

NATIONALLY ACCREDITED CERTIFICATION SCHEME FOR INDIVIDUAL GAS FITTING OPERATIVES

GUIDANCE TO ACS GAS SAFETY ASSESSMENT FRAMEWORK

VERSION 9

ACS GAS SAFETY ASSESSMENT FLOW CHARTS

Page No. CONTENTS

3. Introduction – Flow Chart Legend
4. Initial Domestic Gas Safety ACS Assessments Natural (NG) & Liquefied Petroleum Gas (LPG) (Bank A) Flow Chart
5. Initial Domestic Gas Safety ACS Assessments Natural Gas Core Competencies
7. Initial Domestic Gas Safety ACS Assessments Liquefied Petroleum Gas Specific Sectors (Bank B) Flow Chart
8. Initial Domestic Gas Safety ACS Assessments Liquefied Petroleum Gas Generic Core Competencies
10. Initial Non-Domestic Commercial Gas Safety ACS Assessments Natural & Liquefied Petroleum Gas Flow Chart
11. Initial Non-Domestic Commercial Gas Safety ACS Assessments Titles
12. Initial Non-Domestic Commercial Gas Safety ACS Assessments Generic Competencies
15. Initial Domestic/Non Domestic/Commercial Changeover Assessment Flow Chart
16. ACS Domestic/Non Domestic Initial Change Over Assessment Criteria
18. Initial Emergency Service Operatives & Gas Meter Installers Gas Safety ACS Assessments Titles & Flow Chart
19. Initial Emergency Service Operatives & Gas Meter Installers Gas Safety ACS Assessments Generic Format
21. ACS/NVQ/SQA - 6012 Scheme- Gas Services Installation & Maintenance/Emergency Service Ops S/NVQ Alignment Matrix
23. Re-Assessment for Domestic Natural Gas (Replacing Expiring ACS Certificates Previously Held)
24. Re-Assessment for Domestic LPG (Replacing Expiring ACS Certificates Previously Held)
26. Re-Assessment for Non Domestic/Commercial (Replacing Expiring ACS Certificates Previously Held)
28. Re-Assessment for Emergency/Meter Installers (Replacing Expiring ACS Certificates Previously Held)
29. Re-Certification for Emergency Service Providers (Replacing Expiring NVQ 6012-04 Certificates Previously Held)

NB. For more details of the assessment criteria please refer to the Energy & Utility Skills Website

Introduction

This Version 8 of 'GUIDANCE TO ACS GAS SAFETY ASSESSMENT FRAMEWORK' replaces all previous 7 Versions & now includes new additional details used within the Nationally Accredited Certification Scheme For Individual Gas Fitting Operatives.

The Flow Charts now include:-

- Details of the Competencies contained in the new 'Generic Format' used to construct the Initial Assessment Criteria.
- Details of the Competencies contained in the new 'Generic Format' used to construct the Re-Assessment Criteria.
- New Changeover Cores to enable easier transfer among differing 'Industry Gas Sectors'
- Details of the ACS competencies which align with the S/NVQ 6012 Scheme
- Details of the 'ACS Aligned S/NVQ' Re-Certification Scheme for Emergency Service Operatives 6012 - 44

Legend

All assessment details in green boxes containing writing in black & black edged are suitable for natural gas <u>only</u>	NG
All assessment details in orange boxes containing writing in black & black edged are suitable for liquefied petroleum gas <u>only</u>	LPG
All assessment details in green boxes containing writing in orange & orange edged are suitable for both NG & LPG	NG & LPG
All assessment details in yellow boxes containing writing in black & black edged are changeover assessments <u>only</u>	
All purple boxes contain additional information	

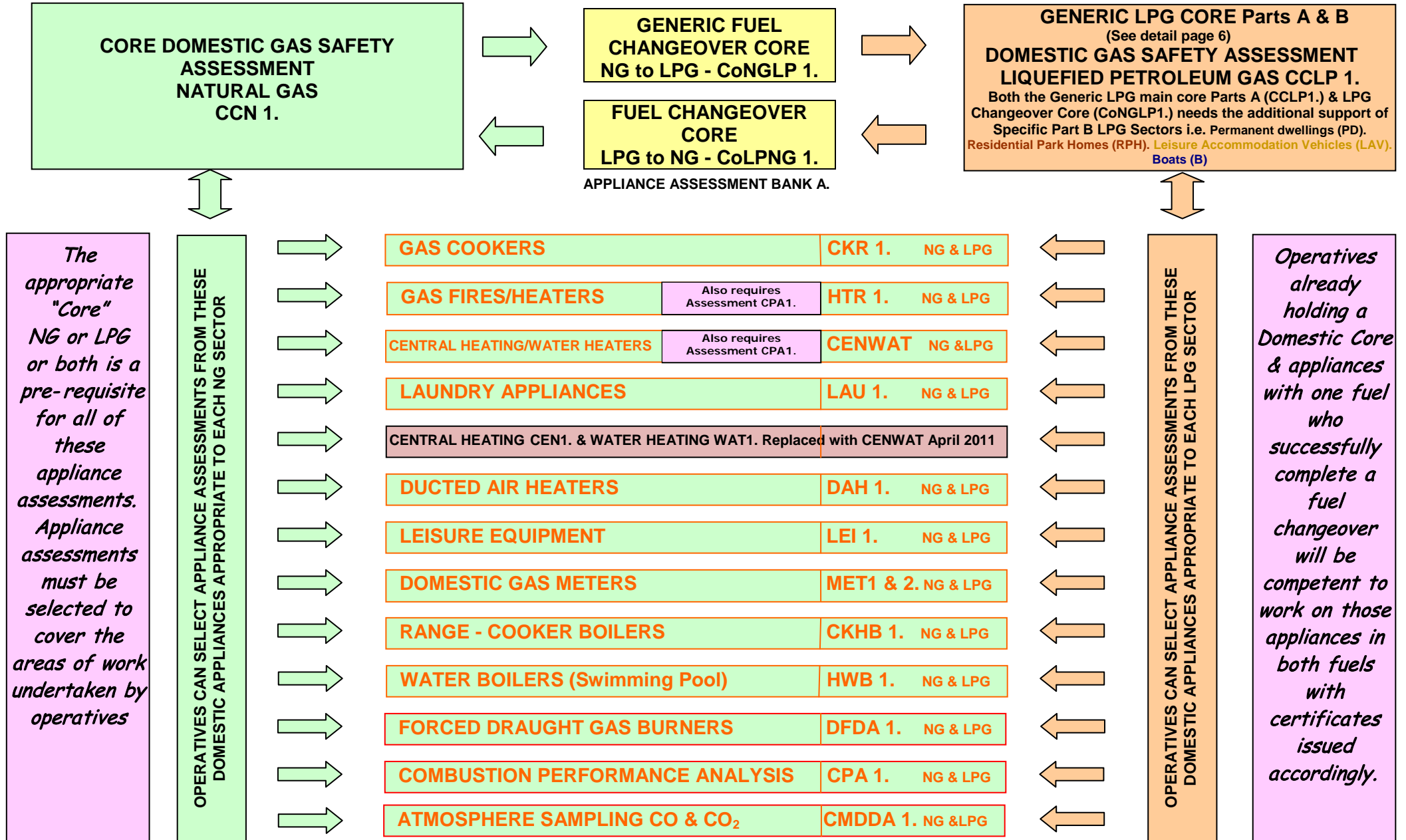
 *NG
Arrow*

 *LPG
Arrow*

 *Changeover
Arrow*

 *Linkage
Arrow*

INITIAL DOMESTIC GAS SAFETY ACS ASSESSMENTS FLOW CHARTS FOR NATURAL GAS & LPG



NATURAL GAS INITIAL CORE COMPETENCIES

CORE COMPETENCIES CCN 1.

1. Gas Safety Legislation.
2. Gas Emergency Actions and Procedures.
3. Products & Characteristics of Combustion.
4. Ventilation.
5. Installation of Pipework and Fittings.
6. Testing for Tightness.
7. Checking and/or Setting Meter Regulators.
8. Identification of Unsafe Situations and the Use of Emergency Notices and Warning Labels.
9. The Operation of and Positioning of Emergency Isolation Controls and Valves.
10. Checking and Setting Appliance Burner Pressures and Gas Rates.
11. The Operation and Checking of Appliance Gas Safety Devices and Controls.
12. Chimney Standards.
13. Chimney Testing.
14. Installation of Open, Balanced and Fan Assisted Chimney Configurations
15. Re-establish Existing Gas Supply and Relight Appliances.

CORE CHANGEOVER COMPETENCIES LPG to NG CoLPNG 1.

- 1 Gas Emergency Actions and Procedures - Including characteristics of NG.
- 2 Ventilation - Related to NG.
- 3 Installation of Pipework and Fittings - Related to NG.
- 4 Identification of Unsafe Situations and the Use of Emergency Notices
- 5 Testing for Tightness
- 6 Checking and/or Setting Meter Regulators
- 7 The Operation of and Positioning of Emergency Isolation Controls and Valves
- 8 Checking and Setting Appliance Burner Pressures and Gas Rates
- 9 Chimney Standards - Related to NG
- 10 The Installation of Open, Balanced and Fan Assisted Flue Assemblies for Natural Gas Appliances

GENERIC CORE CHANGEOVER COMPETENCIES NG to LPG CoNGLP 1.

- 1 Characteristics of Liquefied Petroleum Gas.
- 2 Cylinder Location Safety Requirements and Sizing
- 3 LPG Supply Pressures – Operation of and Positioning of Emergency Isolation, Flow Control and Valves for Cylinders.
- 4 Gas Emergency Actions and Procedures
- 5 Installation of pipework and fittings for LPG
- 6 Testing for Soundness installation pipework with total internal volume as per BS5482 pt 1 (TM83) & operating pressure up to 37 mbar - applies to (PD), (LAV) and (RPH).
And/or
Testing for Soundness for LPG Installations in Boats, Yachts/ Vessels (B).

NB. Additional competencies are required for specific LPG Sectors i.e. PD, LAV, RPH, B, EP, EPC. (See LPG Charts)

Example 1

An operative who installs & commissions, disconnects & repairs natural gas pipe-work only & does not work on any appliances

***SEE FLOW CHART
DOMESTIC
ASSESSMENTS
PAGE 4**

- CCN 1. *(Core /pre requisite assessment)*
Designed to test the gas safety competence of an operative in core domestic gas work by Practical and knowledge & understanding means.
Applicable to all domestic gas fittings

Example 2

An operative who installs, exchanges, disconnects services, repairs, attends breakdowns & commissions natural gas central heating boilers

***SEE FLOW CHART
DOMESTIC
ASSESSMENTS
PAGE 4**

- CCN 1. *(Core /pre requisite assessment)*
Designed to test the gas safety competence of an operative in core domestic gas work by Practical and knowledge & understanding means.
Applicable to all domestic gas fittings
- CENWAT.
Designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service, repair, attends to breakdown & commission domestic gas central heating boilers & water heaters by Practical and knowledge & understanding means (see flow chart).
- CPA 1. *(This assessment is a pre-requisite for CENWAT.)*
Designed to test gas safety competence of an operative in the work of carrying out an appliance combustion performance analysis

Example 3

Operatives intending to extend their work range from domestic natural gas appliances to include liquefied petroleum gas appliances
(in permanent dwellings)

***SEE FLOW CHART
DOMESTIC
ASSESSMENTS
PAGE 4**

- CoNGLP 1. (PD) *(Fuel changeover assessment NG to LPG)*
Designed to test the gas safety competence of an operative intending to extend the work range from domestic NG appliances to include LPG appliances by practical and knowledge & understanding means.
- Note: Before the above assessments can be undertaken, the candidate must hold as a minimum a certificate of competence in Domestic Core Gas Safety CCN 1.*
- *Appliances already held in NG are automatically given in LPG in conjunction with CoNGLP 1.*
 - *If gas work is to be undertaken in a Residential Park Home then CoNGLP 1. (RPH) should be taken.*
- Note: All LPG assessments will become invalid if the NG core CCN1. expires*

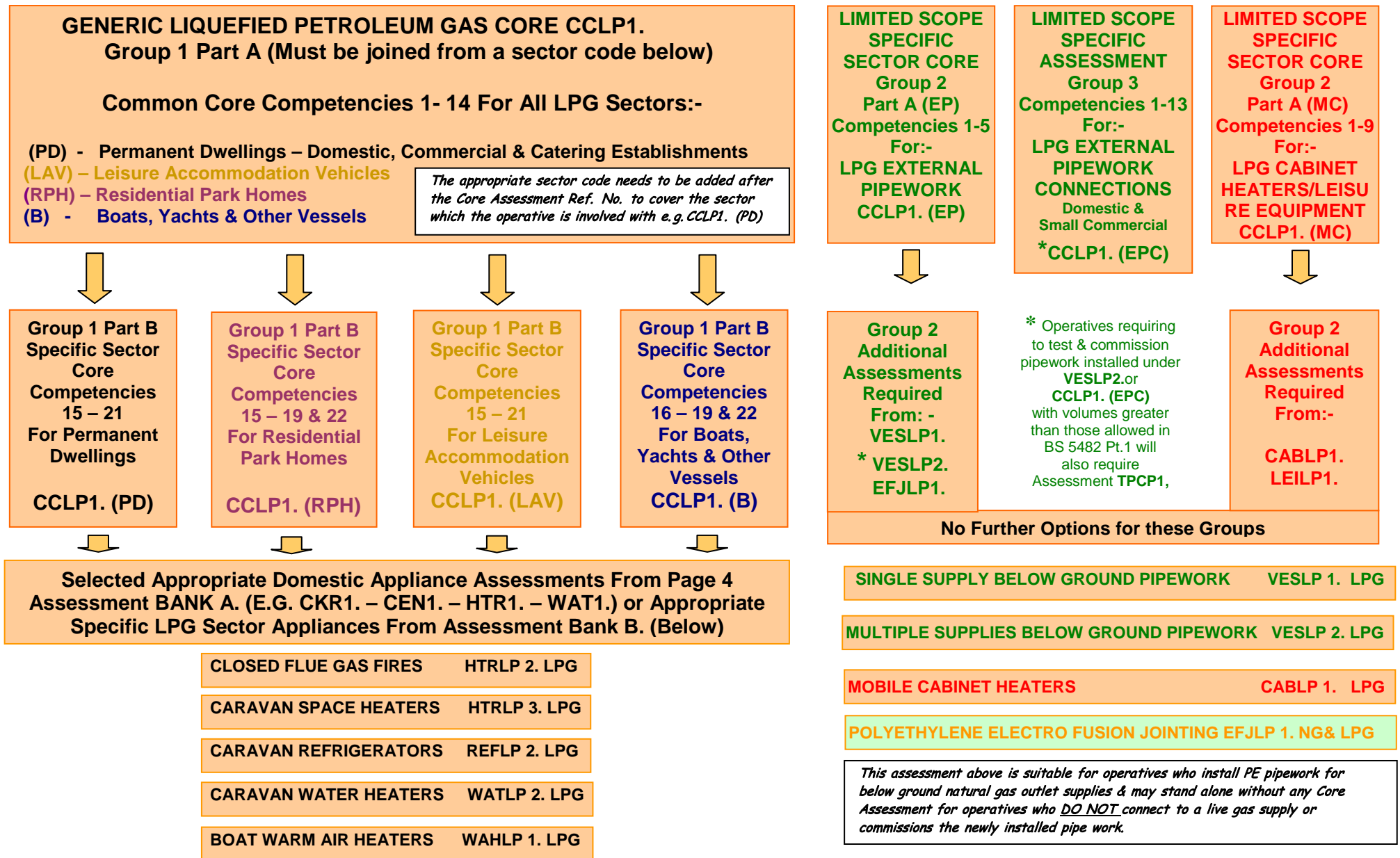
Example 4

An operative intending to extend their work range from domestic liquefied petroleum gas to include natural gas

***SEE FLOW CHART
DOMESTIC
ASSESSMENTS
PAGE 4**

- CoLPNG 1. *(Fuel changeover assessment LPG to NG)*
Designed to test the gas safety competence of an operative intending to extend the work range from domestic LPG appliances to include NG appliances by practical and knowledge & understanding means.
- Note: Before the above assessments can be undertaken, the candidate must hold as a minimum a certificate of competence in Domestic Core Gas Safety CCLP 1.*
- *Appliances already held in NG are automatically given in LPG in conjunction with CoNGLP 1.*

INITIAL DOMESTIC GAS SAFETY ASSESSMENTS LIQUEFIED PETROLEUM GAS FLOW CHART FOR SPECIFIC LPG SECTORS (ASSESSMENT BANK B)



LIQUEFIED PETROLEUM GAS GENERIC CORE COMPETENCIES

GROUP 1 PART A. GENERIC COMPETENCIES

1. Characteristics of Liquefied petroleum Gas
2. Cylinder Location, Safety Requirements & Sizing
3. LPG Supply Pressures, Operation of & Positioning of ECV's
4. Gas Emergency Actions & Procedures
5. Identification of Unsafe Situations & Use of Emergency Notices
6. Installation of Pipework & Fittings
- 7i. Soundness Test LPG installation pipework volume as per BS 5482 pt 1 (TM 83) & Operating Pressures of up to 37mbar
- 7ii. Soundness Test LPG installations in Boats, Yachts & other Vessels
8. Liquefied Petroleum Gas Safety Legislation
9. Characteristics Of Combustion of LPG
10. The Operation & Checking of LPG Appliance Safety Devices/Controls
11. Flueing Standards for LPG Appliances
12. Flue Testing
13. The installation of Open, Closed, Balanced & Fan Assisted Flue Assemblies
14. Re- Establishing Existing LPG Supplies & Re-lighting Appliances

SPECIFIC CORE COMPETENCIES GROUP 1 PART B

15. LPG Supply Pressures, Operation of & Positioning of Emergency & Flow Control Valves for Bulk Gas Storage Vessels
16. Cylinder Locations & Safety Requirements
17. Installation of LPG Pipework & Fittings
18. Ventilation Requirements for LPG Appliances
19. Flueing Standards for LPG
20. Flue Testing for LPG
21. Flue assemblies for LPG Appliances
22. Re- Establishing Existing LPG Supplies & Re-lighting Appliances

NB. The 8 Competencies within these Specific Core Competencies must use the correct nuances for the Sector being assessed.
e.g. (PD), (RPH), (LAV), or (B).



GROUP 2 Part A (EP)

1. Vessel Location & Safety Requirements
2. Supply Pressures, Emergency/Flow controls
3. Emergency Actions & Procedures
4. Legislation
5. Installation of External Pipework/Fittings
6. Identification of Unsafe Situations.

GROUP 3 (EPC)

1. Vessel Location & Safety Requirements.
2. LPG Storage Vessels & Connections.
3. LPG Supply Pressure (Propane) Operation/Positioning of Emergency Isolation, flow Controls & Valves.
4. Gas Emergency Actions & Procedures.
5. LPG Gas Safety Legislation.
6. Installation of Service Pipework, Meters/Fittings Alteration of Existing Installation Pipework (Copper/Steel 6- 28mm, MDPE 32mm).
7. Identification of Unsafe Situations/Use of Emergency Notices & Warning Labels with LPG Gas Installations.
8. Soundness Testing of LPG Service & Installation Pipework.
9. Characteristics of LPG.
10. Products & Characteristics of Combustion.
11. Flueing/Chimney Standards.
12. Ventilation.
13. Re-Establish Existing LPG Supplies & Re-Light Domestic/Commercial Appliances.

GROUP 2. Part A. (MC)

1. Cylinder locations & Safety Requirements
2. Characteristics of combustion - LPG
3. Emergency Actions & Procedures
4. Ventilation Requirements
5. LPG Safety Legislation
6. Installation of Pipework/Fittings
7. Identification of Unsafe Situations.
8. Characteristics of LPG
9. LPG Supply pressures

Example 1

An operative who installs, exchanges, disconnects, services, repairs, attends to breakdown & commissions liquefied petroleum gas pipe-work & closed flue gas fires in caravan holiday homes (LAV)

***SEE FLOW
CHART SPECIFIC
SECTORS PAGE 7**

- CCLP 1. (LAV) *(Core /pre requisite assessment)*
Designed to test the gas safety competence of an operative in core domestic Caravan LPG gas work by practical and knowledge & understanding means.
- HTRLP 2. *Designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service, repair breakdown & commission closed flue LPG gas fires in leisure accommodation vehicles by practical and knowledge & understanding means.*

Example 2

An operative who installs, exchanges, disconnects services, repairs, attends to breakdown & commissions liquefied petroleum gas water heaters in touring & motorised caravans (LAV - *Leisure Accommodation Vehicles*)

***SEE FLOW
CHART SPECIFIC
SECTORS PAGE 7**

- CCLP 1. (LAV) *(Core /pre requisite assessment)*
Designed to test the gas safety competence of an operative in core domestic Caravan LPG gas work by practical and knowledge & understanding means.
- WATLP 2. *Designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service, repair breakdown & commission LPG water heaters designed for use in touring & motorised caravans by practical and knowledge & understanding means.*

Example 3

An operative who installs, exchanges, disconnects services, repairs, attends to breakdown & commissions liquefied petroleum gas cookers & warm air heaters installed on boats (B)

***SEE FLOW
CHART SPECIFIC
SECTORS PAGE 7**

- CCLP 1. (B) *(Core /pre requisite assessment)*
Designed to test the gas safety competence of an operative in core domestic Boat LPG gas work by practical and knowledge & understanding means
 - CKR 1. *Designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service, repair, attends to breakdown & commission domestic LPG gas cooking appliances by practical and knowledge & understanding means*
- WAHLP 1. *Designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service, repair, attends to breakdown & commission domestic LPG gas boat warm air heating systems by practical and knowledge & understanding means*

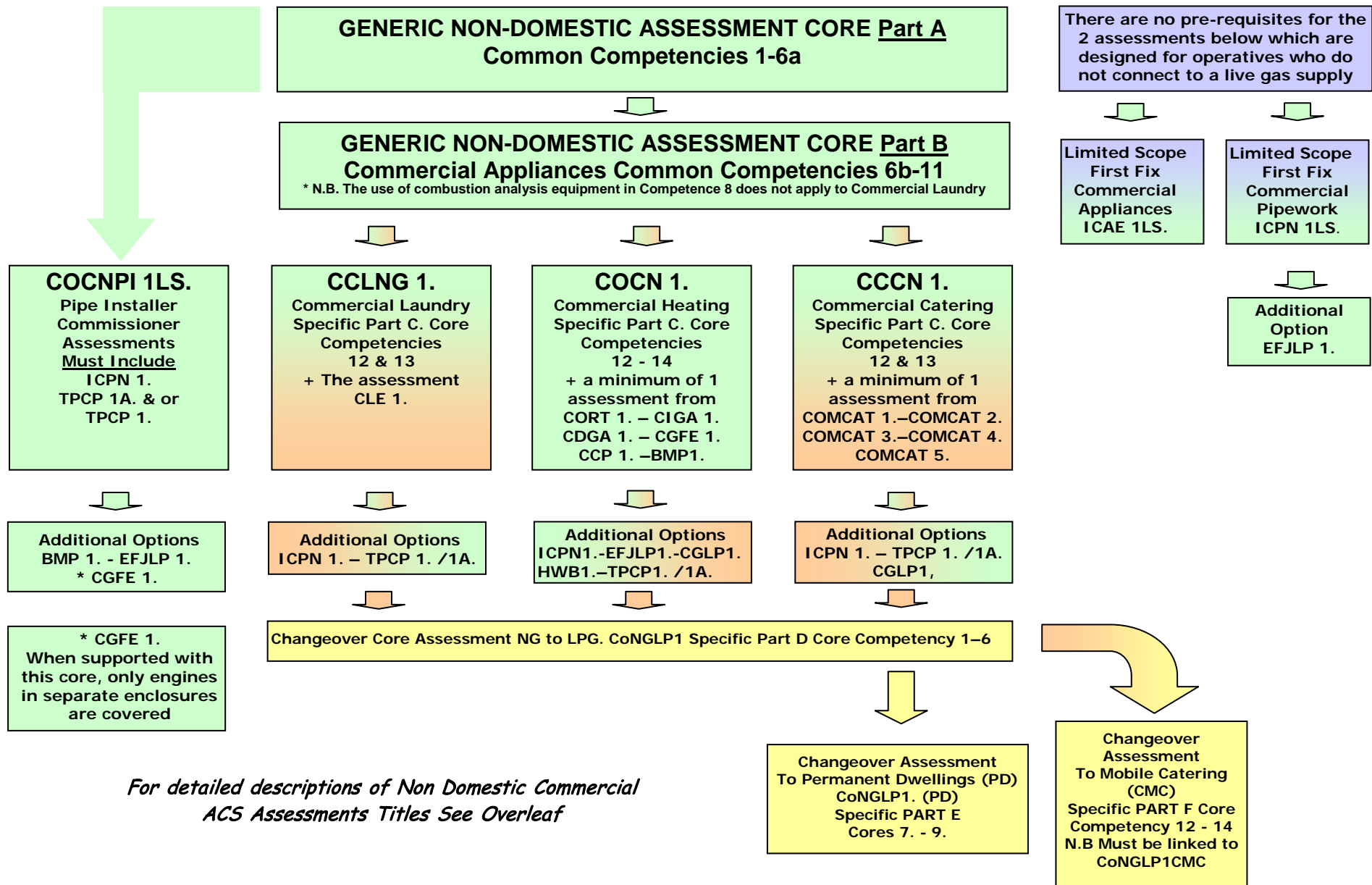
Example 4

An operative who installs & commissions single supply polyethylene external underground liquefied petroleum gas pipe-work & gas vessel connections (EP)

***SEE FLOW
CHART SPECIFIC
SECTORS PAGE 7**

- CCLP 1. (EP) *(Core/ pre-requisite) Designed to test the gas safety competence of an operative in core domestic external pipework LPG gas work by practical and knowledge & understanding means.*
- VESLP 1. *Designed to test the gas safety competence of an operative in the work of gas storage vessel connections, controls and safety requirements. Sizing external above ground and un-jointed below ground pipe-work of up to 0.02m³ for single LPG gas supplies by Practical and knowledge & understanding means*

INITIAL NON DOMESTIC/COMMERCIAL GAS SAFETY ACS ASSESSMENTS FLOW CHART



INITIAL NON DOMESTIC/COMMERCIAL GAS SAFETY ACS ASSESSMENTS TITLES

Non Domestic/Commercial Pipework Assessments

COMMERCIAL PIPEWORK IN EXCESS OF 35mm	ICPN 1.	NG & LPG
STRENGTH, TIGHTNESS TESTING & PURGING PIPEWORK up to 16 bars	TPCP 1.	NG & LPG
STRENGTH/TIGHT/TESTING & PURGING PIPEWORK up to 40mbar & 1m ³ volume	TPCP 1A.	NG
GAS BOOSTERS & ASSOCIATED CONTROLS	BMP 1.	NG

Non Domestic/Commercial Catering Assessments

OPEN/SOLID TOP RANGES	COMCAT 1.	NG & LPG
WATER BOILERS PRESSURE/STEAM TYPE	COMCAT 2.	NG & LPG
DEEP FAT & PRESSURE FRYERS	COMCAT 3.	NG & LPG
FISH & CHIP RANGES	COMCAT 4.	NG & LPG
FORCED DRAUGHT BURNER APPLIANCES	COMCAT 5.	NG & LPG
SMALL GAS FIRED GENERATORS	CGLP 1.	LPG

NB. CMCALP1, 2, 3. are no longer available, the appropriate COMCAT assessment indicated above should be taken.

Non Domestic/Commercial Heating Assessments

OVERHEAD RADIANT & TUBE HEATERS	includes ICAE1.	CORT 1.	NG & LPG
DIRECT FIRED COMMERCIAL APPLIANCES	includes ICAE1.	CDGA 1.	NG & LPG
INDIRECT FIRED COMMERCIAL APPLIANCES	includes ICAE1.	CIGA 1.	NG & LPG
GAS FUELLED ENGINES	includes ICAE1.	CGFE 1.	NG & LPG

Non Domestic/Commercial Laundry Assessments

COMMERCIAL LAUNDRY EQUIPMENT	CLE 1.	NG & LPG
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Non Domestic/Commercial Miscellaneous Assessments

COMMISSIONING COMMERCIAL PLANT & EQUIPMENT	CCP 1.	NG & LPG
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Commercial Catering Assessment Content Table

COMCAT 1. Appliances Covered	COMCAT 2. Appliances Covered	COMCAT 4. Appliances Covered
<p>*Open/Solid Top Range Boiling Burners Stockpot stoves Hotplates, Warming Ovens Bain Marie Hot Cupboards Combination Ovens Forced & Natural Convection Direct & Semi-Indirect Ovens Boiling Pans Direct/Indirect Bulk Liquid & Jacketed Urns Expansion Type Water Boilers Gas Fired Dishwashers Gas Heated Rinsing Sinks</p> <p>Ancillary Equipment</p>	<p>* Pressure Type Water Boiler (Stills or equivalent) Pressure Steamers Pressure Steaming Ovens Ancillary Equipment</p>	<p>* Fish & Chip Ranges These appliances are normally assembled on site to meet shop front requirements.</p>
COMCAT 3. Appliances Covered	COMCAT 5. Appliances Covered	
<p>*Deepfat & Pressure fryers Bratt Pans, Griddles, Grills - Salamanders, Simulated Charcoal, Over/Under fired. Ancillary Equipment</p>	<p>*Forced Draught Burners Appliances covered by assessments COMCAT 1-2-3 fitted with forced draught burners need this assessment</p>	

** Appliances marked bold with an asterisk at the top of each Table are the appliances used for assessment, providing evidence of competence for other appliances listed below in each table.*

NON DOMESTIC/COMMERCIAL INITIAL ACS GAS GENERIC CORE COMPETENCIES

GENERIC NON-DOMESTIC ASSESSMENT CORE Part A. Common Competencies 1-6a

1. Gas Safety Legislation.
2. Gas Emergency Actions and Procedures.
3. Installation & Jointing of Pipework and Fittings
4. Identification of Unsafe Situations and the Use of Emergency Notices for Pipework.
5. The Operation of and Positioning of Emergency Isolation Controls and Valves.
- 6a. Tightness testing & purging of small natural gas installations

GENERIC NON-DOMESTIC ASSESSMENT CORE Part B. Commercial Appliances Common Competencies 6b-11

- 6b. Tightness Testing of Appliance Connector
7. Checking and/or Setting Commercial Supply/Appliance & Meter Regulators
8. Characteristics of Combustion for Natural Draught Burners
9. The Operation and Checking of Appliance Gas Safety Devices and Controls
10. Re-establish Existing Gas Supply and Relight Commercial Appliances
11. Identification of Unsafe Situations and the Use of Emergency Notices and Warning Labels

GENERIC INITIAL NON-DOMESTIC CORE Part C.

Commercial Laundry Appliances Competencies 12 - 13. CCLNG1.
12/13. Commercial Laundry Ventilation & Flueing (Exhaust Duct) Requirements

GENERIC INITIAL NON-DOMESTIC CORE Part C.

Commercial Heating Appliances Competencies 12 - 14. COCN1.

12. Commercial Heating Appliance Flueing Requirements
13. Commercial Heating Ventilation Requirements
14. Characteristics of Combustion for Forced Draft Burners

GENERIC INITIAL NON-DOMESTIC CORE Part C.

Commercial Catering Appliances Competencies 8a - 12 - 13. CCCN1.

- 8a. Products & Characteristics of Combustion
12. Commercial Catering Ventilation & Flueing (Extraction System) Requirements
13. Installation of Pipework and Fittings for Commercial Catering Appliances

GENERIC INITIAL FUEL CHANGEOVER CORE Part D.

Changeover Natural Gas to LPG Competencies 1 - 6 CoNGLP1.

1. Characteristics of Liquefied Petroleum Gas
2. Cylinder Locations, Safety Requirements/Sizing Single Supply
3. LPG Supply Pressures - Operation of and Positioning of Emergency Isolation, Flow Controls and Valves.
4. Gas Emergency Actions and Procedures.
5. Installation of Pipework and Fittings - Related to LPG
6. Test for Soundness

INITIAL FUEL CHANGEOVER PERMANENT DWELLINGS CORE Part E.

Changeover Natural Gas to LPG Competencies 7 - 9 CoNGLP1. (PD)

10. LPG Supply Pressures-Operation of & Positioning of Emergency Isolation, Flow-control & Valves for Cylinders & Gas Storage Vessels
11. Cylinder Locations, Safety Requirements
12. Installation of pipework & Fittings for LPG

GENERIC INITIAL NON-DOMESTIC CORE Part F Commercial Mobile Catering Appliances Competencies 12 - 14. CoNGLP1CMC

These Part C Mobile Catering Competencies must be supported by the Generic Initial Fuel Changeover Core Part D (CoNGLP1.) with Generic Initial Non-Domestic Cores Part A/Part B

12. Commercial Mobile Catering Flueing Requirements.
13. Ventilation Requirements for Liquefied Petroleum Gas Appliances used in Mobile Catering
14. Cylinder Locations, Safety Requirements and Sizing

Example 1

An operative who installs commercial pipe work up to 16 bar pressure, tests & purges & installs, services, repairs, attends to breakdowns & commissions commercial indirect fired natural gas appliances

- PART A. - *Generic Non-Domestic Assessment Core Common Competencies 1-5*
- PART B. - *Generic Non-Domestic Assessment Core Commercial Appliances Common Competencies 6-11*
- COCN 1. (PART C) - *Specific Core Commercial Heating Common Competencies 12-14, Designed to test the gas safety competence of an operative in core commercial heating*
- TPCP 1. - *Designed to test the gas safety competence of an operative in strength/tightness testing and direct purging of commercial pipe work up to 16 bar pressure.*
- ICPN 1. - *Designed to test the gas safety competence of an operative in installing commercial pipe work above 35mm in diameter. (Not PE Electro-Fusion)*
- CIGA 1. - *Designed to test the gas safety competence of an operative in install, commission, service, repair & breakdown of indirect fired commercial appliances.*

***SEE FLOW CHART
NON DOMESTIC
ASSESSMENTS
PAGES 10 & 11**

Example 2

An operative who installs, services, repairs, attends to breakdowns & commissions commercial overhead radiant & tube heaters on natural gas

- PART A. - *Generic Non-Domestic Assessment Core Common Competencies 1-5*
- PART B. - *Generic Non-Domestic Assessment Core Commercial Appliances Common Competencies 6-11*
- COCN 1. (PART C) - *Specific Core Commercial Heating Common Competencies 12-14, Designed to test the gas safety competence of an operative in core commercial heating*
- ICPN 1. - *Designed to test the gas safety competence of an operative in installing commercial pipe work above 35mm in diameter. (Not PE Electro-Fusion)*
- CORT 1. - *Designed to test the gas safety competence of an operative in the work of commission, service, repair and breakdown of commercial overhead luminous radiant plaque and radiant tube heaters.*

***SEE FLOW CHART
NON DOMESTIC
ASSESSMENTS
PAGES 10 & 11**

Example 3

A pipe fitter who installs, tests and purges natural gas commercial pipe-work up to 1m³ volume, working at up to 40mb operating pressure (OP) and not exceeding 150mm/6" diameter

- COCNPI 1LS. (PART A.) - *Generic Non-Domestic Assessment Core Common Competencies 1-5 (Core/pre-requisite for Pipe Installer/Commissioner)*
- ICPN 1. - *Designed to test the gas safety competence of an operative in installing commercial pipe work above 35mm in diameter. (Not PE Electro-Fusion)*
- TPCP 1A. *Designed to test the gas safety competence of an operative in strength/tightness testing and direct purging of commercial pipe-work up to 1m³ volume at up to 40mbar OP.*

***SEE FLOW CHART
NON DOMESTIC
ASSESSMENTS
PAGE 10**

Example 4

A pipe fitter who only installs natural gas commercial pipe-work up to 150mm/6" diameter that is not connected to a gas supply

***SEE FLOW CHART
NON DOMESTIC
ASSESSMENTS
PAGE 10**

- ICPN 1LS. *(Stand alone assessment no pre-requisite core assessment needed) Designed to test the gas safety competence of an operative in first fixing of commercial installation pipe-work but does not connect to a live gas supply.*

Example 5

An operative who installs, services, repairs, attends to breakdowns & commissions any natural gas catering appliance covered by COMCAT1

***SEE FLOW CHART
NON DOMESTIC
ASSESSMENTS
PAGES 10 & 11**

- PART A. - *Generic Non-Domestic Assessment Core Common Competencies 1-5*
- PART B. - *Generic Non-Domestic Assessment Core Commercial Appliances Common Competencies 6-11*
- CCCN 1. (PART C) - *Specific Core Commercial Catering Common Competencies 12-13, (Core /pre requisite assessment) Designed to test the gas safety competence of an operative in core commercial catering.*
- COMCAT 1. - *Designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service, repair, breakdown & commission of catering appliances in COMCAT 1 grouping (See Table page 8) by Practical & knowledge & understanding*

Example 6

An operative intending to extend the work range from commercial catering natural gas to commercial catering liquefied petroleum gas holding CCCN1. or equivalent with COMCAT assessments.

***SEE FLOW CHART
NON DOMESTIC
ASSESSMENTS
PAGES 10 & 11**

- CoNGLP 1. (PART D) - *Specific Core Fuel changeover NG to LPG competencies 1 - 6. Designed to test the gas safety competence of an operative intending to extend the commercial catering work range from natural gas to include LPG.*
- (PD) - (PART E) FOR - *Specific Core Fuel changeover NG to LPG for Permanent Dwellings competencies 7 - 9*
- (CMC) - (PART F) FOR - *Specific Core Fuel changeover NG to LPG for Mobile Catering competencies 12 - 14*
Note: Appliances already held in NG are automatically given in LPG in conjunction with CoNGLP 1. (PD) or CoNGLP1CMC

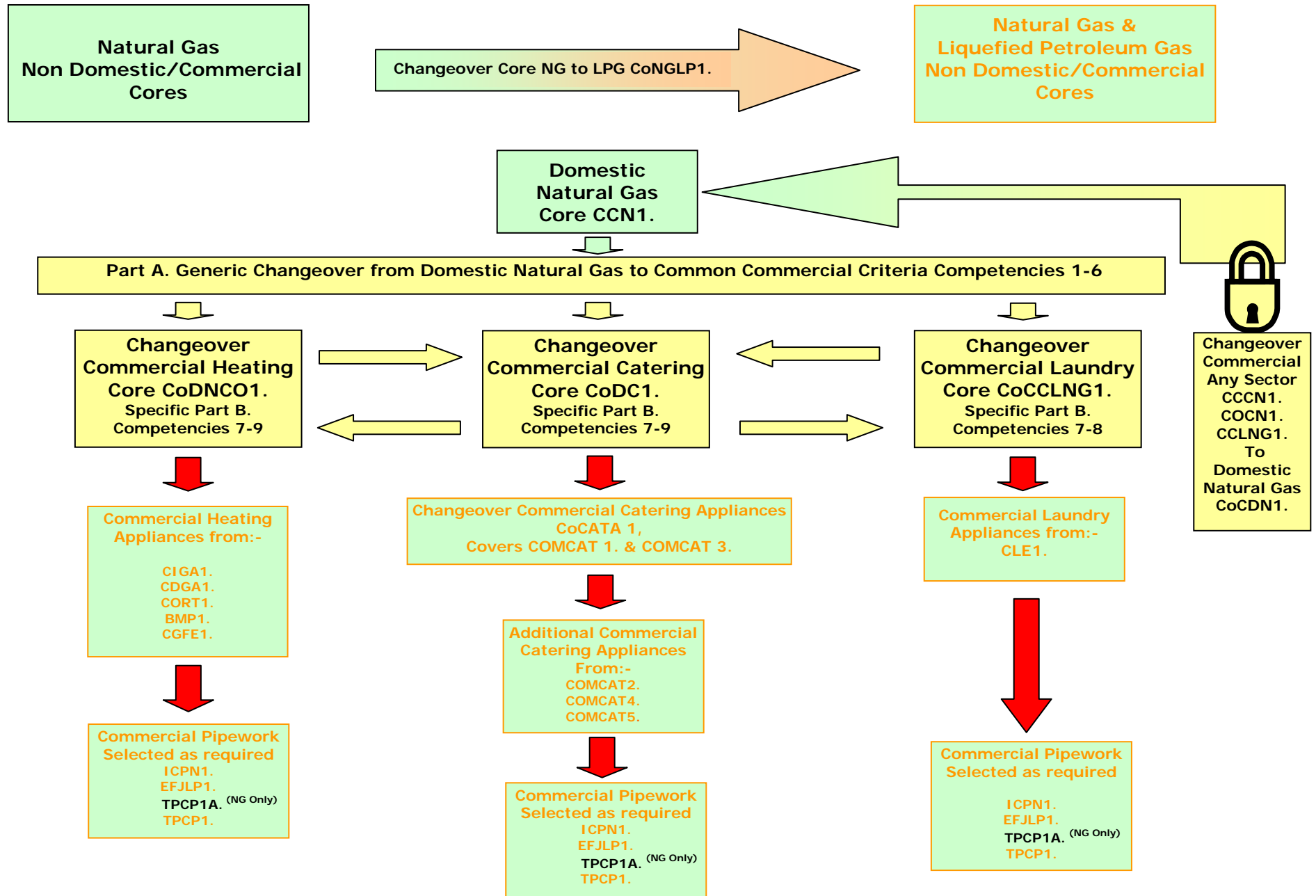
Example 7

An operative who installs, services, repairs, attends to breakdown & commissions any LPG commercial mobile catering appliance from CMCALP 2.

***SEE FLOW CHART
NON DOMESTIC
ASSESSMENTS
PAGES 10 & 11**

- PART A. - *Generic Non-Domestic Assessment Core Common Competencies 1-5*
- PART B. - *Generic Non-Domestic Assessment Core Commercial Appliances Common Competencies 6-11*
- CCCN 1. (PART C) - *Specific Core Commercial Catering Common Competencies 12-13, (Core /pre requisite assessment) Designed to test the gas safety competence of an operative in core commercial catering.*
- COMCAT 3. - *Designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service, repair, breakdown & commission of catering appliances in COMCAT 3 grouping (See Table page 8) by Practical, knowledge & understanding.*
- CoNGLP 1. (PART D) - *Specific Core Fuel changeover NG to LPG competencies 1 - 6.*
- (CMC) - (PART F) FOR - *Specific Core Fuel changeover NG to LPG for Mobile Catering competencies 12 - 14*

ACS DOMESTIC/NON DOMESTIC/COMMERCIAL INITIAL CHANGEOVER ASSESSMENTS FLOW CHART



ACS DOMESTIC/NON DOMESTIC/COMMERCIAL INITIAL CHANGEOVER ASSESSMENT CRITERIA

<p>GENERIC INITIAL FUEL CHANGEOVER CORE Part D.</p> <p>Changeover Natural Gas to LPG Competencies 1 – 6 <u>CoNGLP1.</u></p> <ol style="list-style-type: none"> 1. Characteristics of Liquefied Petroleum Gas 2. Cylinder Locations, Safety Requirements/Sizing Single Supply 3. LPG Supply Pressures - Operation of and Positioning of Emergency Isolation, Flow Controls and Valves. 4. Gas Emergency Actions and Procedures. 5. Installation of Pipework and Fittings - Related to LPG 6. Test for Soundness
<p>INITIAL FUEL CHANGEOVER PERMANENT DWELLINGS CORE Part E.</p> <p>Changeover Natural Gas to LPG Competencies 7 – 9 <u>CoNGLP1. (PD)</u></p> <ol style="list-style-type: none"> 7. LPG Supply Pressures-Operation of & Positioning of Emergency Isolation, Flow-control & Valves for Cylinders & Gas Storage Vessels 8. Cylinder Locations, Safety Requirements 9. Installation of pipework & Fittings for LPG

<p>INITIAL FUEL CHANGEOVER CORE</p> <p>Changeover LPG to Natural Gas Competencies 1 –10 <u>CoLPNG1.</u></p> <ol style="list-style-type: none"> 1. Gas Emergency Actions and Procedures - Including characteristics of NG. 2. Ventilation - Related to NG. 3. Installation of Pipework and Fittings - Related to NG. 4. Identification of Unsafe Situations and the Use of Emergency Notices and Warning Labels 5. Testing for Tightness. 6. Checking and/or Setting Meter Regulators. 7. The Operation of and Positioning of Emergency Isolation Controls and Valves. 8. Checking and Setting Appliance Burner Pressures and Gas Rates. 9. The Flueing Standards - Related to NG. 10. Installation of Open, Balanced and Fan Assisted Flue Assemblies for Natural Gas Appliances
--

<p>INITIAL CHANGEOVER CORE <u>CoCDN1.</u></p> <p>Changeover Any Commercial Natural Gas to Domestic Competencies 1 –14</p> <ol style="list-style-type: none"> 1. Characteristics of Combustion. 2. Ventilation. 3. Installation of Pipework and Fittings. 4. Testing for Tightness. 5. Checking and/or Setting Meter Regulators. 6. The Operation of & Positioning of Emergency Isolation Controls & Valves. 7. Checking and Setting Appliance Burner Pressures and Gas Rates. 8. Flueing Standards 9. Installation of Open, Balanced and Fan Assisted Flue Assemblies. 10. Flue Testing 11. The Operation & Checking of Appliance Gas Safety Devices & Controls. 12. Gas Safety Legislation. 13. Identification of Unsafe Situations Emergency Notices & Warning Labels. 14. Re-establish Existing Gas Supply and Relight Appliances.

<p>GENERIC INITIAL CHANGEOVER CORE</p> <p>Changeover from Domestic NG to Common Commercial Competencies 1–6</p> <ol style="list-style-type: none"> 1. The Operation/Positioning Emergency Controls/Valves in Commercial Premises 2. Checking and Setting Commercial Equipment/Appliance Burner Pressures 3. Tightness Testing of Appliance Pipework Connections (Volume up to 0.15/0.12m³) 4. Identification of Unsafe Situations and the Use of Emergency notices for Pipework 5. The Operation & Checking of Commercial Appliance Gas Safety Devices & Controls 6. Re-establish Existing Gas Supply and Relight Commercial Appliances
<p>SPECIFIC INITIAL CHANGEOVER CORE</p> <p>Changeover from Domestic NG to Specific Commercial Competencies 7-9</p> <p style="text-align: center; color: red;">Commercial Heating Changeover Core <u>CoDNCO1.</u></p> <ol style="list-style-type: none"> 7. Characteristics of Combustion/Flue Gas Analysis Equipment Commercial Heating Appliances. 8. Commercial Heating Ventilation Requirements 9. Commercial Heating Appliance Flueing Requirements
<p style="text-align: center;">Commercial Catering Changeover Core <u>CoDC1.</u></p> <p>7/8. Ventilation & Flueing (Extraction Systems) Commercial Catering Appliances</p> <p>9. Installation of Pipework and Fittings for Commercial Catering Appliances.</p>
<p>Changeover Domestic Appliances to Commercial Catering Appliances <u>CoCATA1.</u></p> <p style="text-align: center;">COMCAT1. & COMCAT3.</p>
<p style="text-align: right;"><u>CoCCLNG1.</u></p> <p>7/8. Commercial Laundry Appliance Ventilation & Flueing/Exhaust Duct Requirements</p>

Example 1

An operative intending to extend work range from domestic natural gas appliances to include non-domestic/commercial heating appliances across range

***SEE FLOW CHART
DOMESTIC TO
NON-DOMESTIC
CHANGEOVER
ASSESSMENTS
PAGE 15 & 16**

- PART A. - *Generic Changeover Assessment Domestic Natural Gas to Common Commercial Appliance Core Competencies 1-6*
- SPECIFIC PART B. CoDNCO1. - *Specific Commercial Heating Core Competencies 7-9*
- CORT1. - *Designed to test the gas safety competence of an operative in the work of commission, service, repair and breakdown of commercial overhead luminous radiant plaque and radiant tube heaters*
- CIGA1. - *Designed to test the gas safety competence of an operative in install, commission, service, repair & breakdown of indirect fired commercial appliances.*
- CDGA1. - *Designed to test the gas safety competence of an operative in install, commission, service, repair & breakdown of direct fired commercial appliances.*

Example 2

Operatives intending to extend their work range from domestic natural gas appliances to include commercial natural gas catering appliances covered by COMCAT 1 & COMCAT 3. Table 1 & 3.

***SEE FLOW CHART
DOMESTIC TO
NON-DOMESTIC
CHANGEOVER
ASSESSMENTS
PAGE 15 & 16**

- PART A. - *Generic Changeover Assessment Domestic Natural Gas to Common Commercial Appliance Core Competencies 1-6*
- SPECIFIC PART B. CoDC 1. - *Specific Commercial Catering Core Competencies 7-9*
- CoCATA 1. - *Designed to test the gas safety competence of an operative intending to extend the work range from domestic NG appliances to include commercial NG catering appliances by Practical and knowledge & understanding means. Applicable to all commercial catering contained in COMCAT's 1 & 3 (See Table page 10)*

**Note: Before the above Changeover assessments can be undertaken, the candidate must hold as a minimum a certificate of competence in Domestic Core Gas Safety CCN 1. & appropriate Domestic appliance assessments such as CKR 1. - WAT 1.*

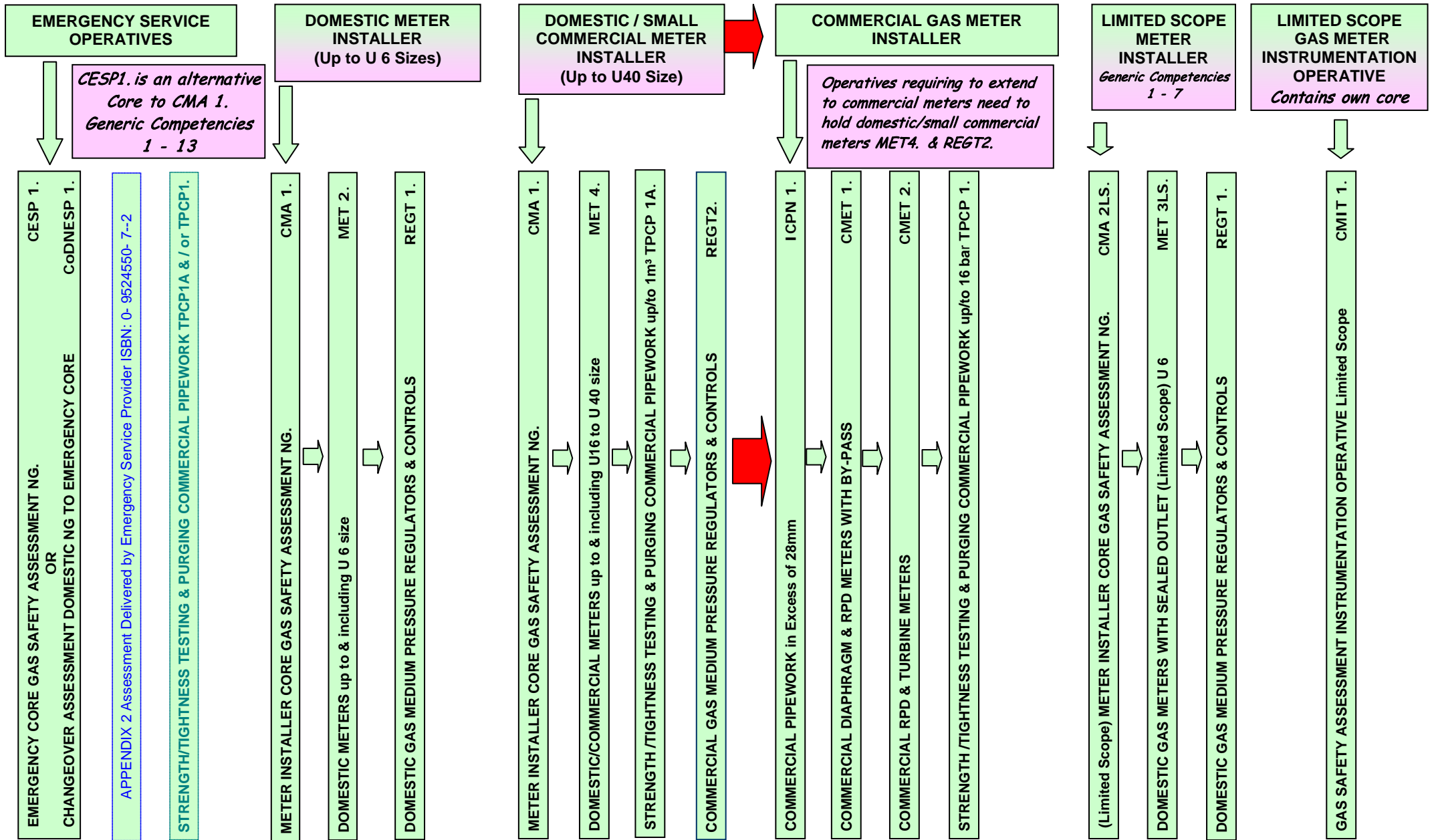
Example 3

Operatives intending to extend their work range from domestic natural gas appliances to include commercial natural gas laundry appliances & the installation testing & purging of low pressure commercial pipework.

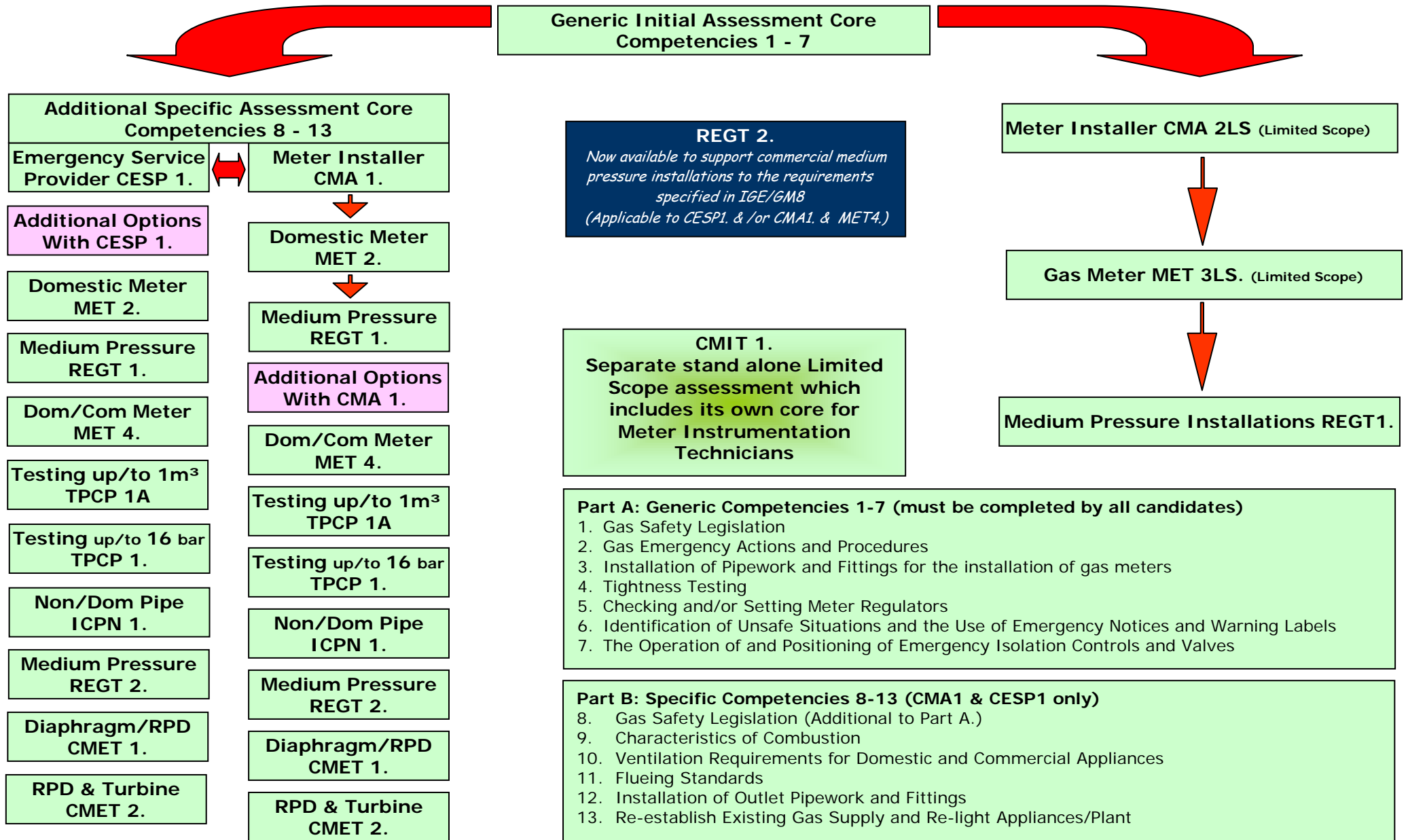
***SEE FLOW CHART
DOMESTIC TO
NON-DOMESTIC
CHANGEOVER
ASSESSMENTS
PAGE 15 & 16**

- PART A. - *Generic Changeover Assessment Domestic Natural Gas to Common Commercial Appliance Core Competencies 1-6*
- SPECIFIC PART B. CoCCLNG1. - *Specific Commercial Laundry Core Competencies 7-8*
- CLE1. - *Designed to test the gas safety competence of an operative in the work of commission, service, repair and breakdown of commercial laundry appliances.*
- ICPN1. - *Designed to test the gas safety competence of an operative in installing commercial pipe work above 35mm in diameter. (Not PE Electro-Fusion)*
- TPCP1A. *Designed to test the gas safety competence of an operative in strength/tightness testing and direct purging of commercial pipe-work up to 1m³ volume at up to 40mbar OP.*

INITIAL EMERGENCY SERVICE OPERATIVES & GAS METER INSTALLERS NATURAL GAS ASSESSMENTS



INITIAL EMERGENCY SERVICE OPERATIVES & GAS METER INSTALLERS ACS GENERIC ASSESSMENTS



Example 1

An OAMI approved meter installer who installs domestic natural gas meters to both low & medium pressures supplies

***SEE FLOW CHART
INITIAL EMERGENCY
& METER INSTALLERS
PAGES 18 & 19**

- CMA 1. - *Generic Core designed to test the gas safety competence of an operative in core domestic meter gas work by practical & knowledge & understanding means.*
- MET 2. - *Designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service & commission domestic gas meters up to U6 in size by practical and knowledge & understanding means.*
- REGT 1. - *Designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service & commission medium pressure service regulators.*

Example 2

An OAMI approved meter installer who installs low pressure non domestic natural gas diaphragm meters up to U40 size, natural gas meters diaphragm meters with by-passes, RPD meters & medium pressure Turbine meters.

***SEE FLOW CHART
INITIAL EMERGENCY
& METER INSTALLERS
PAGES 18 & 19**

- CMA 1. - *Generic Core designed to test the gas safety competence of an operative in core domestic meter gas work by practical & knowledge & understanding means.*
- MET 4. - *Designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service & commission domestic/small commercial gas meters up to U40 in size using anacondas by practical and knowledge & understanding means.*
- ICPN 1. - *Designed to test the gas safety competence of an operative in installing commercial pipe work above 35mm in diameter.*
- REGT 2.- *Designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service & commission medium pressure service regulators.*
- TPCP 1. - *Designed to test the gas safety competence of an operative in strength/tightness testing and direct purging of commercial pipe work up to 16 bar pressure.*
- CMET 1. - *Designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service & commission non-domestic gas meters both of large diaphragm meters with by-pass & RPD meters by practical and knowledge & understanding means.*
- CMET 2. - *Designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service & commission non-domestic/commercial gas meters both of RPD & Turbine types by practical and knowledge & understanding means.*

Note: Holders of assessment MET4. Are also competent to meet the requirements of MET2.

Example 3

An approved gas emergency service operative responding to public reported escapes

***SEE FLOW CHART
INITIAL EMERGENCY
& METER INSTALLERS
PAGES 18 & 19**

- CESP 1. - *Generic Core designed to test the gas safety competence of an operative in the work of an emergency service provider*
Note: In addition to the above generic core the operative will have to successfully complete additional upstream training & assessment provided by the employer. (See appendix 2 - ACS Assessments for ESP's)

Example 4

An operative employed by a Gas Meter Asset Manager to install correctors & other instrumentation to Non-Domestic/Commercial Meters

***SEE FLOW CHART
INITIAL EMERGENCY
& METER INSTALLERS
PAGES 18 & 19**

- CMIT 1. - *Generic Core designed to test the gas safety competence of an instrumentation operative in core non-domestic/commercial meter gas work by practical & knowledge & understanding means.*

**ACS ALIGNED, CITY AND GUILDS AND SCOTTISH QUALIFICATION AUTHORITY (SOA) 6012 SCHEME, GAS SERVICES INSTALLATION & MAINTENANCE
AND EMERGENCY SERVICE OPERATIONS NVQ**

ACS EQUIVALENT ASSESSMENTS - DOMESTIC NATURAL GAS

	COMPLEX NUMBER	CORE CCN 1	COOKERS CKR 1	FIRES HTR 1	INST W/H WAT 1	CENTRAL HEATING CEN 1	LAUNDRY LAU 1	LEISURE LEI 1	WARM AIR DAH 1	RANGE/CKR BOILERS CKHB 1	COMB'TION PERFORMANCE ANALYSIS CPA 1	MEDIUM PRESSURE REGULATORS REGT1.	PIPEWORK CCN 1 See Notes	TEST AND PURGE TPCP 1A	METERS	ESP CESP 1 CMA CoDNESP 1
6012 LEVEL II	6012 -02/60	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	NO	YES	NO	YES UP TO U6 MET 1	NO
6012 LEVEL III	6012 -03/70	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES UP TO U40 MET 4	NO
<u>APPLIANCE PATHWAY ROUTE LEVEL II</u>																
COOKERS	6012 -20	YES	YES	NO	NO	NO	YES	NO	NO	NO	YES	NO	YES	NO	NO	NO
CENTRAL HTG	6012 -21/62	YES	NO	NO	YES	YES	NO	NO	NO	NO	YES	NO	YES	NO	NO	NO
METERS	6012 -22	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	YES UP TO U6	NO
	6012-12	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO		CMA 1
SPACE HEATERS	6012 -24	YES	NO	YES	NO	NO	NO	YES	NO	NO	YES	NO	YES	NO	NO	NO
WARM AIR	6012 -25	YES	NO	NO	NO	NO	NO	NO	YES	NO	YES	NO	YES	NO	NO	NO
<u>APPLIANCE PATHWAY ROUTE LEVEL III</u>																
COOKERS	6012 -30	YES	YES	NO	NO	NO	YES	NO	NO	NO	YES	NO	YES	NO	NO	NO
CENTRAL HTG	6012 -31	YES	NO	NO	YES	YES	NO	NO	NO	NO	YES	NO	YES	NO	NO	NO
METERS	6012 -32	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES UP TO U40	NO
	6012 -13	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES		CMA 1
EMERGENCY SERVICE OPERATIONS LEVEL I	6012 -04/80	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES UP TO U40	YES
	6012 44/80	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES		YES
	6012-05	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
	6012-55	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
NG & LPG	6012-06	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
NG & LPGII	6012-66	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES

NOTES:

Complex 03 - Meters at Level III up to U40 fitted using anacondas, using IGE UP 1A procedures for testing and purging in domestic premises only.

Complex 04 – Meters at Level III up to U40 fitted using anacondas, using IGE UP 1A procedures for testing and purging in domestic and small commercial gas installations

Complex 04 - In addition to equivalence of **CCN 1**, enabling **ACS** appliance assessments to be added to this award. This complex also satisfies **CESP 1**, and **CMA 1**. Assessments

ACS changeover assessments may be used in conjunction with appropriate Complex Number awards

Complexes 02 – 03 - **60 – 70** Pipework sizes are up to 35mm copper and 35mm R1

Complexes 04/44 – **80** Pipework sizes are up to 50mm copper and 50mm R1

Prior to the 1st August 2007 Metering Complexes 22 and 32 included the equivalence of CCN 1. From 1st August 2007 new Metering Complexes were introduced 12 and 13 that reduces the Core to the equivalence of CMA 1

Combustion Performance Analysis will be included in those awards indicated above from the 1st March 2008

Emergency Service Operations Complexes 06 and 66 with cover both natural gas and LPG. The NG Complexes will cover the same ACS assessments as Complexes 05 and 55. LPG coverage yet to be confirmed

Complexes 04/44 have been withdrawn by City & Guilds and replaced with Complexes 05/55

Example 1.

An operative holding an ACS aligned N/SVQ Level II Appliance Pathway Route Certificates 6012-20 & 6012-21 which are less than five years old intends to extend areas of work to space heaters.

***SEE ACS/NVQ
ALIGNMENT MATRIX
PAGE 21**

- Operatives existing aligned NVQ's are equivalent to ACS Certificates of competence :-
CCN1. CKR1. LAU1. WAT1. CEN1. *(CENWAT from April 2011)*
- Operative can undertake ACS Assessment HTR1. & CPA1. or extend NVQ by undertaking additional Level II Appliance Pathway Route 6012-24

Example 2.

An operative holding limited scope ACS certificates CMA2LS. & MET3LS. & currently employed by a gas meter installer intends to become a GAS SAFE REGISTERED sole trader working on the full range domestic Natural Gas appliances.

***SEE ACS/NVQ
ALIGNMENT MATRIX
PAGE 21**

- Operative's current ACS certificates only cover the installation of a domestic meter to a sealed meter outlet providing no experience of internal installations & appliance requirements.
- NVQ 6012-02 at Level II or III with on job experience with a GAS SAFE REGISTERED gas installer is the preferred route.

Example 3.

An operative holding an ACS aligned N/SVQ Level II Appliance Pathway Route Certificates 6012-22 or 63 pathway award which is less than five years old intends to install low pressure & medium pressure U16 meters in domestic premises.

***SEE ACS/NVQ
ALIGNMENT MATRIX
PAGE 21**

- Operatives existing aligned NVQ's are equivalent to ACS Certificates of competence :-
CCN1. MET1.
- Operative can undertake ACS Assessments REGT1. REGT2. MET4. & TPCP1.

Example 4.

An operative holding an ACS aligned N/SVQ Level III Appliance Pathway Route Certificates 6012-32 or 73 pathway award which is less than five years old intends to undertake emergency service operational work.

***SEE ACS/NVQ
ALIGNMENT MATRIX
PAGE 21**

- Operatives existing aligned NVQ's are equivalent to ACS Certificates of competence :-
CCN1. MET1. MET2. MET4. & TPCP1A.
- Operative can undertake ACS Changeover Assessment CoDNESP1.

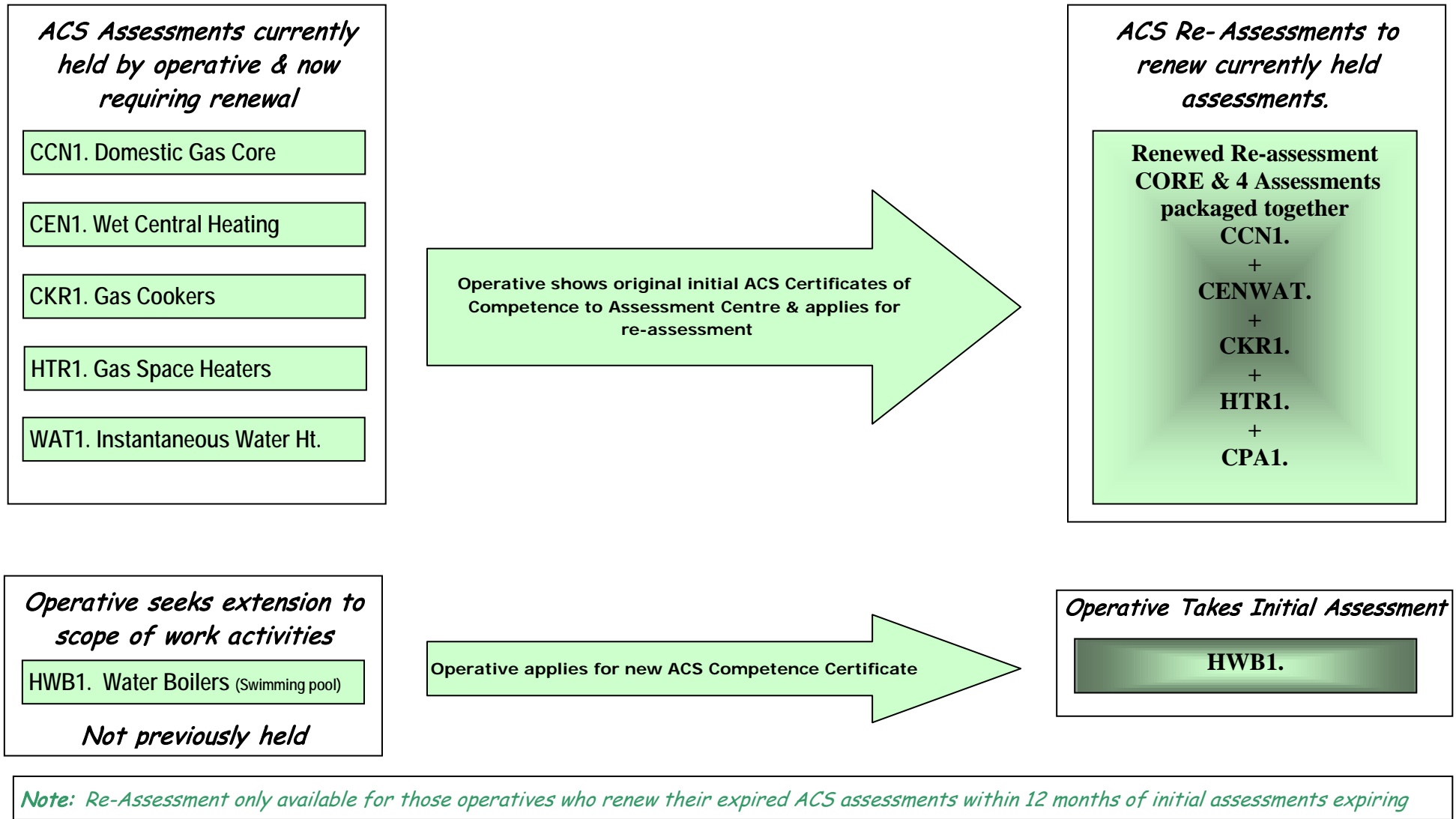
Example 5.

An operative wishing to commence work in the gas sector for the first time with no experience within gas or any other related sector of industry.

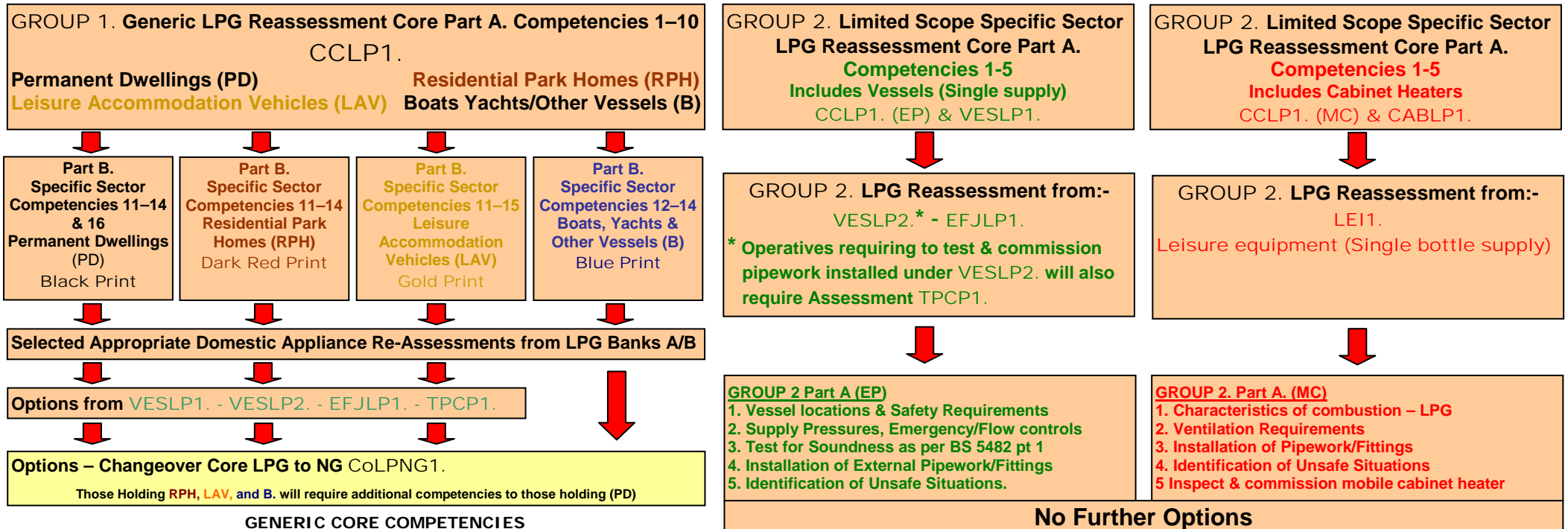
***SEE ACS/NVQ
ALIGNMENT MATRIX
PAGE 21**

- NVQ 6012-02 at Level II with on job experience with a GAS SAFE REGISTERED gas installer is the preferred route

RE-ASSESSMENT for DOMESTIC NATURAL GAS



DOMESTIC LIQUEFIED PETROLEUM GAS RE-ASSESSMENT CRITERIA



GENERIC CORE COMPETENCIES

- | | |
|---|-----------------------|
| <ol style="list-style-type: none"> 1. LPG Supply Pressures 2. Identification of Unsafe Situations & Use of Emergency Notices 3. Installation of Pipework & Fittings 4(i). Soundness Test LPG installation pipework volume as per BS5482 Pt. 1 4(ii). Soundness Test LPG installations in Boats, Yachts & other Vessels 5. Characteristics Of Combustion of LPG 6. The Operation & Checking of LPG Appliance Safety Devices/Controls 7. Flueing Standards for LPG Appliances 8. Flue Testing 9. The installation of Open, Closed, Balanced & Fan Assisted Flue Assemblies 10. Re- Establishing Existing LPG Supply & Re-lighting Appliances | GROUP 1 PART A |
|---|-----------------------|

- | | |
|---|---|
| <p>SPECIFIC CORE COMPETENCIES</p> <ol style="list-style-type: none"> 11. LPG Supply Pressures (gas storage vessels), Operation/Positioning of ECV 12. Installation of LPG Pipework & Fittings 13. Ventilation Requirements for LPG Appliances 14. Flueing Standards for LPG 15. Flue Testing for LPG Appliances 16. Flue assemblies for LPG Appliances | <p style="text-align: center;">GROUP 1 PART B</p> <p>NB. The 6 Competencies within these Specific Sectors must use the correct nuances for the Sector being assessed (where appropriate) e.g. (PD), (RPH), (LAV), or (B)</p> |
|---|---|

- | | |
|--|--|
| <p>OPTIONAL COMPETENCIES</p> <ol style="list-style-type: none"> 17. BANK A. Inspection, Testing, Service, Repair, and Commission 'Generic' Domestic Gas Appliances - CKR 1, HTR 1, WAT 1, LAU 1, CEN 1, DAH 1, LEI 1, MET 1, CKHB 1, HWB 1 or DFDA 1 18. BANK B. Inspection, Testing, Service, Repair, and Commission 'Sector' Domestic Gas Appliances - CABLP 1, LEILP 1, HTRLP 2, HTRLP 3, REFLP 2, WATLP 2 and/or WAHLP 1. | <p style="text-align: center;">GROUP 1. BANKS A & B</p> |
|--|--|

Example 1.

An operative holding expiring Domestic Natural gas ACS certificates CCN1. – CEN1. – HTR1. – CKR1. – WAT1.

***SEE FLOW CHART
DOMESTIC
RE-ASSESSMENT
PAGE 23**

- Operative presents previous ACS Certificates to the Assessment Centre to enter for Re-assessment.
- Operative undertakes ACS Re-Assessment package CCN1. core with 4 assessments CENWAT. – HTR1. – CKR1. – CPA1.

Example 2.

An operative holding expiring Domestic Natural gas ACS certificates CCN1. – CEN1. – HTR1. – CKR1. – WAT1. & wishes to extend the scope to cover Liquefied Petroleum Gas for Permanent Dwellings & Leisure Accommodation Vehicles with additional appliances.

***SEE FLOW CHART
DOMESTIC RE-
ASSESSMENT
PAGE 23 & INITIAL
ASSESSMENTS
PAGE 7**

- Operative presents previous ACS Certificates to the Assessment Centre to enter for Re-assessment.
- Operative undertakes ACS Re-Assessment package CCN1. core with 4 assessments CENWAT. – HTR1. – CKR1. – CPA1.
- CoNGLP 1. (PD) (LAV) **Initial (Fuel changeover assessments NG to LPG)**
Designed to test the gas safety competence of an operative intending to extend the work range from domestic NG appliances to include LPG appliances by practical and knowledge & understanding means in both permanent dwellings & leisure accommodation vehicles.
- HTRLP2. **Initial ACS Assessment designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service, repair breakdown & commission closed flue LPG gas fires in leisure accommodation vehicles by practical and knowledge & understanding**
- REFLP 2. **Initial ACS Assessment designed to test the gas safety competence of an operative in the work of install, exchange, disconnect, service, repair breakdown & commission LPG gas refrigerators in leisure accommodation vehicles by practical and knowledge & understanding**

Example 3.

An operative previously holding Domestic Natural gas ACS certificates CCN1. – CEN1. which have been expired for over 6 months

***SEE FLOW CHART
DOMESTIC
INITIAL ASSESSMENT
PAGE 4**

- CCN1. & CEN1. **No longer available to operative as a re-assessment - Operative has to renew by taking CCN1. CPA1. & CENWAT. as an Initial Assessment**

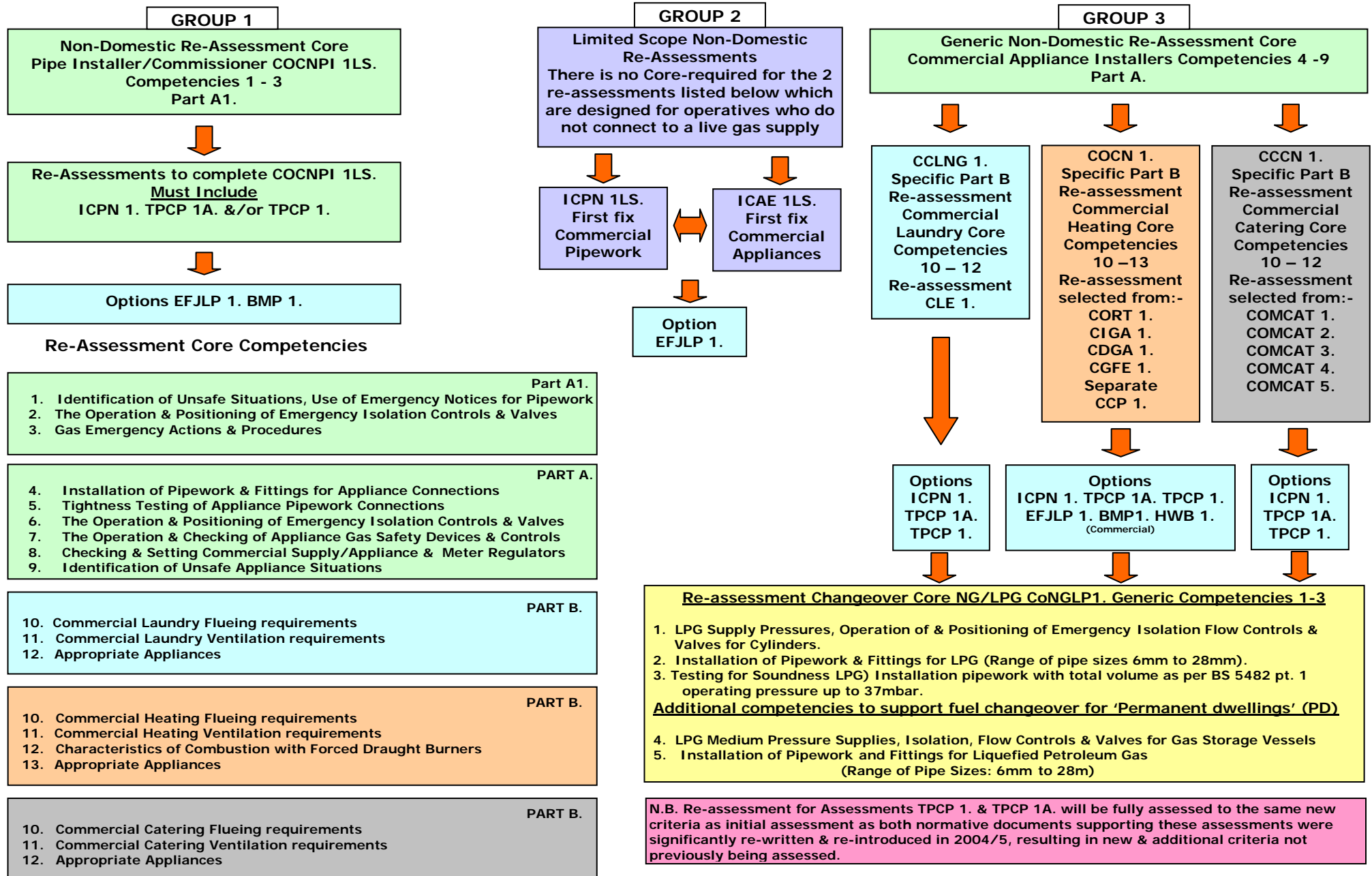
Example 4.

An operative previously holding Domestic Natural gas ACS certificates CCN1. – CEN1. & CKR1. which have just expired & NG to LPG changeover CoNGLP1. (PD) with WAT1. & LAU1. which are still valid for a further 2½ years

***SEE FLOW CHART
DOMESTIC
INITIAL ASSESSMENT
PAGE 23**

- Operative presents previous ACS Certificates to the Assessment Centre to enter for Re-assessment
- Operative undertakes ACS Re-Assessment package CCN1. core with 3 assessments CENWAT1. CPA1 & CKR1.
- CoNGLP1. (PD) along with LAU1. are refreshed for a further 2½years until their due expiry date

NON DOMESTIC/COMMERCIAL ACS RE-ASSESSMENT CRITERIA



Example 1.

An operative holding expiring Non Domestic/Commercial Heating Natural gas ACS certificates COCN1. – CIGA1. – CORT1. – CDGA1.

***SEE FLOW CHART
NON DOMESTIC
RE-ASSESSMENT
PAGE 26**

- Operative presents previous ACS Certificates to the Assessment Centre to enter for Re-assessment.
- Operative undertakes ACS Re-Assessment package Group 3 Part A. & Part B. Commercial Heating Core COCN1.
- Generic & Specific Cores with 3 appliances:-
CIGA1. – CORT1. – CDGA1.

Example 2.

An operative holding expiring Non Domestic/Commercial Catering Natural gas ACS certificates CCCN1. – COMCAT1. – COMCAT2. – COMCAT3.

***SEE FLOW CHART
NON DOMESTIC
RE-ASSESSMENT
PAGE 26**

- Operative presents previous ACS Certificates to the Assessment Centre to enter for Re-assessment.
- Operative undertakes ACS Re-Assessment package Group 3 Part A. & Part B. Commercial Catering Core CCCN1.
- Generic & Specific Cores with 3 appliances:-
COMCAT1. – COMCAT2. – COMCAT3.

Example 3.

An operative holding expiring Non Domestic/Commercial Laundry & Catering Natural gas ACS certificates CCLNG1. – CLE1. – CCCN1. - COMCAT1. COMCAT2. COMCAT3.

***SEE FLOW CHART
NON DOMESTIC
RE-ASSESSMENT
PAGE 26**

- Operative presents previous ACS Certificates to the Assessment Centre to enter for Re-assessment.
- Operative undertakes ACS Re-Assessment package Group 3 Part A. & Part B. Commercial Laundry Core CCLNG1. Part B Commercial Catering Core CCCN1.
- Generic & Specific Cores with 1 laundry appliance CLE1. & 3 catering appliances COMCAT1. – COMCAT2. – COMCAT3.

Example 4.

An operative holding expiring Non Domestic Natural gas Pipe Installer/Commissioner ACS certificates COCNPI1LS. – ICPN1. – TPCP1. & wishes to extend the scope to cover Electro-Fusion of Polyethylene Pipe

***SEE FLOW CHART
NON DOMESTIC
RE-ASSESSMENT
PAGE 26**

- Operative presents previous ACS Certificates to the Assessment Centre to enter for Re-assessment.
- Operative undertakes ACS Re-Assessment package Group 1 Part A1. Specific Core with 2 other re-assessments:-
ICPN1. - TPCP1.
- EFJLP1. Initial ACS Assessment designed to test the gas safety competence of an operative in the work of installing & jointing by electro-fusion polyethylene pipework.

Example 5.

An operative holding expiring Limited Scope Non Domestic Pipework ACS certificate ICPN1LS.

***SEE FLOW CHART
NON DOMESTIC
RE-ASSESSMENT
PAGE 26**

- Operative presents previous ACS Certificate to the Assessment Centre to enter for Re-assessment.
- Operative undertakes ACS Re-Assessment from Group 2 - ICPN1LS.

EMERGENCY SERVICE OPERATIVES & GAS METER INSTALLERS ACS RE- ASSESSMENTS

Re-Assessment Generic Core Competencies 1 – 5 Part A.

REGT 2.
Now available to support commercial medium pressure installations to the requirements specified in IGE/GM8 (Applicable to CESP1. & /or CMA1. & MET4.)

CMIT 1.
 Separate stand alone Limited Scope Re-assessment which includes its own core for Meter Instrumentation Technicians

Meter Installer Re-Assessment CMA 2LS
 (Limited Scope)

Gas Meter Re-Assessment MET 3LS.
 (Limited Scope)

Medium Pressure Installations REGT1.
 Same as Initial

Additional Re-Assessment Specific Core Competencies 6 – 10 Part B.

Emergency Service Provider CESP 1.

Gas Meter Installer CMA 1.

Additional Options With CESP 1.

Domestic Meter MET 2.

Domestic Meter MET 2.

Medium Pressure REGT 1. Same as Initial

Medium Pressure REGT 1. Same as Initial

Dom/Com Meter MET 4.

Additional Options With CMA 1.

Testing up/to 1m³ TPCP1A. Same as Initial

Dom/Com Meter MET 4.

Testing up/to 16 bar TPCP1. Same as Initial

Testing up/to 1m³ TPCP1A. Same as Initial

Non/Dom Pipe ICPN 1.

Testing up/to 16 bar TPCP1. Same as Initial

Diaphragm/RPD CMET 1.

Non/Dom Pipe ICPN 1.

RPD & Turbine CMET 2.

Diaphragm/RPD CMET 1.

RPD & Turbine CMET 2.

Part A: Generic Competencies 1-5 (must be completed by all candidates)

1. Installation of Pipework and Fittings for the installation of gas meters
2. Tightness Testing
3. Checking and/or Setting Meter Regulators
4. Identification of Unsafe Situations and the Use of Emergency Notices and Warning Labels
5. The Operation of and Positioning of Emergency Isolation Controls and Valves

Part B: Specific Competencies 6-10 (CMA1. & CESP1. only)

6. Characteristics of Combustion
7. Ventilation Requirements for Domestic and Commercial Appliances
8. Flueing Standards
9. Installation of Outlet Pipework and Fittings
10. Re-establish Existing Gas Supply and Re-light Appliances/Plant

**ACS ALIGNED, CITY AND GUILDS 6012 - 04 RE-CERTIFICATION SCHEME TO 6012 - 44, GAS EMERGENCY SERVICE OPERATIONS
N/SVQ**

ACS EQUIVALENT ASSESSMENTS - DOMESTIC NATURAL GAS

RE-CERTIFICATION	COMPLEX NUMBER	CORE CCN 1	COOKERS CKR 1	FIRES HTR 1	INST W/H WAT 1	CENTRAL HEATING CEN 1	LAUNDRY LAU 1	LEISURE LEI 1	WARM AIR DAH 1	RANGE/CKR BOILERS CKHB 1	MEDIUM PRESSURE REGULATORS REGT1.	PIPEW'RK CCN 1 See Notes	TEST AND PURGE TPCP 1A	METERS	ESO CESP 1 CMA 1
EMERGENCY SERVICE OPERATIONS LEVEL III	6012 - 44	YES	NO	NO	NO	NO	NO	NO	NO	NO	Under development	YES	YES	YES UP TO U40	YES

NB. 6012 -04/80 is a pre-requisite qualification for access to 6012 - 44

Example 1.

An operative holding expiring Domestic Natural gas Meter Installers ACS certificates CMA1. – MET2. – REGT1.

***SEE FLOW CHART
ESP & METERING
RE-ASSESSMENT
PAGE 28**

- Operative presents previous ACS Certificates to the Assessment Centre to enter for Re-assessment.
- Operative undertakes ACS Re-Assessment package Part A. & Part B. – CMA1. Generic & Specific Cores with 2 equipment Re- assessments:- MET2 – REGT1.

Example 2.

An operative holding expiring Emergency Service Providers ACS certificate CESP1.

***SEE FLOW CHART
ESP & METERING
RE-ASSESSMENT
PAGE 28**

- Operative presents previous ACS Certificates to the Assessment Centre to enter for Re-assessment.
- Operative undertakes ACS Re-Assessment package Part A. & Part B. – CESP1.

Example 3.

An operative holding expiring Emergency Service Providers NVQ 6012 - 04 certificate

***SEE FLOW CHART
EMERGENCY SERVICE
NVQ RE-CERTIFICATION
ABOVE**

- Operative presents previous NVQ 6012-04 Certificate to the NVQ Centre to enter for Re-Certification.
- Operative undertakes NVQ Re-Assessment package 6012 - 44

Example 4.

An operative holding expiring Emergency Service Providers NVQ 6012 - 04 certificate but wants to renew certification through the ACS route

***SEE FLOW CHART
EMERGENCY SERVICE
RE-ASSESSMENT
PAGE 28 & 29**

- Operative presents previous NVQ 6012-04 Certificate to the ACS Assessment Centre to enter for Re-assessment.
- Operative undertakes ACS Re-Assessment package Part A. & Part B. – CESP1.

VARIATIONS TO STANDARD ACS ASSESSMENT COMBINATIONS

A number of ACS Assessment Criteria were originally placed in the 'Gas Sector Criteria' that was most appropriate at the time of publication. Since then it has become apparent that some of these assessment criteria can be utilised effectively across a wider range of gas sectors without the need of the originally identified pre-requisites.

Listed below are some of the more common variations that an operative can make use of to ensure that they are holding the necessary certificate of competence by following an acceptable alternative route.

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; padding: 5px;">POLYETHYLENE ELECTRO FUSION JOINTING EFJLP 1.</td> <td style="width: 30%; padding: 5px;">NG & LPG</td> </tr> </table>	POLYETHYLENE ELECTRO FUSION JOINTING EFJLP 1.	NG & LPG	➔	<p>This assessment is valid with the following core gas safety assessments:-</p> <ul style="list-style-type: none"> ➤ In conjunction with both Domestic NG &/or LPG Cores (CCN 1.–CCLP 1.–CoNGLP 1.) <i>Normal Route</i> ➤ In conjunction with both any other core. ➤ On its own for limited scope operatives not connecting to a live gas supply (No pre-requisite required)
POLYETHYLENE ELECTRO FUSION JOINTING EFJLP 1.	NG & LPG			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; padding: 5px;">TESTING & PURGING PIPEWORK (Not exceeding 1m³ volume)</td> <td style="width: 30%; padding: 5px;">TPCP 1A. NG</td> </tr> </table>	TESTING & PURGING PIPEWORK (Not exceeding 1m³ volume)	TPCP 1A. NG	➔	<p>This assessment is valid with the following core gas safety assessments:-</p> <ul style="list-style-type: none"> ➤ In conjunction with the Commercial NG Core (COCN 1.) <i>Normal Route</i> ➤ In conjunction with any other NG Core
TESTING & PURGING PIPEWORK (Not exceeding 1m³ volume)	TPCP 1A. NG			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; padding: 5px;">TESTING & PURGING PIPEWORK (Exceeding 1m³ volume)</td> <td style="width: 30%; padding: 5px;">TPCP 1. NG & LPG</td> </tr> </table>	TESTING & PURGING PIPEWORK (Exceeding 1m³ volume)	TPCP 1. NG & LPG	➔	<p>This assessment is valid with the following core gas safety assessments:-</p> <ul style="list-style-type: none"> ➤ In conjunction with both Commercial NG &/or LPG Cores (COCN 1.–CoDNCO 1.–CoNGLP 1.) <i>Normal Route</i> ➤ In conjunction with any other Core
TESTING & PURGING PIPEWORK (Exceeding 1m³ volume)	TPCP 1. NG & LPG			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; padding: 5px;">DOMESTIC APPLIANCES - NG & LPG (Cookers, Hot Water/Central Heating Boilers, Water Heaters)</td> <td style="width: 30%; padding: 5px;">NG & LPG</td> </tr> </table>	DOMESTIC APPLIANCES - NG & LPG (Cookers, Hot Water/Central Heating Boilers, Water Heaters)	NG & LPG	➔	<p>This assessment is valid with the following core gas safety assessments:-</p> <ul style="list-style-type: none"> ➤ In conjunction with both Domestic NG &/or LPG Cores (CCN 1.–CCLP 1.–CoNGLP 1.) <i>Normal Route</i> ➤ Limited scope (occasional involvement from appliance isolation valve to appliance in commercial environment) in conjunction with Commercial I/Commercial Catering (COCN 1. - CoDNCO 1. – CoNGLP 1. – CCCN 1. - CoDC1.)
DOMESTIC APPLIANCES - NG & LPG (Cookers, Hot Water/Central Heating Boilers, Water Heaters)	NG & LPG			

WHAT'S THE ANSWER?

This page is intended to give some guidance to anyone involved in offering advice to operatives intending to undertake ACS assessments.
The following examples of typical questions/response should be used in conjunction with the attached flowcharts.

Candidates Questions

Response

I hold ACoP 1-14 qualifications that are out of date.
What ACS assessments do I need to take?



What areas of gas work do you undertake?
Use page 4 flow chart to advise candidate

I carry out work on NG domestic cookers and hold CCN1 & CKR 1. however; I need to be able to carry out this type of work on LPG.
What assessment do I need to take?



Use page 4 flow chart to advise the candidate to undertake suitable changeover assessment

I work on Touring Caravans, Residential Park Homes and Boats.
What ACS assessments do I need to take?



What gas appliances do you carry out gas work on?
Use page 7 flow chart to advise candidate, which core & sector assessment to take.
Use page 4 & 7 flow charts to advise candidate which appliance assessments to take.

I install test & purge large commercial pipework, install & commission commercial Overhead Radiant Tube Heaters.
What ACS assessments do I need to take?



Use pages 10 & 11 flow chart to advise the candidate to undertake suitable core and appliance/equipment assessments

I install commercial pipe-work & appliances but do not connect to a live gas supply or commission the equipment.
What ACS assessments do I need to take?



Ensure the candidate is a "Limited Scope" operative and refer to the flow chart on Page 10

I only install domestic gas meters up to U6 size.
What assessments do I need to take?



Enquire as to whether the candidate carries out work on behalf of a Gas Transporter (GT) Meter Asset Manager or Gas Supplier & is approved by an OAMI registered business.
If so refer to page 18 & 19 flowcharts to advise candidate which assessments to take.

Candidates Questions

Response

I hold CCN1 & CKR1 and wish to take a "changeover" assessment to extend my scope of work to include commercial catering appliances



Refer to page 15 flowchart to advise candidate which assessment to take.
Advise the candidate that the commercial catering appliance categories will cease to be valid when the Core CCN1 assessment expires.

Which ACS assessments do I need to take to enable me to work on Mobile Catering Equipment?



Enquire as to which (if any) ACS assessments the operative holds & refer to page 10 flowchart

NOTE:
*If uncertain about any assessment requirements contact
Energy & Utility Skills Ltd.
Tel. No.
0845 077 99 22*