

GANZ Reticulated Gas - Competence Protocol GIP009 - Appendix 3		Version 3 - December 2021												
CoC No.	CoC Title & Permitted Activities	Pre-requisite Requirements	Supervision Required	Renewal Period	Reference	Knowledge and Skills	US Level	US Credits	US in Gas Qual?	US Standard Setting Body	US Reviewed?	Learning & Assessment Resources		Comments
Unique identifier for CoC Card	The type of work being undertaken and a description of the activities the holder is authorised to do or not do.		Refer GIP009 for more information.	How often reassessment is required.	Unique identifier for knowledge.	The training and assessment required to achieve the competency. This primarily includes unit standards. Alternatives are accepted where a clear alignment to the framework is proven.						Available?	Source	
1	Authorised Restricted Access (Distribution) Permits the holder to carry out: Specified work that does not affect the operation of the gas distribution assets such as meter readings, site inspection, painting, vegetation control, reinstatement works, site surveying and site housekeeping. These works must be authorised and approved by the asset operator. Specialist works such as steel welding, weld inspections, non-destructive testing etc. on the gas distribution assets while the site is under the supervision of a holder of a relevant CoC for the works being undertaken.	Holders can also demonstrate competence for the specified or specialist works being carried out.	Indirect	2 Yearly		Completion of an approved Distribution Network Induction Course.	NA	NA		NA	Review and update of current ARA training & Assessment Material Required	Yes		
2	Safety Induction Permits the holder to assist and work under the direct supervision at all times of a person who holds a relevant CoC for the works being undertaken. This CoC provides new entrants to the industry with the minimum basic safety skills to aid keeping safe within the work place while under direct supervision. It is anticipated that the holder of the Safety Induction will progress to the Safe Working CoC as soon as practicable. It is valid for a maximum of 2 years.	None	Direct	2 Yearly	497 17593 32105	DKO workplace health & safety Apply safe work practices Use PPE in a gas network	1 2 2	3 4 2	No No L3	Skills Skills MITO	NA NA Yes	Yes Yes Yes	PTE PTE MITO	PTE such as Vertical Horizonz or besafe PTE such as Vertical Horizonz or besafe Alternate 9631
3	Safe Working Permits the holder to assist and work under the direct supervision of a person who holds a relevant CoC for the works being undertaken. This CoC is a prerequisite for all other CoC's.	Safety Induction	Direct	2 Yearly	3271 6401 6402 18426 30265	Suppress fire with hand extinguishers Provide First Aid Provide basic life support Demonstrate knowledge of hazards associated with confined spaces Apply health and safety risk assessment to a job role	2 2 1 3 3	1 1 1 4 8	L3 No No L3 L3	Skills Skills Skills Skills Skills	NA NA NA NA NA	Yes Yes Yes Yes Yes	PTE PTE PTE PTE PTE	PTE such as Vertical Horizonz or besafe PTE such as Vertical Horizonz or besafe PTE such as Vertical Horizonz or besafe PTE such as Vertical Horizonz or besafe PTE such as Vertical Horizonz or besafe
4	Gas Foundation Permits the holder to assist and work under the indirect supervision of a person who holds a relevant CoC for the works being undertaken. The holder may also carry out additional tasks that they hold a relevant unit standard for as authorised by the asset operator but excludes carrying out any tasks that the holder does not hold a relevant unit standard for.	Safety Induction Safe Working	Indirect	2 Yearly	10995 11327 11328 12502 12507 17596 20877 20878 25510 30367 30370 30380 32040 32042	Draft information for as-built drawings for a gas network Respond to concerns/enquiries to industry operations Gain approvals/notifications for works Use pressure gauges and monitoring equipment Use hand held gas leakage detection equipment Demonstrate knowledge of safety observer responsibilities in the workplace DKO working safely under temp traffic management Assist with temporary traffic management Operate an atmospheric testing device to determine a suitable atmosphere exists to work safely DKO gas & risks & safety precautions for working with live gas DKO gas transmission pipelines & distribution networks Interpret & use gas terminology, signage, plans and drawings to identify assets in a gas network Collect and record gas metering data Describe gas metering equipment in a gas network	3 3 3 3 3 3 2 1 3 3 3 3 3 3	5 4 3 4 5 8 2 2 4 6 6 6 4 4	L3 L3 L3 L3 L3 L3 L3 L3 L3 L3 L3 L3 L3	MITO MITO MITO MITO MITO Skills Connexis Connexis Skills MITO MITO MITO MITO MITO	Yes Yes Yes Yes Yes NA NA NA Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	MITO MITO MITO MITO - Jan 22 MITO MITO - Jan 22 PTE PTE PTE MITO MITO MITO - Jan 22 MITO MITO	
5	Replace GMS < 25m³/hour Permits the holder to install or change a low capacity GMS up to 25m ³ /hour capacity. Includes disconnect and reconnect meters in accordance with GIP 001 Gas Industry Disconnection and Reconnection Protocol	Safety Induction Safe Working	Unsupervised	3 Yearly	11328 12502 12507 30367 30382 30383 32040 32041 32042	Gain approvals/notifications for works Use pressure gauges and monitoring equipment Use hand held gas leakage detection equipment DKO gas & risks and safety precautions for working with live gas Install & change low capacity gas measurement systems Restore supply and recommission a low capacity installation after an interruption. Collect and record gas metering data Demonstrate knowledge of standard gas pressure control equipment and metering stations Describe gas metering equipment in a gas network	3 3 3 3 4 4 3 3 3	3 4 5 6 8 10 4 8 3	L3 L3 L3 L3 L4 L4 L3 L4 L3	MITO MITO MITO MITO MITO MITO MITO MITO MITO	Yes Yes Yes Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes Yes Yes Yes	MITO MITO - Jan 22 MITO MITO MITO - Jan 22 MITO - Feb 22 MITO MITO - Jan 22 MITO	Replaced 12442, 12524 & 17690 Replaced 12510 and 23085 Replaced 19550 and 23089 Ex 23084 Based on 23088 Based on 12450

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												Available?	Source	
6	PE Pipelaying Only Permits the holder to install PE pipe, tracer wire and warning tape using open trench, open cut, thrust or drill methods. An additional endorsement is required to perform pipe jointing: E1: PE Pipe Jointing Electro fusion E2: PE Pipe Jointing Butt fusion This CoC does not permit the holder to carry out pressure testing, liveing or purging of any pipes or fittings or any jointing work on to any live pipe.	Safety Induction Safe Working	Unsupervised	3 Yearly	10995 10988 11328 20869 20877 20878 23086 25610 30380 31448 32035	Draft information for as built drawing in a gas network Insert PE pipe for a trenchless operation in a gas network Gain approvals/notifications for works DKO notifiable works and work permits typical of infrastructure work sites DKO working safely under temp traffic management Assist with temporary traffic management Lay a PE gas pipeline Demonstrate knowledge of polyethylene pipe, fittings and fusion jointing for a gas network Interpret & use gas terminology, signage, plans and drawings to identify assets in a gas network Operate and maintain small plant for infrastructure works Demonstrate and apply knowledge of excavation, backfill and compaction for a gas network	3 4 3 3 2 1 3 3 3 3 3	5 6 3 3 2 2 6 6 6 10 10	L3 L4 L3 L3 L3 L3 L3 L3 L3 L3	MITO MITO MITO Connexis Connexis Connexis MITO MITO MITO Connexis MITO	Yes Yes Yes NA NA NA Yes Yes Yes NA Yes	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	MITO MITO - Mar 22 MITO MITO PTE PTE MITO MITO MITO - Jan 22 MITO MITO	Renamed Or NZTA approved Traffic Controller Card Or NZTA approved Traffic Controller Card Replaced 9543, 10994, 11326
7	Construct PE Services Permits the holder to construct, connect, test, commission, decommission and disconnect PE Services. Includes install and change low capacity GMS. An additional endorsement is required to perform pipe jointing: E1: PE Pipe Jointing Electro fusion E2: PE Pipe Jointing Butt fusion	Safety Induction Safe Working Gas Foundation	Unsupervised	3 Yearly	10975 10981 10988 23086 25610 30382 31448 32035 32336 32332 32338	Squeeze off a polyethylene pipe in a gas network Fit mechanical couplings in a gas network Insert PE pipe for a trenchless operation in a gas network Lay a polyethylene gas pipeline Demonstrate knowledge of polyethylene pipe, fittings and fusion jointing for a gas network Install & change low capacity gas measurement systems Operate and maintain small plant for infrastructure works Demonstrate and apply knowledge of excavation, backfill and compaction for a gas network Connect, test, purge and commission a polyethylene (PE) service in a gas network Decommission and disconnect a gas main or service in a gas network Access a gas pipe inside a casing pipe in a gas network	4 3 4 3 3 4 3 3 4 4 4	6 4 6 6 6 8 10 10 8 6 5	L4 L3 L4 L3 L3 L4 L3 L4 L4 L4	MITO MITO MITO MITO MITO Connexis MITO MITO MITO MITO MITO	Yes Yes Yes Yes Yes Yes NA Yes New unit New unit New unit	Yes Yes Yes Yes Yes Yes Yes Yes No No Yes	MITO - Mar 22 MITO MITO - Mar 22 MITO MITO MITO - Jan 22 MITO - Feb 22 MITO Not yet started Not yet started MITO - Mar 22	Renamed Renamed Replaced 12510 and 23085 Based on 19547 Not yet started Not yet started
8	Construct PE Mains Permits the holder to construct, connect, test, commission, decommission and disconnect PE Mains using squeeze off or valve connections. The following additional specialist operations associated with PE Mains can only be carried out by personnel deemed competent by the asset operator: Bag Stop PE Stopple Personnel carrying out hydrostatic testing for PE Mains must hold the Hydrostatic Endorsement (E3) or be deemed competent by the asset operator.	Safety Induction Safe Working Gas Foundation Construct PE Services	Unsupervised	3 Yearly	30371 30374 30377 32335 32339	DKO flow stopping in a gas network Carry out a flow stopping operation using squeeze-offs Demonstrate knowledge of pigging Test, connect, purge and commission a polyethylene (PE) main in a gas network Internally clean a gas pipe in a gas network	3 4 3 4 4	4 10 4 12 6	L3 L4 L3 L4 L4	MITO MITO MITO MITO MITO	Yes Yes Yes New unit New unit	Yes No Yes No No	MITO - Mar 22 Not yet started MITO - Jan 22 Not yet started Not yet started	Replaced 25607 and 25611 Based on 19546 New unit
9	Construct Steel Mains & Services Permits the holder to construct, connect, test, commission, decommission and disconnect Steel Mains and Services using valve connections. The following additional specialist operations associated with Steel Mains can only be carried out by personnel deemed competent by the asset operator: Bag Stop Stopple Personnel carrying out the following activities must hold the appropriate endorsement or be deemed competent by the asset operator: E3: Hydrostatic Testing E4: Hot Tap Steel Pipe E5: Install CP Test Points	Safety Induction Safe Working Gas Foundation Construct PE Services Construct PE Mains	Unsupervised	3 Yearly	9550 10982 10984 10993 32036 32337	Perform pipe coating and wrapping on a steel pipeline Describe steel welding in a gas network Cut, thread, and join steel pipes in a gas network Use a Holiday detector on a steel gas pipe Demonstrate knowledge of cathodic protection and carry out a reading in a gas network Test, connect, purge and commission steel mains or services in a gas network	4 4 3 3 3 4	3 5 3 4 5 12	No No L3 No L3 No	MITO MITO MITO MITO MITO MITO	yes Yes Yes Yes Yes New unit	Yes Yes Yes Yes Yes N	MITO - Mar 22 MITO - Mar 22 MITO - Jan 22 MITO - Jan 22 MITO - Jan 22 Not yet started	Replaced 25607 and 25611 Based on 19546 Replaced 19546 and 19547
10	Standard Pressure Control Permits the holder to install, commission, maintain, fault-find and decommission standard pressure control installation. Includes Pressure Reducing Stations (PRS) and Gas Measurement Systems (GMS) and electronic flow correctors for single point of supply installations with 2-stage pressure reduction and installations with a meter bypass stream that is normally closed. The following installations are excluded: District Regulator Stations Twin Stream Configurations Active/Monitor Configurations	Safety Induction Safe Working Gas Foundation	Unsupervised	3 Yearly	5929 10984 12456 19555 19557 19560 30382 30383 32041	DKO hazardous areas and their electrical requirements Cut, thread, and join steel pipes in a gas network Install, commission, maintain electronic flow correctors Assemble, install, test, and commission a standard gas pressure control and metering station. Perform maintenance on standard gas pressure control and metering station. Troubleshoot and rectify faults on a standard gas pressure control and metering station. Install & change low capacity gas measurement systems Restore supply and recommission a low capacity installation after an interruption Demonstrate knowledge of standard gas pressure control equipment and metering stations	4 3 4 4 4 4 4 4 3	3 3 6 15 10 15 8 10 8	L4 L3 L4 L4 L4 L4 L4 L4 L4	Skills MITO MITO MITO MITO MITO MITO MITO MITO MITO	NA Yes Yes Yes Yes Yes Yes Yes Yes	Yes Yes No No No No Yes Yes Yes	PTE MITO - Jan 22 Not yet started Not yet started Not yet started Not yet started MITO - Jan 22 MITO - Feb 22 MITO - Jan 22	Unit is expiring - replacement required. Changed to Level 4 Replaced 12510 and 23085 Replaced 19550 and 23089 Based on 23088

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11	Complex Pressure Control Permits the holder to install, commission, maintain, fault-find and decommission all Distribution pressure control installations with an inlet pressure up to 2,000kpa.	Safety Induction Safe Working Gas Foundation Standard Pressure Control	Unsupervised	3 Yearly	30384 30385	Assemble, install, test, and commission a complex gas pressure control and metering station. Maintain, troubleshoot and rectify faults on a complex gas pressure control and metering station.	5 5	30 30	No No	MITO MITO	Yes Yes	No No	Not yet started Not yet started	Replaced 19554 and 19556 and incorporates 23090 Replaced 195548 and 19559
12	Network Leakage Response Permits the holder to act as first responder to assess, contain and stabilise leakage from reticulated gas networks by making a temporary repair. Temporary repair refers to making safe in an emergency situation. Examples of this include but are not limited to isolating a regulator stream, clamping, crimping, and wrapping. The holder may only carry out permanent repairs if they hold a CoC relevant to the repair work required.	Safety Induction Safe Working Gas Foundation	Unsupervised	3 Yearly	10975 10981 12503 12526 19549 19552 25610 30371 30379 30383 31448 32035 32334	Squeeze off a polyethylene pipe in a gas network Fit mechanical couplings in a gas network Respond to, locate and classify gas escapes in a gas network Use fresh air distance breathing apparatus in a gas network Make temporary repairs of gas escapes in a gas network Stabilise a gas emergency site and deal with a gas-filled building Demonstrate knowledge of polyethylene pipe, fittings and fusion jointing for a gas network DKO flow stopping operations in a gas network Locate pipes and cables and advise on third party works in the vicinity of a gas pipeline Restore supply and recommission a low capacity installation after an interruption Operate and maintain small plant for infrastructure works Demonstrate and apply knowledge of excavation, backfill and compaction for a gas network Implement controls to work in a hazardous gas atmosphere	4 3 4 3 4 4 3 3 4 4 3 3 4	6 4 15 3 10 20 4 4 6 10 10 10	L4 L3 No L3 No No L3 L3 L4 L4 L3 L4	MITO MITO MITO MITO MITO MITO MITO MITO MITO Connexis MITO MITO	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	Yes Yes No Yes No No Yes Yes No Yes Yes No	MITO - Mar 22 MITO Not yet started MITO Not yet started Not yet started MITO MITO MITO - Mar 22 Not yet started MITO - Feb 22 MITO MITO Not yet started	Replaced 25607 and 25611 Replaced 9548, 10992 and 19551 Replaced 19550 and 23089 Change to Level 4 New unit
13	Gas Fitter - GMS Change, Disconnect, and/or Reconnect Permits the holder to change, disconnect/reconnect GMS with a capacity no greater than 25 m3/h, and includes restoring supply.	Licensed Gas Fitter	Unsupervised	3 Yearly	30370 30382 30383 32040 32041 32042	DKO gas pipelines & network Install & change low capacity gas measurement systems Restore supply and recommission a low capacity installation after an interruption Collect and record gas metering data Demonstrate knowledge of standard gas pressure control equipment and metering stations Describe gas metering equipment in a gas network	3 4 4 3 3 3	6 8 10 4 8 3	L3 L4 L4 L3 L4 L3	MITO MITO MITO MITO MITO MITO	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	MITO MITO - Jan 22 MITO - Feb 22 MITO MITO - Jan 22 MITO	Replaced 12520, 12521, 19541, 19542 Replaced 12510 and 23085 Replaced 19550 and 23089 Ex 23084 Based on 23088 Based on 12450
14	Gas Fitter – Gas Leakage Response on GMS <25m3/hr Permits the holder to provide first line emergency response for the location and repair of gas leakage on GMS equipment with a capacity no greater than 25 m3/h.	Licensed Gas Fitter	Unsupervised	3 Yearly	12507 19552 30370 30382 30383 32040 32041 32042	Use hand held gas leakage detection equipment Stabilise a gas emergency site and deal with a gas-filled building DKO gas pipelines & network Install & change low capacity gas measurement systems Restore supply and recommission a low capacity installation after an interruption Collect and record gas metering data Demonstrate knowledge of standard gas pressure control equipment and metering stations Describe gas metering equipment in a gas network	3 4 3 4 4 3 3 3	5 20 6 8 10 4 8 3	L3 No L3 L4 L4 L3 L4 L3	MITO MITO MITO MITO MITO MITO MITO MITO	Yes Yes Yes Yes Yes Yes Yes Yes	Yes No Yes Yes Yes Yes Yes Yes	MITO Not yet started MITO MITO - Jan 22 MITO - Feb 22 MITO MITO - Jan 22 MITO	Replaced 12520, 12521, 19541, 19542 Replaced 12510 and 23085 Replaced 19550 and 23089 Ex 23084 Based on 23088 Based on 12450
15	Gas Fitter – Disconnect or reconnect a GMS <12m3/hr for Commercial Reasons Permits the holder to disconnect or reconnect a GMS with a capacity no greater than 12 m3/h. Includes: 1. Temporary disconnection - turn off gas inlet valve, perform let-by test, tag valve, insert rubber bung in the outlet cap or plug the inlet valve. 2. Commercial reconnection – restore supply at the inlet valve, perform let-by test and pressure drop test, purge the installation, check all appliances and relight pilot lights. No changes to the gas meter or regulator are allowed.	Licensed Gas Fitter	Unsupervised	3 Yearly	32040 32042 32749	Collect and record gas metering data Describe gas metering equipment in a gas network Isolate and disconnect a low-capacity gas measurement system (GMS) in a gas network	3 3 3	4 3 4	L3 L3 No	MITO MITO MITO	Yes Yes Yes	Yes Yes Yes	MITO MITO MITO - Mar 22	Ex 23084 Based on 12450

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												Available?	Source		
E	CoC Endorsements														
	Endorsements to certain CoC's permit the holder to carry out specified tasks														
E1	PE Pipe Jointing - Electro Fusion														
	Perform electrofusion jointing on PE pipe for a network.	PE Pipelaying or Gas Foundation	Unsupervised	3 Yearly	10980	Perform electrofusion jointing on PE pipe for a network.	4	6	L4	MITO	Yes	Yes	MITO - Jan 22		
E2	PE Pipe Jointing - Butt Fusion														
	Perform butt fusion jointing on PE pipe for a network	PE Pipelaying or Gas Foundation	Unsupervised	3 Yearly	10987	Perform butt fusion jointing on PE pipe for a network	4	6	L4	MITO	Yes	No	Not yet started		
E3	Hydrostatic Testing														
	Perform hydrostatic tests on gas mains and services	Construct PE Mains or Construct Steel Mains & Services	Unsupervised	3 Yearly	10972	Perform hydrostatic tests on gas mains and services	5	7	No	MITO	No	No	Not yet started		
E4	Hot Tap Steel Pipe														
	Hot tap, test, and drill a steel pipe in a gas network	Construct Steel Mains & Services	Unsupervised	3 Yearly	10983	Hot tap, test, and drill a steel pipe in a gas network	5	12	No	MITO	No	No	Not yet started		
E5	Install CP Test Points														
	Install and test CP test points in a gas network	Construct Steel Mains & Services	Unsupervised	3 Yearly	12509	Install and test CP test points in a gas network	5	7	No	MITO	No	No	Not yet started		
E6	Odorant Survey														
	Test for odour level and concentration in a gas network	Gas Foundation	Unsupervised	3 Yearly (Annual Panel Test)	20590	Test for odour level and concentration	4	3	L4	MITO	Yes	Yes	MITO - Jan 22		
E7	Cathodic Protection Survey														
	Carry out cathodic protection system monitoring.	Gas Foundation	Unsupervised	3 Yearly	32036 32037	Demonstrate knowledge of cathodic protection and carry out a reading in a gas network Carry out cathodic protection system monitoring in a gas network	3 4	5 6	L3 No	MITO MITO	Yes Yes	Yes Yes	MITO - Jan 22 MITO - Mar 22	Based on 9575 Based on 9576	
E8	Mark-outs & Standovers														
	Locate pipes and cables and advise on third party works in the vicinity of a gas distribution network.	Gas Foundation	Unsupervised	3 Yearly	30379	Locate pipes and cables and advise on third party works in the vicinity of a gas pipeline	4	8	L4	MITO	Yes	No	Not yet started	Replaced 9548, 10992 and 19551.	
E9	Valve Maintenance														
	Check and maintain in-line valves in a gas pipeline. Excludes actuated valves and low-pressure trip mechanisms	Gas Foundation	Unsupervised	3 Yearly	12518	Check and maintain in-line valves in a gas pipeline	4	3	No	MITO	Yes	Yes	MITO - Jan 22		
E10	Leakage Survey (Walking)														
	Perform and record walking leakage surveys	Gas Foundation	Unsupervised	3 Yearly	32330	Perform a walking leakage survey in a gas network	4	4	No	MITO	Yes	Yes	MITO - Mar 22	Replaced 12504	
E11	Leakage Survey (Vehicle)														
	Perform and record vehicle leakage surveys	Gas Foundation	Unsupervised	3 Yearly	32331	Perform a vehicle leakage survey in a gas network	4	4	No	MITO	Yes	Yes	MITO - Jan 22	Replaced 12505	
E12	Issue Work Permits														
	Issue worksite specific work permits	Gas Foundation	Unsupervised	3 Yearly	17590	Issue worksite specific work permits	3	6	L4	Skills	NA	Yes	PTE		