



Light Utility Vehicle (LUV) Technical Document

(Supporting the LUV One Page SOP, docCM-673790)

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1. Purpose

Using Light Utility Vehicles (LUV) is a fundamental part of Department of Conservation (DOC) work. This technical document must be used in conjunction with the LUV Standard Operating Procedure (SOP) (DOC-673790). It provides a clear set of rules around the use of LUVs so that all Department workers (i.e. staff, contractors and volunteers) can use LUVs safely.

A LUV is a lightweight agricultural vehicle which has some or all of the following features:

- carry tray
- rollover protection structure (ROPS)
- a minimum of four wheels
- automatic transmission
- a steering wheel and differential

The Department has split the use of LUVs into two levels of competency;

1. Probation (or learner) level operator. People who are beginning in LUV use (including prior to attending formal training) and are gaining competency; their use is limited to conditions set by the Manager and they *must be under direct supervision from an experienced operator at all times*.

2. Fully qualified operator. A worker who has gained the qualifications and competency to operate a LUV in the conditions set out by the Manager or Supervisor.

This technical document has several other important components;

- Identification of 'go' and 'no go' areas or tasks and conditions for LUV use by each Operations Manager (known high risk places, known high risk tasks, steep, wet, unstable, etc.).
- The emphasis on team leadership. All members of the team should help one another to make good and safe judgements about the way in which they work and this is lead by a designated team leader.

2.Roles and responsibilities

Managers and Directors are authorised to approve local variation from SOP and technical document requirements and are accountable for those decisions. They are required to use their professional judgement and seek advice or escalate when in doubt. All decisions should be documented. It is expected that variations from requirements will be the exception rather than the norm, and that legal (i.e. legislation and judge made laws), and health and safety requirements are compulsory. Common sense should prevail in the case of genuinely exceptional or emergency field situations.

A worker may be required to operate a LUV as part of their role in the DOC. An employee under the guidance of an experienced operator can be assisted through training, supervision and mentoring to gain the necessary skills and knowledge required to be competent at either the base or high level of work.

ROLE	RESPONSIBILITY
Purchase a fit for purpose LUV	Operations Manager
Register/license all LUVs correctly	National Fleet Manager
Operators are supplied with appropriate personal safety equipment (PPE)	Operations Manager/Supervisor
Ensure equipment is maintained according to manufacturer's instructions	Operations Manager/Supervisor
Ensure compliance with the standard operating procedure	Operations Manager/Supervisor
Ensure competency of operator (including external training and assessment)	Operations Manager Supervisor
Approve competency in DOCLearn	Operations Manager
Confirm manual and SOP are available	Operations Manager
Confirm route risk assessment identifying 'go'/'no go' areas in each district	Operations Manager
Ensure team leader confirmed and JSA undertaken	Supervisor

Hold a Class 1 driver licence	Operator
Comply with requirements of the competency including attending an external training course and completing assessments	Operator
Wear all required personal protective equipment (PPE)	Operator
Know and comply with requirements of the SOP	Operator
Report/tag out/do not use faulty equipment	Operator
Ensure familiarity with the operator manual and video for the LUV you are operating	Operator
Perform daily check before use	Operator
Carry out the recommended maintenance of LUVs	Operator
Follow manufacturer's specification for the safe use of LUVs for maximum load capacity, safe operating speeds and carriage of passengers	Operator
Additional items added to the LUV must be to manufacturers specifications and have Manager approval	Operations Manager
Enter training records and assessments into DOCLearn	Office Administrator

3.Competency

3.1 Qualifications

Any LUV operator whether an employee, contractor or volunteer must be approved as competent by the Operations Manager. The Operations Manager may seek advice from a colleague with a greater level of experience if required. The competency requirements (includes all side by sides and other LUV's such as Mule, Argo and Gator) are set out below.

3.1.1 Prerequisites

Any worker who operates a LUV must have;

- A current full Class 1 drivers licence and
- A current first aid certificate with the following New Zealand Qualifications Authority (NZQA) unit standards 6401, 6402 or 26551, 26552 and 6400

3.1.2 Training

A NZQA recognised training course covering all of the following unit standards;

- 24556 Demonstrate knowledge of the safe operation of a light utility vehicle (LUV)
- 24553 Drive a light utility vehicle (LUV) on flat terrain
- 24560 Drive a light utility vehicle (LUV) with trailed equipment
- 24562 Drive a light utility vehicle (LUV) with mounted equipment or a load
- 24558 Drive a light utility vehicle (LUV) on hilly terrain

Approved training providers

Approved providers can be accessed on the [NZ Qualifications Authority](#) website. Managers are to ensure the training provider as a minimum is covering the above units. It is essential that training providers understand how LUVs are used in conditions likely to be faced by the workers. Therefore the provider should be briefed, and the course tailored to Departmental needs.

3.1.3 Assessment

Assessment ([docCM-2687347](#)) is required before operators can be approved as competent.

Operators are required to be assessed on the LUV they will be operating. If the district has several different LUV's with different characteristics the operator must be assessed on each of them.

3.2 Probation level operator

Probation level users are at the beginning of their LUV use and are gaining experience, therefore it is acceptable prior to being formally trained, that an individual receives instruction under close and direct supervision of an experienced LUV operator.

Some training providers require staff to log hours (often 10) on a LUV before signing off on their training. In these cases the individual will be a probation level operator until completion of these hours, the NZQA certification is confirmed, and the DOC competency assessment is completed.

Steps for a probation level operator:

- Full drivers licence
- First aid certificate
- Operations Manager approves probation level operator (with conditions)
- May use a LUV under direct supervision (i.e. sitting alongside the operator) while getting instruction and formal qualifications

3.3 Fully qualified operator

The Operations Manager is to approve the LUV operator.

Steps to gain competency;

- Complete NZQA LUV unit standards listed above
- Complete an operator assessment to determine competency
- Manager approves competency in DOCLearn
- While the individual may be fully qualified, the Operations Manager may apply conditions to the operation of the LUV.

3.4 DOCLearn

All training and competencies are to be recorded in DOCLearn. There are two HSE LUV competencies in DOCLearn;

1. Probation level operator, and
2. Full level operator

The probation level operator will be recorded in DOCLearn as 'Not yet competent - under supervision' Once they complete the NZQA training and assessment and their manager is satisfied they are competent they can then gain the full level operator competency.

Recording contractor and volunteer competencies

Record this information as you have for their other competencies. Casual staff records are also to be entered into DOCLearn.

4. Work planning

4.1 Purchase

Selecting the right LUV and equipment is the essential first step in the process.

All LUVs are to be registered as the legal definition of a road includes all of the Public Conservation Land.

4.2 Confirm where use is acceptable

‘Go’ and ‘No Go’ Areas in each District

The Operations Manager is to ensure that Go and No Go areas are identified in each District. This can be identified through either of two means:

- local controls in Health and Safety plans are established that determine where LUVs can and cannot be used within their District, and/or
- use of the Go and No Go area template ([docCM-2727254.](#))
 - Either way, they must specify locations or conditions where LUVs are permitted to go and where they are specifically not permitted to go.

The default position is that if an LUV is not specifically permitted to be used in a certain place or for a particular purpose then it cannot be used. The purpose of the no go list is for staff to be very clear on where an LUV may or may not be used.

The factors that must be considered in mapping where these can be used are:

- The conditions in this Technical document;
- Guidance from the LUV operating manual;
- Formed tracks and roads;
- Steepness of track or road;
- Ground conditions;
- Traversing of slopes generally to be avoided;
- River crossings
- Tasks being carried out

A statement might also be required that if certain conditions cannot be met then LUV use is not permitted.

Tasks and locations that have a high risk must be included in safety plans in Risk Manager.

An annual review is required for the Go and No Go lists for each District, this should be recorded in Risk Manager.

4.3 Pre-trip

- Appoint a team leader with suitable experience for the type of work

- Ensure a safety plan recorded in Risk Manager is in place for work being carried out
- Review the 'go' and 'no go' area criteria in Risk Manager and ensure it is met
- Ensure relevant work or project intentions are held with the office intention system
- Ensure all LUV operators are competent for the required work
- Select the right LUV and equipment (contact the Fleet Manager)
- Complete a prestart check according to manufacturer's instructions, including checking the tyre pressure and brakes are fully operational. Also check registration
- Check maps, weather conditions and plan the safest route
- Always check the weather forecast as this has the most potential to change the traction environment

Loading and Unloading a LUV

Loading and unloading a LUV is hazardous. *While a dedicated trailer is preferred, loading onto the back of a fit for purpose Ute is acceptable.*

The following guidelines apply when loading a LUV on a 4WD/Ute or trailer:

- Always plan and prepare for loading and unloading the LUV
- Use properly designed ramps - galvanised/alloy (secured to the deck by hooks and to the ground by spurs)
- Find the most suitable and safe spot available when unloading and loading a LUV
- Ensure that the loading angle is not too steep (look for bank, or hollow in the ground, or similar)
- Careful use of throttle as appropriate
- Placing the LUV sideways on the 4WD may be appropriate in many circumstances (e.g. double cab)
- Make sure the anchor points are strong enough to secure the LUV, e.g. well-side Toyota Hilux points are only rated to 30kg and are not strong enough to safely anchor the LUV
- Use heavy duty tie downs that can be easily tightened to take the bounce of the vehicle's suspension, *the bounce must be removed* to prevent the tie downs from falling off or loosening over bumps
- Secure ramps to the trailer/truck
- Each situation is to be assessed on its merits.

4.4 On-site

The team leader will undertake a daily hazard briefing through the use of Job Safety Analysis (JSA) with LUV operators and other staff involved in the work.

- Where possible use formal roads or tracks
- The legal road limit for an LUV is 30 kph.
- Avoid excessively steep hills and avoid crossing the side of any hill and operate within the constraints of the 'go' – 'no go' areas.
- Never operate the vehicle in fast flowing water or water that exceeds the floor level
- Slow down, verify tyre pressure and use extra caution when operating in unfamiliar or rough terrain, operating over obstacles, climbing an incline
-

Towing trailed equipment

Stay within the gross towing weight recommendations from the manufacturer in the manual. Display the limits on the LUV.

Passengers must not be transported in trailers.

River/water crossings

Careful assessment of crossing waterways is recommended. Don't take chances, if in doubt stay out!

- Check the depth of water – get off the vehicle and walk the crossing first. Don't go any deeper than the floor of the LUV.
- If the river is too swift to walk across it will be too swift to cross on a LUV safely. (Toss a small stick in the river; follow it downstream, if you can't keep up with the stick by maintaining a steady walk, the river is too swift to cross!).
- Check for hazards at your entry and exit points and downstream prior to entering the river – tree roots, boulders, channels etc. Factor in what could happen if you were carried downstream from your original crossing point and avoid the possibility of bringing dangerous hazards into play.
- Cross on a downstream angle whenever possible (avoid upstream crossings unless shallow), double the angle of entry into the river to twice that you would normally use for a 4WD.
- Always have a Plan B i.e. if the river gets too big make sure you are able to run out on the same side as you entered the river, further downstream (have an escape route).
- Unclip your seatbelt for a quick exit. Then buckle up again after crossing
- If all turns to custard preserve your life, before the LUV, they can be replaced, there is only one of you!

If a LUV gets drowned in a water crossing, do not try and start the engine if possible, transport the LUV to your servicing agent for repair.

Steep Terrain

Driving on steep terrain refers to activities where LUVs are being driven up or down steep ground and does not include using tracks that gradually zigzag up a hill.

When operating on steep terrain ensure:

- the LUV has the stability required for the steepness of terrain, refer to manufacturer recommendations
- routes or tracks do not include traversing side slopes
- sufficient spacing between multiple LUVs so that they do not interfere with each other's driving or expose each other to impact from their LUVs in the case of an incident
- activities are within the ability of the operator who must be fully competent — traversing is a particularly challenging skill.
 - Post Trip
 - Turn off ignition and remove keys
 - Store keys in a separate location
 - Clean and refuel
 - Report any safety incidents or near misses to the Operations Manager and record in Risk Manager
 - Report/tag out/do not use faulty equipment, organize for any maintenance required
 - Review work completed including; a discussion of how the work went, improvements that could be made and any training needs or opportunities
 - After any incident have a qualified service dealer inspect the entire machine for possible damage.

4.5 Damage and maintenance

Damage

Damage is to be reported to the Operations Manager, keys need to be removed from the key storage location, and a notice attached to the LUV until the problem has been repaired.

Follow the manufacturer's recommended maintenance plan for all servicing and repairs. Any work is to be carried out by a qualified service dealer.

Following an LUV rollover or tip on its side, in addition to a mechanical check, there also needs to be a structural check of the rollover protection carried out by an authorised dealership for the particular LUV. It is likely that the ROPS will need to be replaced following a rollover or tip-on-side event.

Maintenance and WOF exemption

The Department has exemption from Waka Kotahi for a Warrant of Fitness – see exemption [DOC-7308803](#). The LUV must be registered to the Department of Conservation and MUST be maintained to a warrant of fitness standard at all times. A copy of this exemption ([DOC-7308803](#)) must be carried with the vehicle at all times and produced for enforcement officers and vehicle inspectors. All conditions of the exemption must be met when operating the LUV, including routine maintenance.

Other conditions of use

1. The vehicles must only be used during the hours of daylight and when atmospheric conditions allow 200 meters of clear visibility
Note: If night work is necessary then the LUV must have lights.
2. The vehicles must not be driven at a speed greater than 30 kph on a public road and must not operate for a distance greater than six kilometres, other than department of conservation land maintenance areas; and
3. No passengers are to be carried on the vehicles unless it is specifically designed for the purpose of carrying passengers and fitted with the manufacturer's original equipment seatbelts; and
4. These vehicles must be registered to the Department of Conservation and MUST be maintained to a warrant of fitness standard at all times; and
5. A copy of this exemption ([DOC-7308803](#)) must be carried with the vehicle at all times and produced for enforcement officers and vehicle inspectors.

5. Equipment

5.1 Personal protective equipment



Personal protective equipment applies to the operator and passengers in the LUV.

Helmets

Helmets (with chin strap) must be:

- Worn by all operators and passengers
- An approved safety helmet NZS8600:2002
- Disposed of as per manufacturers specifications (generally 5 years)



Eye protection

Eye protection is required and can be a full-face shield, goggles or glasses. Optional if the LUV has an adequate windshield.



Boots

Always wear boots that are:

- Over the ankle and low healed
- Tightly laced boots (or strong footwear that support the ankle)
- Made with slip-resistant materials on the soles and heels



Seatbelt

Always wear a seatbelt except when crossing bodies of water.



Hearing protection

Hearing protection is recommended for particularly noisy LUVs (e.g. Honda Pioneer with noise drumming through the alloy tray)

5.2 Additional equipment

The following equipment items must be carried in the LUVs:

- Mobile phone/radio/EPIRB
- Personal first aid kit
- Fire extinguisher can be fitted in certain circumstances (e.g. where fire risk exists)

Any additional fuel must be carried in an approved container (see Flammable Liquids SOP).

Equipment added to a LUV must be within manufacturers specifications and have manager approval.

Where side netting is fitted it must be used.

6.Related documents

Light Utility Vehicle (LUV) One Page SOP ([docCM-673790](#))

Operator assessment ([docCM-2687347](#))

‘Go’ and ‘No Go’ areas ([docCM-2727524](#))

Waka Kotahi WOF exemption ([DOC-7308803](#))

About this document

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Amendments

Amendment date	Amendment details	docDM version	Amended by
5 April 2016	Hearing protection		Mike Massaar
26 November 2019	Require annual review of Go No-Go locations		Andy Roberts
14 July 2020	Hand over from Ops to h&s team		Mike Massaar
8 May 2023	WOF exemption		Mike Massaar
1 July 2023	ROPS check post incident		Mike Massaar
19 Oct 2023	WOF exemption updated		Pam McDonald