LONDON FIRE BRIGADE

Hose layer unit (HLU)

New policy number:	**749**
Old instruction number:	**PN189**
Issue date:	**4 April 2011**
Reviewed as current:	**18 June 2014**
Owner:	**Head of Operational Policy**
Responsible work team:	**Operational Tactics**

Contents

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1 Introduction

1.1 This policy gives a brief description of the Hose Layer Unit (HLU), its operational role and use at incidents.

1.2 More detailed information on user specification and operation can be found in the vehicle handbook.

2 Description

2.1 The HLU is a 16 tonnes vehicle which supports front line appliances by providing large capacity (90mm) hose lines over long distances to supply water to or from the fireground.

2.2 Each HLU carries up to 4km of hose in two hose pods providing up to 2km of twinned hose or a single line of 4 km.

2.3 It incorporates the Hytrans hose recovery system which enables hose to be mechanically recovered.

2.4 Four HLUs are strategically placed within London and are alternately crewed with one HLU trained driver.

3 Mobilising

3.1 The HLU will be mobilised in accordance with Policy number 412 – 'Mobilising policy' or at the request of the Incident Commander (IC).

3.2 Whenever a HLU is requested, a Bulk Media Advisor (BMA) will also be mobilised to provide advice and guidance to the IC regarding the provision of water and other resources available. Note that if the HLU is mobilised as part of a PDA then the BMA will not be mobilised and the IC will need to request their attendance if required.

3.3 During deployment and retrieval of hose the HLU will require the assistance of additional crews see paragraph 4.1 below.

3.4 The HLU will come off the run if the Hytrans mechanical recovery system is defective or if the amount of hose available falls below 600m (i.e.20 lengths in total).

3.5 Whenever the HLU is off the run and returned to the vehicle and equipment contractor for service or repair the ancillary equipment is to be removed from the vehicle and placed on reserve HLU. The 90mm flaked hose remains with the HLU.

4 Operational use

Deployment

4.1 The HLU driver will require the assistance of a minimum crew of four in laying the hose, deploying equipment and turning on the hydrant. The IC must take this into consideration when calculating resources.

4.2 When requesting a HLU the IC should consider whether the HLU and pump crew should proceed to a rendezvous point (RVP) to connect to a water supply or proceed to the incident ground.

4.3 If it is decided that HLU and pump crew are to proceed directly to an RVP, the IC must inform Control so that those resources can be ordered to proceed directly.

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4.4 On arrival at such an RVP, HLU driver and pump crew must contact control and book status 3 and request that this information is passed to the Command Unit (CU) or nominated Incident Command Pump (ICP) as appropriate.

4.5 Once HLU and pump crew have completed the hose laying task they must report directly to CU or ICP and "book in".

4.6 All hose must be laid safely and not cause a dangerous obstruction in the roadway. The HLU is equipped with hose bridges, signage and lighting to assist crews in ensuring this is carried out effectively.

4.7 One crew member will observe the hose deployment using the on-board monitor, ordering the driver to stop if the hose gets caught up or is causing a dangerous obstruction in the roadway.

4.8 The route from the water supply to the incident ground should be pre-planned by the IC and agreed with the HLU driver. When ready to deploy, one length of hose should be pulled from each hose box ready to connect to the water supply. Note: this must **not** be connected to the water supply before the HLU has finished laying out its hose as there is the potential to damage the hydrant if the hose becomes snagged during laying.

4.9 Whilst the HLU is capable of deploying hose at speeds of up to 30 mph the HLU must take into account the surrounding terrain and other vehicles and pedestrians along the route when calculating a safe speed.

4.10 Once hose is deployed safely the IC will give the order for "water on".

4.11 Following hose deployment a message should be sent to Control giving the call sign of HLU(s) which have laid out hose, the amount of hose laid out and the number of pumps involved in a water relay.

Retrieval

4.12 Except when the vehicle is off the run the same HLU which deployed hose must be used to carry out the recovery. If the vehicle has been removed from operations then the reserve vehicle should be used for hose retrieval.

4.13 In addition to the HLU driver the minimum personnel required to undertake hose retrieval is two crew members trained in hose recovery to work in the hose pod and three non- trained personnel to monitor the recovery process and to manage hose.

4.14 HLU hose is to be cleaned and tested prior to retrieval and to supervise this essential work a BMA will also be mobilised. Defective lengths must be marked and removed by an Operational Support Unit (OSU) to Technical rescue/hose workshop, Croydon. The advice of a Hazardous Materials and Environmental Protection Officer (HMEPO) must be requested if there is any concern regarding the nature of any contaminant.

4.15 It must be noted that 90mm HLU hose requires 2 person lift for safe manual handling operations and the IC will need to take this into account if hose is to be recovered in any way other than by the mechanical system.

4.16 The decision when to start hose retrieval including inspection and cleaning should form part of the planning cycle of the Decision Making Model and where possible hose retrieval should be carried out during hours of daylight. The following message should be sent as early as possible to Control:

"Request (HLU call sign) and hose recovery personnel to carry out retrieval of XX number of lengths of hose at XXXXhrs".

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Control will arrange for the HLU, hose recovery personnel and BMA to attend.

4.17 IC's should take into account the strenuous nature of carrying out hose recovery and ensure sufficient personnel are ordered to allow adequate rest breaks.

4.18 Minimum PPE for hose recovery in hose pod is safety helmet, fire tunic, leggings fire boots and fire gloves. The fire tunic may be removed at the discretion of the IC depending on weather conditions and work activity.

5 Care and maintenance of equipment

5.1 Before hose is made up from the incident or exercise ground, it will be necessary to remove any contaminants that pose a risk to personnel or equipment.

5.2 In the majority of cases washing with an appliance hose reel and use of a bass broom will be sufficient, however, if there is any doubt as to the level or nature of contamination then the IC will seek advice from HMEPO or the Brigade scientific advisor prior to commencement of cleaning and making up the hose.

5.3 If there are a number of lengths that require specialist removal and cleaning, these should be disconnected from the hose line and the remainder of the hose recovered mechanically.

5.4 A note must be made of the number of lengths removed and a message sent from the IC to control stating the number of lengths removed.

5.5 All delivery and soft suction hose is subject to a testing regime through Technical Rescue/Hose workshop. Outside of this regime, hose will need to be tested prior to making up from the incident or exercise ground.

5.6 Personnel will be required to "walk" the hose line and identify any damaged or defective lengths.

5.7 These lengths will be removed and sent to Technical Rescue/Hose workshop, Croydon for repair using OSU.

6 Policies affected

6.1 This policy has superseded Policy number 139 – Hose layer unit (HLU) which has hereby been cancelled.

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Appendix 1 - Hose laying unit

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Appendix 2 - Inventory

Cab

Quantity	Description
1	Geographia
1	Nominal roll board
1	Multitone pager
1	Reflective Jerkin
1	Vehicle Handbook
1	Operators manual
1	First aid kit
1	9L Foam extinguisher (stored externally)

Nearside front through locker

Quantity	Description
2	PPE stowage boxes including blue safety helmet X4
12	Tildawn amber lamps
4	Storz spanners (T type)
2	Hydrant key and bar
2	Hydrant standpipe and head with blank cap
2	False spindles
6	Hose bandages

Nearside centre locker

Quantity	Description
3	Ramp ahead signs
3	Rolled 90mm hose
4	Instantaneous to storz adaptors

Nearside centre lower locker

Quantity	Description
8	Hose bridges

Nearside rear locker

Quantity	Description

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2	Water Control Breeching

Offside front through locker

Quantity	Description
36	Traffic cones
8	Hose tail storz adaptors

Offside centre locker

Quantity	Description
3	Ramp ahead signs
3	Rolled 90mm hose
4	Instantaneous to storz adaptors

Offside centre lower locker

Quantity	Description
8	Hose bridges

Offside rear locker

Quantity	Description
2	Water Control Breeching

Hose Hopper nearside

Quantity	Description
67	90mm x 30mm Flaked Hose

Hose Hopper offside

Quantity	Description
67	90mm x 30mm Flaked Hose

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Appendix 3 - Key point summary - Hose layer unit (HLU)

Information on task or event

- A BMA will be mobilised with HLU to provide advice and guidance to the IC regarding provision of water and other resources.
- If the HLU is mobilised as part of a PDA then the BMA will not be mobilised. ICs should request a BMA if required.
- Hose lines may be single (4kms) or twinned (2kms).

Information about Resources

- Four HLUs and one reserve strategically stationed within Brigade.
- Carries 4 Kilometres of 90mm hose with Storz couplings.
- When calculating resources the IC must condsider that the HLU driver will require a minimum crew of four in laying the hose, deploying equipment and turning on the hydrant.

Information about Risk and Benefit

- IC should consider whether the HLU & pump crew should proceed to a RVP to connect to a water supply or proceed to the incident ground.
- The HLU can deploy hose at up to 30mph. Consideration should be given to surrounding terrain, other vehicles and pedestrian along the route.

Gathering and thinking

Objectives

- Supply of water to the fireground.
- Public safety - Hose must be laid safely and not cause a dangerous obstruction in the roadway.
- Crew safety.

Communicating

- The following message should be sent to Control: "Request HLU and hose recovery personnel to carry out retrieval of XX number of lengths of hose at XXhrs".
- Following deployment a message should be sent to Control with: call sign of HLU(s) which have laid hose, amount of hose used and number of pumps in relay.

Controlling

- On board cameras to monitor and observe hose deployment.
- One crew member will observe the hose deployment using the on-board monitor, ordering driver to stop if issues occur.
- Once hose is deployed safely the IC will give the order for "water on".

Plan

- All hose must be laid safely and not cause a dangerous obstruction in the roadway. The HLU is equipped with hose bridges, signage and lighting to assist crews in ensuring this is carried out effectively.
- Tactical advisor bulk media (BMA) available to provide advice and guidance.
- The route from the water supply to the incident ground should be pre-planned by the IC and agreed with the HLU driver.
- The decision when to start hose retrieval including testing and cleaning should form part of the planning cycle of the Decision Making Model and where possible hose retrieval should be carried out during hours of daylight.
- IC's should take into account the strenuous nature of carrying out hose recovery and ensure sufficient personnel are ordered to allow adequate rest breaks.
- Minimum PPE for hose recovery in hose pod is safety helmet, fire tunic, leggings fire boots and fire gloves. The fire tunic may be removed at the discretion of the IC depending on weather conditions and work activity.
- HLU hose is to be cleaned and tested prior to retrieval and to supervise this essential work a BMA will also be mobilised.
- In the majority of cases washing with an appliance hose reel and use of a bass broom will be sufficient, however, if there is any doubt as to the level or nature of contamination then the IC will seek advice from HMEPO or the Brigade scientific advisor prior to commencement of cleaning and making up the hose.

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Document history

Assessments

An equality, sustainability or health, safety and welfare impact assessment and/or a risk assessment was last completed on:

EIA	14/03/2011	SDIA	23/06/2014	HSWIA		RA	

Audit trail

Listed below is a brief audit trail, detailing amendments made to this policy/procedure.

Page/para nos.	Brief description of change	Date
Throughout	The company Assetco has been replaced with Premier FireServe.	31/10/2012
Review Dates	Reviewed as current, no changes made. Review dates amended.	18/06/2014
Assessments	SIA date added.	24/06/2014
Page 2 & 8	Key point summary removed from page 2 and KPS flowchart added as appendix 3.	01/09/2014
Page 9	'Subjects list' table - template updated.	05/01/2015
Throughout	TAB replaced with Bulk Media Advisor (BMA)	07/01/2015
Throughout	Terminology updated for naming conventions, inventory updated.	04/07/2016

Subject list

You can find this policy under the following subjects.

Bulk media advisor	Demountable Units
Assets	Equipment
Firefighting	High Volume Pump
Hose	Hose layer unit
Hoses and Hose reels	Mobile Data Terminals (MDTs)
Flowchart - Key Point Summary (KPS)	

Freedom of Information Act exemptions

This policy/procedure has been securely marked due to:

Considered by: (responsible work team)	**FOIA exemption**	**Security marking classification**

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