial Facilities			
Plant	- Elevating work platforms - Overhead powerlines	Impact injuries from striking supporting structures, electric shock, manual handling injuries, burns, crushing, lacerations and noise induced hearing loss	- Work at Heights - Work in the vicinity of power poles and overhead lines
Electrical	AC / DC Power distribution systems (i.e.	Electric shock, burns and fire	Work in the vicinity of power

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Hazard Type	Example	Risks	Contractor WHS Hazard Standard
	- overhead power cables) - Coaxial cable TV Network - Lightning strikes		- poles and overhead lines - Electrical Work
Gravitational	- Working at heights from EWPs - Working from ladders - Falling objects	Fall, trips & slips Injury through impact with person	- Ladders fixed and portable - Work at Heights
Radiation	- Working outdoors - Radio Frequency Radiation - Laser light	Burns, sickness, eye sight injury	- Heat, cold, solar, ultraviolet and inclement weather - Laser Safety - Electromagnetic Energy
Biological	- Sharps - Pests - Airborne contaminants - Animals (e.g. snakes, etc) - Birds and other wildlife nesting	Infections, diseases, stings and bites	Nil.
Psychosocial	Customer aggression	Injury or mental health illness	Remote & Isolated Work
Kinetic	- Traffic & Pedestrian management - Vehicles	Impacts, collisions, crashes, injury	- Traffic Management - Safe operation of light vehicles - Mobile powered plant - Loading and unloading operations
Environmental	Extreme heat or cold	Injury / illness	- Asbestos - Confined Spaces - Heat, cold, solar, ultraviolet and inclement weather
Manual Tasks	- Manual Handling - Access & egress to work area	Injury	- Hazardous Manual Tasks - Loading and unloading operations

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Hazard Type	Example	Risks	Contractor WHS Hazard Standard
Noise	Noise produced by plant / equipment used	Noise Induced Hearing Loss	Mobile Powered Plant