

**To include in all translations:**

This is a translation of the original English version of the EFESC handbook and its appendices.  
This translated version is subordinate to the original English version.

## **EUROPEAN CHAINSAW STANDARDS: 2026**

### **ECS 2: Basic Tree Felling Techniques (Small Trees)**

**What the chainsaw operator must be able to do: Safely felling trees under effective guide bar length on felling height, removing branches and top and taking down a hung-up tree**

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| <b>ECS2-1</b> | <b>TAKE CARE OF YOURSELF (PPE) AND OTHERS AROUND YOU AT WORK - Chainsaw operator to wear appropriate PPE</b>   |
| <b>01:01</b>  | Chainsaw safety trousers   |
| <b>01:02</b>  | Chainsaw safety boots  |
| <b>01:03</b>  | Safety helmet  |
| <b>01:04</b>  | Eye & ear protection   |
| <b>01:05</b>  | Gloves appropriate to task   |
| <b>01:06</b>  | Non-snap outer clothing  |
| <b>01:07</b>  | Personal /Squad First Aid Kit – on work site   |
| <b>01:08</b>  | Whistle/Mobile/Radio   |
| <b>ECS2-2</b> | <b>PLANNING THE WORK INCLUDING WHAT TO DO IN AN EMERGENCY - Chainsaw operator must be able to identify hazards relevant to the site &amp; trees to be worked on:</b>   |
| <b>02:01</b>  | Emergency planning - check information   |
| <b>02:02</b>  | Method statement - verbal  |
| <b>02:03</b>  | Risk Assessment – walk site, look and discuss  |
| <b>ECS2-3</b> | <b>OPERATIONAL SAFETY CHECKS (chainsaw ON) - Chainsaw operator must be able to check a chainsaw for condition/sharpness etc and pre-use safety: (Still applicable if battery chainsaw is used for cross-cutting)</b> |
| <b>03:01</b>  | Cold/Warm start method (ground/'leg lock')   |
| <b>03:02</b>  | Safe start distance from fuel (min.1m or greater according to national guidance, no spillage, gases released)  |
| <b>03:03</b>  | Function of chain brake tested, left hand guard and throttle lock  |
| <b>03:04</b>  | Saw checked for oiling (e.g. oil throw test or oil present on drive links)   |
| <b>03:05</b>  | Chain not moving when throttle released (no chain creep)   |
| <b>03:06</b>  | On/off switch is working (pull choke to stop if not, then label not to be used)  |
| <b>03:07</b>  | Chain tension 'warm' re-checked  |
| <b>ECS2-4</b> | <b>MEET LEGAL &amp; SITE ENVIRONMENTAL REQUIREMENTS IN ACCORDANCE WITH NATIONAL STANDARDS - Chainsaw operator must be able to check specifications:</b>  |
| <b>04:01</b>  | Protection of fauna, flora, wildlife, waterways, site specifications etc, regards pollution/damage:  |
| <b>04:02</b>  | Use bio-oils and alkylate fuel whenever possible   |

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| <b>04:03</b>  | Prevent waste or dispose of it without causing further damage, in accordance with the regulations, especially according to the standard for recyclable waste  |
| <b>ECS2-5</b> | <b>CONSTANT SAFE AND ERGONOMIC SAWING POSITION AND METHOD - The chainsaw operator must be able to perform all sawing operations in a safe and ergonomic manner, taking into account:</b>  |
| <b>05:01</b>  | Right hand on the rear handle when sawing   |
| <b>05:02</b>  | Left thumb always around top handle, head/neck are not allowed across of line of chain (unless checking the line of the cuts with bar tip in full view) when sawing   |
| <b>05:03</b>  | Saw body not above shoulder height  |
| <b>05:04</b>  | Chain brake used appropriately: according to national regulations, e.g. when walking with the engine running, if the saw has to be put down while moving cut material or before taking a hand off the saw   |
| <b>05:05</b>  | Stable and ergonomic position   |
| <b>05:06</b>  | Safe position to side of tree/stem in all activities  |
| <b>ECS2-6</b> | <b>PREPARE THE TREE FOR FELLING BY SAFE BRASHING - Chainsaw operator must also be able to remove low branches considering:</b>  |
| <b>06:01</b>  | Correct “break-in” (remove low-hanging branches to create a passage to the stem) and brashing close to the stem moving systematically anti-clockwise  |
| <b>06:02</b>  | Position of the saw in relation to the operator, bar on opposite side of stem or out of line of head/neck and body (operating technique)  |
| <b>ECS2-7</b> | <b>FELLING TREES IN A SAFE &amp; ERGONOMIC WAY - Chainsaw operator must be able to fell safely the following types of tree: upright; backward weighted; forward weighted.</b>   |
| <b>7A:1</b>   | Trees Inspected for signs of rot or decay, loose branches & accurate evaluation of weight distribution (tree assessment)  |
| <b>7A:2</b>   | Choice of felling direction made  |
| <b>7A:3</b>   | Escape routes selected and prepared   |
|               | Chainsaw operator must be able to cut a notch to determine felling direction on upright, forward or backward weighted trees, using:   |
| <b>7B:1</b>   | Top notch cut normally between 45-60°   |
| <b>7B:2</b>   | Bottom notch cut as close to ground as practicable (unless site criteria is different)  |
| <b>7B:3</b>   | Cuts 20-30% into stem unless tree condition dictates otherwise  |
| <b>7B:4</b>   | Notch cuts to meet accurately (not undercut)  |
| <b>7B:5</b>   | Notch facing in the chosen direction of fall  |
|               | Chainsaw operator must be able to make the main felling cut/s on upright, forward or backward weighted trees using a safe and effective felling method (e.g. a standard cut; a ‘split-level’ cut; a “boring cut” technique leaving rear hold; “Danish” / ‘saved corner’ cut; or any other cut) appropriate to the aspect of the tree. |
| <b>7C:1</b>   | Correct felling method chosen for the particular aspect of the tree   |
| <b>7C:2</b>   | “Ears” cut to avoid tearing, where appropriate  |
| <b>7C:3</b>   | Checks site for specific safety conditions (including third parties) before the main felling cut started & shout verbal warning: no unauthorized persons within two tree lengths or directly below on steep slopes  |
| <b>7C:4</b>   | Main felling cut no more than 10% of tree diameter above level of notch   |
| <b>7C:5</b>   | Felling cuts made with “pushing chain” or “pulling” chain as appropriate  |
| <b>7C:6</b>   | Safe withdrawal of the saw and chain brake used as appropriate  |

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| <b>7C:7</b>   | <b>A hinge retained appropriate to the tree diameter, aspect and condition</b>   |
| <b>7C:8</b>   | Appropriate aid tools as required to fell tree   |
| <b>7C:9</b>   | <b>The operator fully uses a prepared escape route as soon as the tree begins to fall</b>                                      |
| <b>7C:10</b>  | <b>Look up and check for loose branches, tops etc.</b>   |
| <b>ECS2-8</b> | <b>REMOVE BRANCHES IN A SAFE &amp; ERGONOMIC WAY</b> - Safe working practice will include:                                     |
| <b>8A:1</b>   | Correct stance and support of the saw on tree and/or right leg   |
| <b>8A:2</b>   | <b>Apply chain brake if reaching across bar and when negotiating obstacles</b>   |
|               | Chainsaw operator must be able to avoid:   |
| <b>8A:3</b>   | <b>Walking with a chain in motion when saw is on same side of stem as operator</b>   |
| <b>8A:4</b>   | Overreaching with chainsaw or reaching too far round with saw on far side of tree  |
| <b>8A:5</b>   | <b>Cutting towards legs or body</b>  |
| <b>8A:6</b>   | <b>Using kick-back zone on tip of guide bar</b>  |
| <b>8A:7</b>   | Straddling the stem  |
| <b>8A:8</b>   | <b>Working on lower side of tree on side slopes unless tree is restrained</b>  |
|               | Chainsaw operator must be able to demonstrate:   |
| <b>8B:1</b>   | Systematic sequence of cuts and position of the saw to remove branches as appropriate for the branching habit                  |
| <b>8B:2</b>   | All branches removed flush with the stem   |
|               | Chainsaw operator must be able to remove the top of the tree in accordance with site specifications:                           |
| <b>8C:1</b>   | Cut top at appropriate diameter  |
| <b>8C:2</b>   | Remove top with a safe method of cutting   |
| <b>8C:3</b>   | Dispose of top according to Job Specification  |
|               | Chainsaw operator must be able to turn tree and remove remaining branches:   |
| <b>8D:1</b>   | The stem turned using appropriate techniques &/or aid tools  |
| <b>8D:2</b>   | Using a safe and effective method to sever remaining branches  |
| <b>8D:3</b>   | All branches removed flush with the stem   |
| <b>ECS2-9</b> | <b>TAKE DOWN A HUNG-UP TREE IN A SAFE &amp; ERGONOMIC WAY (without a winch)</b> : Safe working practice will include:          |
|               | Chainsaw operator must be able to partially sever the hinge of hung-up tree with the chainsaw using:                           |
| <b>9A:1</b>   | <b>Safe position to side of tree</b>   |
| <b>9A:2</b>   | Safe cutting technique for removal of the hinge, leaving part(s) of hinge attached as appropriate to take down method utilised |
|               | Chainsaw operator must be able to take down the tree using hand tools:   |
| <b>9B:1</b>   | Aid tool positioned and attached safely & effectively  |
| <b>9B:2</b>   | Straight back  |
| <b>9B:3</b>   | Correct pushing/pulling technique as appropriate   |
| <b>9B:4</b>   | Correct grip   |
| <b>9B:5</b>   | Repositioning aid tool as appropriate  |

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| <b>9B:6</b>  | <b>Method applied avoids working in danger areas and/or with indiscriminate techniques</b>  |
| <b>9B:7</b>  | Release of aid tool as tree falls   |
| <b>9B:8</b>  | <b>Use escape route(s) as appropriate</b>   |
| <b>9B:9</b>  | If tree does not fall through the canopy when rolled, sever last part of the hinge from a safe position & 'walk down' e.g. wooden pole, using correct lifting technique |
| <b>9B:10</b>   | Tree in a stable condition on the ground, mechanical (e.g. winch) takedown arranged, or tree clearly taped off as a hazard if necessary                                 |
| <b>9B:11</b>   | Site left safe & tidy   |
| <b>What the chainsaw operator must know and understand: ECS2</b> |   |
| <b>1</b>   | Demonstrate knowledge of how to identify hazards and comply with the control procedures of risk assessments   |
| <b>2</b>   | Demonstrate knowledge of emergency planning and procedures for the site using the actual emergency plan for that site   |
| <b>3</b>   | Demonstrate knowledge of electrical emergency planning and procedures   |
| <b>4</b>   | Describe the implications of terrain, ground conditions, season, weather and species  |
| <b>5</b>   | Demonstrate knowledge of the legal requirements for felling trees in different circumstances  |
| <b>6</b>   | Demonstrate knowledge of the causes of, and how to prevent, potential pollution, environmental damage   |
| <b>7</b>   | Demonstrate knowledge of how and why to initiate and maintain effective communication   |
| <b>8</b>   | Demonstrate knowledge of your own role in company working practices and industry good practice  |
| <b>19</b>  | Demonstrate knowledge of how to apply ergonomic working methods and the implications of manual handling regulations   |
| <b>10</b>  | Demonstrate knowledge of how to move or roll timber by hand and with mechanical assistance  |
| <b>11</b>  | Demonstrate knowledge of how to recognise signs of disease and decay in trees and the effects of these on safety  |
| <b>12</b>  | Demonstrate knowledge of how to take down hung up trees safely and in line with industry guidelines including recognition of bad practice                               |
| <b>13</b>  | Demonstrate knowledge of safe techniques of delimiting  |
| <b>14</b>  | Demonstrate knowledge of safeguarding and maintaining your own health and safety and communication with those likely to be affected by your work                        |
| <b>15</b>  | Demonstrate knowledge of the dangers of using a pushing chain   |

### **ECC2 assessment: EFESC prescriptions of tasks and criteria**

**To obtain a European Chainsaw Certificate level 2, you must pass an assessment in which your skills and knowledge, both theoretical and practical, are tested. With this certificate you can prove your competence to work according to the European minimum Chainsaw Standards level 2.**

**If national standards or assessment procedures are more stringent and ECS2 is covered, an ECC2 label can be added to the current certificate by a certified assessment center.**

**During the assessment, the following minimum tasks and criteria must be checked objectively according the standards by a certified assessor.**

**Training and assessing must be separated: the assessor may not be familiar with the candidate.**

**Pre-requisite to ECC2 assessment: ECC1**

### **ECC2 assessment tasks:**

**Using a battery or petrol powered chainsaw.**

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| <b>Theoretical test:</b> |  |
|                          | - Written or oral  |
| <b>Practical Test:</b>   |  |
|                          | - Recommended guide bar size 30-38cm. Diameter of trees at felling height must be under effective guide bar length.<br>Recommended time: 60 Minutes, maximum 90 minutes if appropriate to site conditions.   |
|                          | - Candidate has to sign RA, show ID and wear appropriate PPE for tree felling.   |
|                          | - Candidate has to identify hazards relevant to the site & trees to be worked on; makes a Risk Assessment (RA), work- and emergency-planning   |
|                          | - Candidate has to check chainsaw for condition/sharpness etc and pre-use safety.  |
|                          | - Candidate has to check the legal & site environmental requirements in accordance with national standards.  |
|                          | - Candidate has to remove low branches.  |
|                          | - Candidate has to <b>fell two</b> different types of tree: either upright or backward weighted or forward weighted.<br>(Randomly chosen for the candidate from pre-marked trees).<br>One tree should be hung-up. ( this can be an additional tree )   |
|                          | - Candidate has to cut a notch to determine felling direction on upright, forward or backward weighted trees.  |
|                          | - Candidate has to make the main felling cut/s on upright, forward or backward weighted trees using a safe and effective felling method<br>(e.g. a standard cut; a 'split-level' cut; a "boring cut" technique leaving rear hold; "Danish" / 'saved corner' cut; or any other cut)<br>appropriate to the aspect of the tree. |
|                          | - Candidate has to remove all branches in a safe & ergonomic way.  |
|                          | - Candidate has to remove the top of the tree in accordance with site specifications.  |
|                          | - Candidate has to turn tree and remove remaining branches.  |
|                          | - Candidate has to take down a hung-up tree in a safe & ergonomic way (without a winch).   |
|                          | - Candidate has to partially sever the hinge of hung-up tree with the chainsaw.  |
|                          | - Candidate has to take down the hung-up tree using hand tools.  |
|                          | - Candidate has to demonstrate an ergonomic use of appropriate aids to handle / move timber.   |

**Critical faults or a combination of relevant faults against the good practice of these standards will lead to not passing the assessment.**

**The assessor has the right and duty to stop the assessment if direct safety is compromised.**

**ECC2 assessment criteria:**

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| <b>Theoretical test:</b> |  |
|                          | - If multiple choice: recommended minimum score to succeed: 70% (depending on the national scoring system) |
| <b>Practical Test:</b>   |  |

**CRITICAL (C): IF ONE OF THE FOLLOWING critical POINTS IS NOT FULFILLED, THE CANDIDATE CAN NOT PASS ECC level 2:**

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| <b>none</b>   | - the candidate wears appropriate PPE for tree felling  |
|   | - the candidate has the right hand on the rear handle when sawing   |
|   | - the candidate has the guide bar on opposite side of stem or out of line of head/neck and body when removing low branches  |
|   | - the candidate has the saw body not above shoulder height  |
|   | - the candidate is in safe position to side of tree/stem in all activities  |
|   | - the candidate checks site for specific safety conditions (including third parties) before the main felling cut started & shout verbal warning:<br>no unauthorized persons within two tree lengths or directly below on steep slopes   |
|   | - the candidate retains a hinge appropriate to the tree diameter, aspect and condition  |
|   | - the candidate fully uses a prepared escape route as soon as the tree begins to fall   |
| <b>RELEVANT (R): IF, AFTER ONE WARNING, MORE THAN THE MAXIMUM NUMBER OF RELEVANT ERRORS ON THE TOPICS BELOW ARE MADE, THEN THE CANDIDATE <u>CAN NOT PASS</u> ECC level 2:</b> |   |
| <b>5</b><br><br><b>Max. number of errors allowed</b>  | - the candidate wears gloves appropriate to the task and has a personal /Squad First Aid Kit – on work site   |
|   | - the candidate makes a Risk Assessment, Work- & Emergency planning   |
|   | - the candidate <u>checks function</u> of chainbrake, left hand guard and throttle lock   |
|   | - the candidate checks protection of fauna, flora, wildlife, waterways, site specifications etc, regards pollution/damage   |
|   | - the candidate inspects the trees for signs of rot or decay, loose branches & accurate evaluation of weight distribution   |
|   | - the candidate works in stable and ergonomic position  |
|   | - the candidate applies the chain brake appropriately: according to national regulations, e.g. when walking with the engine running, if the saw has to be put down while moving cut material or before taking a hand off the sawchain brake if reaching across bar and when negotiating obstacles |
|   | - the candidate has the left thumb always around top handle when sawing, head/neck are not across line of chain (unless checking the line of the cuts with bar tip in full view)  |
|   | - the candidate makes a choice of felling direction, selects and prepares escape routes   |
|   | - the candidate makes the notch cuts meet accurately (not undercut). notch facing in the chosen direction of fall   |
|   | - the candidate chooses a correct felling method appropriate to the particular aspect of the tree   |
|   | - the candidate looks up and checks for loose branches, tops etc.   |
|   | - the candidate avoids working on lower side of tree on side slopes unless tree is restrained   |
|   | - the candidate avoids cutting towards legs, body or walking with a chain in motion when saw is on same side of stem as operator  |
|   | - the candidate avoids using the kick-back zone on tip of guide bar   |
|   | - the candidate is on safe position to side of hung-up tree   |
|   | - the candidate avoids working in danger areas when taking down a hung-up tree and/or with indiscriminate techniques. Escape route(s) used as appropriate   |