#### Field Mechanical Engineering

#### Review of Refrigeration and Air Conditioning unit standard 19666

Subfield	Domain	ID
Mechanical Engineering	Refrigeration and Air	19666
	Conditioning	

Competenz has completed the review of the unit standard listed above.

#### Date new versions published

## April 2011

#### Planned review date

#### December 2016

#### Summary

Since the previous review of this standard, there has been a growing awareness of global warming. A new Australasian code for the handling of refrigerants was published in 2007, and new licensing procedures are being developed for the storing and handling of refrigerant gases in New Zealand. This has necessitated an update of this standard which is widely used by the Refrigeration and Air Conditioning industry. Consultation involved the Institute of Refrigeration, Heating and Air Conditioning Engineers (IRHACE), providers, and industry representatives.

#### Main changes

- Title was amended to accurately reflect the updated content.
- Explanatory notes were updated including definitions and references to legislation.
- Global warming and identification and storage of synthetic greenhouse gases outcomes were added.
- Ranges were adjusted.

### Impact on registered qualifications

Key to type of impact		
Affected	The qualification lists a reviewed classification (domain or subfield) in an elective set	
	The qualification lists a standard that has changes to level or credits	
	The qualification lists a C or D category standard	
Not materially affected	The qualification lists a standard that has a new title	
	The qualification lists a standard that has a new classification	

The following Competenz qualifications are not materially affected by the outcome of this review and will be updated when they are reviewed in 2011 and 2012 respectively.

Ref	Qualification Title	ID
0130	National Certificate in Refrigeration and Air Conditioning	19666
	(Level 4)	
1242	National Certificate in Split System Air Conditioning (Level 3)	19666

The following table identifies NZMITO qualifications that are not materially affected by the outcome of this review. NZMITO has been advised that the qualifications require revision.

Ref	Qualification Title	ID
1413	National Certificate in Motor Industry (Automotive Body) with strands in Coachbuilding, Collision Repair, Dismantling and Recycling, Refinishing, and Vehicle Detailing	19666
1415	National Certificate in Motor Industry (Automotive Specialist Engineering) (Level 3) with strands in Automotive Heating, Ventilation, and Air Conditioning; Automotive Machining; Diesel Fuel Injection; and Motorsport	19666
1420	National Certificate in Motor Industry (Vehicle Servicing) with strands in Brake and Clutch, Exhaust Systems, Radiator Repair, Steering and Suspension, Tyres, Underbody and General Service, and Vehicle Security, and with an optional strand in Heavy Vehicle	19666
1421	National Certificate in Motor Industry (Automotive Electrical and Mechanical Engineering) (Level 3) with strands in Electrical and Electronics, Light Vehicle, Motorcycle, Outdoor Power Equipment, and Trailer Boat Systems	19666
1445	National Certificate in Motor Industry (Automotive Heavy Engineering) (Level 3) with strands in Agricultural Equipment, Materials Handling Equipment, Plant and Equipment, and Road Transport	19666

# Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

Ke	y to review category
Α	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
в	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID
Б	and a new version number
С	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

# Engineering and Technology > Mechanical Engineering > Refrigeration and Air Conditioning

ID	Title	Level	Credit	Review Category
19666	Demonstrate knowledge of ozone and how it relates to the refrigeration and air conditioning industry Demonstrate knowledge of ozone depletion and global warming, and their significance to the RAC industry	3	3	В