

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 3: Advanced Tree Felling and Safe Winch Systems (Medium & Large Trees)

What the chainsaw operator must be able to do: Safely felling trees over effective guide bar length on felling height, removing branches and top and work with a winch

ECS3-1	TAKE CARE OF YOURSELF (PPE) AND OTHERS AROUND YOU AT WORK - Chainsaw operator to wear appropriate PPE
1:01	Chainsaw safety trousers
1:02	Chainsaw safety boots
1:03	Safety helmet
1:04	Eye & ear protection
1:05	Gloves appropriate to task (e.g. steel cable manipulation)
1:06	Non-snap outer clothing
1:07	Personal /Squad First Aid Kit - on work site
1:08	Whistle/Mobile/Radio
ECS3-2	PLANNING THE WORK INCLUDING WHAT TO DO IN AN EMERGENCY - Chainsaw operator must be able to identify hazards relevant to the site & trees to be worked on:
2:01	Emergency planning - check information
2:02	Method statement - verbal
2:03	Risk Assessment – walk site, look and discuss
ECS3-3	OPERATIONAL SAFETY CHECKS (chainsaw ON) - Chainsaw operator must be able to check a chainsaw for condition/sharpness etc and pre-use safety:
3:01	Cold/Warm start method (ground/'leg lock')
3:02	Safe start distance from fuel (min.1m or greater according to national guidance)
3:03	Function of chain brake tested, left hand guard and throttle lock
3:04	Saw checked for oiling (e.g. oil throw test or oil present on drive links)
3:05	Chain not moving when throttle released (no chain creep)
3:06	On/off switch is working (pull choke to stop if not, then label not to be used)
3:07	Chain tension 'warm' re-checked
ECS3-4	MEET LEGAL & SITE ENVIRONMENTAL REQUIREMENTS IN ACCORDANCE WITH NATIONAL STANDARDS - Chainsaw operator must be able to check specifications:

4:01	Protection of fauna, flora, wildlife, waterways, site specifications etc, regards pollution/damage:
4:02	Use bio-oils and alkylate fuel whenever possible
4:03	Prevent waste or dispose of it without causing further damage, in accordance with the regulations, especially according to the standard for recyclable waste
ECS3-5	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:
5:01	Right hand on the rear handle when sawing
5:02	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
5:03	Saw body not above shoulder height when sawing
5:04	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
5:05	Stable and ergonomic position
5:06	Safe position to side of tree/stem in all activities
ECS3-6	PREPARE THE TREE FOR FELLING BY SAFE BRASHING - Chainsaw operator must also be able to remove low branches considering:
6:01	Correct “break-in” (remove low-hanging branches to create a passage to the stem) and brashing close to the stem moving systematically anti-clockwise
6:02	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)
ECS3-7	FELLING TREES IN A SAFE & ERGONOMIC WAY - Chainsaw operator must be able to fell safely the following types of tree: upright; backward weighted; forward weighted or side-weighted. A winch may be used to assist the felling if felling aids not considered sufficient.
7A:1	Trees Inspected for signs of rot or decay, loose branches & accurate evaluation of weight distribution (tree assessment)
7A:2	Correct choice of felling direction made
7A:3	Escape route(s) prepared and selected
	Chainsaw operator must be able to cut a notch to determine felling direction, using:
7B:1	Top notch / notch cut made (normally between 45-60°)
7B:2	Bottom notch cut as close to ground as practicable (unless site criteria different)
7B:3	Cuts 20-30% into stem unless tree condition dictates otherwise
7B:4	Notch cuts to meet accurately (not undercut)
7B:5	Notch facing in the chosen direction of fall
7B:6	Boring cut made where appropriate into the middle of the notch at appropriate height, depth and width to remove center of the tree
	Chainsaw operator must be able to make the main felling cut/s using a safe and effective felling method (e.g. 'Danish' / 'saved corner' cut; a bore and radial cut, a 'boring cut' technique leaving rear hold; or any other cut appropriate to the aspect of the tree).
7C:1	Correct felling method chosen for the particular aspect of the tree
7C:2	Buttresses removed &/or “ears” cut to avoid tearing, as appropriate

7C:3	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
7C:4	Main felling cut no more than 10% of tree diameter above level of notch
7C:5	Felling cuts made with “pushing chain” or “pulling” chain as appropriate
7C:6	Safe withdrawal of the saw and chain brake used as appropriate
7C:7	Final position of operator is in safe position relative to aspect of tree
7C:8	A hinge retained appropriate to the tree diameter, aspect and condition
7C:9	Appropriate aid tools as required to fell tree
7C:10	The operator fully uses a prepared escape route as soon as the tree begins to fall
7C:11	Look up and check for loose branches, tops etc.
ECS3-8	REMOVE BRANCHES & CROSSCUT STEMS IN A SAFE & ERGONOMIC WAY - Safe working practice will include:
8A:1	Correct stance and support of the saw on tree and/or right leg
8A:2	Apply chain brake or switch off saw if reaching across bar, clearing branches or when negotiating obstacles
	Chainsaw operator must be able to avoid:
8A:3	Walking with a chain in motion when saw is on same side of stem as operator
8A:4	Overreaching with chainsaw or reaching too far round with saw on far side of tree
8A:5	Cutting towards legs or body
8A:6	Using kick-back zone on tip of guide bar
8A:7	Straddling the stem
8A:8	Working on lower side of tree on side slopes unless tree is restrained
	Chainsaw operator must be able to de-limb / brake down trees using a safe and effective method appropriate for the branching habit, cut flush with the stem:
8B:1	Sequence of cuts and position of the saw to remove branches is appropriate for the branching habit , end result flush with the stem
8B:2	Work from top side of the tree on side slopes
8B:3	Work only from compression side of branches under severe ‘side’ tension
8B:4	Compression and tension forces are assessed and appropriate cuts used
8B:5	Heavy branches gradually reduced in length
8B:6	Work inwards carefully to deal with ascending and overhanging branches
8B:7	Do not work under overhanging limbs
8B:8	Retain main supporting branches on stem as appropriate
8B:9	Manipulate the trunk to bring branches over shoulder height to a safe cutting level as appropriate
	Chainsaw operator must be able to remove the top of the tree in accordance with site specifications (top cut at right angles with appropriate tension/compression cuts):

8C:1	Cut top(s) at appropriate diameter
8C:2	Remove top(s) with a safe method of cutting
8C:3	Dispose of top(s) according to Job Specification (e.g. bark beetle, nutrition of soil, etc.)
	Remove remaining branches using a safe and effective method (using an “under sweep” technique only, is not acceptable):
8D:1	Turn stem using appropriate aid tools/techniques
8D:2	Use a safe and effective method to sever remaining branches
8D:3	All branches removed flush with the stem
	Crosscut pole length timber over guidebar length in diameter to a specification. Chainsaw operator must be able to use:
8E:1	Reducing cuts as appropriate
8E:2	Correct boring technique
8E:3	Correct angle and depth of cuts
8E:4	Compression cut first as appropriate
8E:5	Correct location of final (tension) cut
8E:6	Correct use of throttle
8E:7	Correct accuracy of cuts
8E:8	Accuracy of measurement within reasonable tolerance
8E:9	Appropriate aids for rolling / lifting
ECS3-9	CHAINSAW OPERATOR MUST BE ABLE TO SET UP AND USE A WINCH SYSTEM FOR ASSISTED FELLING OF A TREE OR TAKE DOWN A HUNG-UP TREE IN A SAFE & ERGONOMIC WAY WITH A WINCH : (Winch can be hand or machine operated but must be adequate for the size of tree. All components, including anchor points, must be fit for purpose and compatible with the system used.) Safe working practice will include, as relevant to method used:
	Chainsaw operator must be able to prepare the site with winching equipment for assisted felling or to facilitate take down procedure:
9A:1	Assess position of tree and/or check condition of hinge if tree got hung-up
9A:2	Remove debris and obstacles from felling / takedown route
9A:3	Select a felling / takedown direction appropriate to tree form and site conditions
9A:4	Prepare (new) escape routes as appropriate
9A:5	Select winching equipment adequate for the load to be applied in assisted felling / takedown of the tree
9A:6	Inspect condition and compatibility of components for the winching operation
9A:7	Install winch cable / rope attachment points on / within the tree to give sufficient security and adequate leverage for the load to be applied and winching system, using safe and effective access techniques.
9A:8	Select an anchor point for the winch, or vehicle mounted winch, that is secure enough for the load to be applied.
9A:9	Position and set up the pulling equipment, configured correctly for the winch system and the load to be applied.
9A:10	Set up offset pulling (e.g. a snatch block on steep slopes or around obstacles) where appropriate.

9A:11	Select escape route(s) and determine risk zones for operators and exclusion zones for 3rd parties according to national regulations or EFESC guideline on cable assisted felling (efesc.org/downloads/)
9A:12	Deploy a competent banksman (lookout) where appropriate
9A:13	Agree clear communication protocols for assisted felling / takedown operation
9A:14	Test the winch setup with temporary pre-tension to ensure that all components, including the anchor points, are securely in place and functioning correctly.
9A:15	No unauthorized person within two tree lengths or directly below on steep slopes
	Chainsaw operator must be able to prepare a tree for cable assisted felling:
9B:1	Safe position to side of tree
9B:2	Make felling cuts using (where appropriate) a holding cut method &/or wedge as a failsafe for the assisted felling
9B:3	Chainsaw operator moves into safe zone
9B:4	Ensure command to winch is clearly given to winch operator (or operate winch in safe zone for 1 person system)
	Chainsaw operator must be able to prepare a hung-up tree for takedown operation:
9C:1	Safe position to side of tree
9C:2	Safe withdrawal of the saw leaving 10-20% retaining hinge either side
9C:3	Position or reposition strop (or chain) on the butt or anchor as appropriate
9C:4	Attachment of winch cable to strop or chain
9C:5	Supporting remnants of hinge removed carefully (and/or stump Shaped if applicable)
9C:6	Chainsaw operator moves into safe zone
9C:7	Ensure command to winch is clearly given to winch operator (or operate winch in safe zone for 1 person system)
	Winch operator (or chainsaw operator if one person system) must be able to operates the winch safely for assisted felling or take down:
9D:1	Position of winch operator
9D:2	Winch is used until tree falls
9D:3	Use escape route(s)
9D:4	Tree is winched until stable condition on the ground
9D:5	Strops removed, checked and stowed
9D:6	Winch rope rewound correctly, retrieve, check and stow winching equipment
9D:7	Site left safe & tidy
What the chainsaw operator must know and understand: ECS3:	
1	Demonstrate knowledge of how to identify hazards and comply with the control measures of risk assessments
2	Demonstrate knowledge of emergency planning and procedures for the site using the actual emergency plan for that site
3	Demonstrate knowledge of electrical emergency planning and procedures
4	Demonstrate knowledge of the safety considerations to be observed in planning the felling operation

5	Demonstrate knowledge on safety points to consider when felling a larger tree that is weighted in the felling direction
6	Demonstrate knowledge on safety points to consider when felling a larger tree which is weighted against the intended felling direction
7	Demonstrate knowledge of optional techniques that help to ensure the felling direction and / or quality of timber is maintained when felling large trees
8	Demonstrate knowledge of the consequence of not using the correct technique to a tree that is weighted in the felling direction
9	Demonstrate knowledge of the consequences of not using the correct technique when felling a tree which is slightly weighted against the intended felling direction
10	Demonstrate knowledge of felling rotten or dead trees
11	Demonstrate knowledge of identification of safety points when planning the branch removal procedure
12	Demonstrate knowledge of the safety considerations required during crosscutting
13	Demonstrate knowledge of how to remove a trapped saw
14	Demonstrate knowledge of requirements to consider when timber is stacked
15	Demonstrate knowledge of the safety considerations when selecting the winching equipment used
16	Demonstrate knowledge of the safety points that the chainsaw operator needs to consider in relation to the winching operation
17	Demonstrate knowledge of multiplication of forces encountered when using pulleys/snatch blocks for offset pulling and double rigging and choice of anchor points

ECC3 assessment: EFESC prescriptions of tasks and criteria

To obtain a European Chainsaw Certificate level 3, 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 3.

If National standards or assessment procedures are more stringent and ECS3 is covered, an ECC3 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 ECC3 assessment: ECC2

ECC3 assessment tasks:

Theoretical test:

- Written or oral

Practical Test:

- Recommended min. guide bar size 38cm, at least one tree over effective guide bar length in diameter at felling height.

Max. time allowed 2hr30min

- Candidate has to sign RA, shows 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 fell a minimum of 2 trees in a safe & ergonomic way - Candidate to fell an upright tree and either a backward, forward or side-weighted tree as chosen by the assessor (One tree over 38cm and one tree over 56cm at felling height). A winch may be used to assist the felling if felling aids not considered sufficient.
	- 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 using a safe and effective felling method (e.g. 'Danish' / 'saved corner' cut; a bore and radial cut, a 'boring cut' technique leaving rear hold; or any other cut appropriate to the aspect of the tree).
	- Candidate has to remove branches & crosscut stems in a safe & ergonomic way.
	- Candidate has to remove the top of the tree in accordance with site specifications.
	- Candidate must set up and use a winch system for assisted felling of a tree or to take down a hung-up tree in a safe & ergonomic way with a winch. This to prove the candidate's skills and correct choice of components & positions: (winch can be hand or machine operated but must be adequate for the size of tree. All components, including anchor points, must be fit for purpose and compatible with the system used.)

**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.**

ECC3 assessment criteria:

Theoretical test:

- If multiple choice: recommended minimum score to succeed: 70% (depending on the national scoring system)

Practical Test:

CRITICAL (C): IF ONE OF THE FOLLOWING critical POINTS IS NOT FULFILLED, THE CANDIDATE CAN NOT PASS ECC level 3:

none

- 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 when sawing
- 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:
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

RELEVANT (R): IF, AFTER ONE WARNING, MORE THAN THE MAXIMUM NUMBER OF RELEVANT ERRORS ON THE TOPICS BELOW ARE MADE, THEN THE CANDIDATE CAN NOT PASS ECC level 3:

6 Max. number of errors allowed	- 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 chain brake, 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, before taking a hand off the sawchain or when 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 correct choice of felling direction and 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's final position is in safe position relative to aspect of tree
	- the candidate uses appropriate aid tools as required to fell tree and sets up a safe winch system: all components, including anchor points, must be fit for purpose and compatible with the system used
	- the candidate has clearly established communication with winch operator (if applicable), who is in safe position and using the escape route when tree starts falling
	- the candidate looks up and checks for loose branches, tops etc.
	- the candidate is on safe position to side of tree if tree got hung-up
	- the candidate avoids working in danger areas when taking down a hung-up tree
	- the candidate removes supporting remnants of hinge carefully
	- the candidate prepares new escape routes as appropriate
	- the candidate avoids cutting towards legs or body, avoids using the kick-back zone on tip of guide bar and walking with a chain in motion when saw is on same side of stem as operator
- the candidate avoids working on lower side of tree on side slopes unless tree is restrained	
- the candidate works only from compression side of branches under severe 'side' tension	
- the candidate does not work under overhanging limbs	