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Pest management services — Requirements and competences

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National foreword

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English Version

Pest management services - Requirements and competences

Services de gestion des nuisibles - Exigences et
compétencesSchädlingsbekämpfungsdienstleistungen - Anforderungen
und Kompetenzen

This European Standard was approved by CEN on 10 January 2015.

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Contents

Page

Foreword.....	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Professional approach to pest management.....	8
5 Process flow of professional service	9
5.1 Client Contact.....	9
5.2 Inspect/Assess site	9
5.3 Assess Infestation, Identify pests and conduct a root cause analysis.....	10
5.4 Client and site risk assessment	10
5.5 Define field of legal application.....	11
5.6 Define pest management plan.....	11
5.7 Formal client proposal	12
5.8 Deliver the agreed service	13
5.9 Manage site waste	13
5.10 Formal record, service report and client recommendation.....	13
5.10.1 Internal record.....	13
5.10.2 Service report and recommendation	13
5.11 Confirm service effectiveness.....	14
5.12 Monitoring	14
6 Competence and requirements	14
6.1 Competence	14
6.2 Management of equipment	15
6.3 Supply and use of pesticides	15
6.4 Documentation and recording.....	15
6.5 Insurance	16
7 Subcontracting.....	16
Annex A (normative) Required competences	17
Annex B (informative) Field of application of the services	28
B.1 General information.....	28
B.2 Protection of asset including wood, wood based products and Other Materials (including Building Property and Bird Control) (top zone in Figure B.1).....	28
B.3 Protection of plants and plant products (right zone in Figure B.1).....	29
B.4 Health Protection in Humans, Pets and livestock by Pest Management (bottom zone in Figure B.1)	29
B.5 Health Protection in Humans, Pets and Livestock by Disinfection (left zone in Figure B.1).....	29
Annex C (informative) List of common European pests	30
Annex D (informative) Environmental Checklist	32
Bibliography	34

Foreword

This document (EN 16636:2015) has been prepared by Technical Committee CEN/TC 404 "Project Committee - Services of pest management companies", the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2015, and conflicting national standards shall be withdrawn at the latest by September 2015.

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Introduction

In 2008, the World Health Organisation reported that the last sixty years had brought significant changes in ecology, climate and human behaviour that favoured the development of urban pests (see Bibliography [7]).

The presence of such arthropods, rodents, other vertebrates and micro-organisms in proximity to humans represents a significant hazard for public health. This arises from the possibility that pests can act as physical and mechanical vectors for the introduction and spread of pathogens, diseases and possible allergens into human and animal populations. These organisms can also cause direct and indirect damage to building structures and their contents which can result in significant economic losses for commercial businesses, and households. In addition, they potentially can cause deterioration in the quality of life, including a psychological impact.

Arising from a need to address these concerns, the activities of disinfestation and the control of insects, rodents, other vertebrates and any consequential disinfection of micro-organisms have been developed as a service and are referred to collectively as the Pest Management industry.

The provision of pest control services is the subject of a number of EU Directives and Regulations, as well as national regulation.

NOTE 1 These can be accessed on the Eurlex website (see [9]).

NOTE 2 The food industry uses professional pest control services and the providers of the services need to consider the EU Regulations that apply and the types of control systems used in the food sector.

As these directives and regulations are being enacted, it is becoming clear that there is a need to unify and further professionalize the European Pest Management industry. This does not only support the European Commission's goal to open up cross border trading but also serves to protect and reassure purchasers of pest management services that suppliers operate to clear professional standards and thereby act safely, effectively and within appropriate European and national regulations.

Within this context it has been suggested that there is a necessity to develop a single common essential standard throughout Europe, the objective of which is to display to the clients that service providers following this standard, offer a quality which

- is recognized as being truly professional within all Europe;
- will ensure that its operators are competent to sell and deliver the service they are offering by meeting specified and validated minimum standards of knowledge, skill and practical competence;
- will offer the best available advice on how to prevent pest problems in the client's environment;
- will offer effective and efficient service dealing with the root cause of the problem identified;
- will provide a quality service recognized in Europe and will deliver safe services which minimize the risk for clients and the general public, whilst minimizing possible negative impacts on the environment and animal welfare.

The goal of every pest management activity is the effective and economical reduction or elimination of damage caused by pests. The successful achievement of this goal is dependent on a partnership approach between the service provider and the client.

To achieve this goal, the professional service provider conforms to the principles established by the World Health Organization (WHO) in respect of Integrated Pest Management (IPM), which can include a combination of habitat modification, biological control, physical control and chemical control.

Annex D includes an Environmental Checklist.

1 Scope

This European Standard specifies the requirements for pest management services and competences to be met by professional providers of pest management services in order to protect public health, assets and the environment.

This European Standard applies to those who have the responsibility for delivering pest management services including the assessment, recommendation and subsequent execution of the defined control and prevention procedures.

The requirements set out in this standard are designed to apply to any service provider whose activity falls within this scope, namely the targeted field of application of suitable methods against pests.

This European Standard does not apply to delivering services in the area of:

- field crop protection;
- routine cleaning and disinfection associated with regular contract cleaning services.

2 Normative references

Not applicable.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

active substance

substance or a micro-organism that has an action on or against harmful organisms

[SOURCE: Regulation (EU) No 528/2012.]

3.2

administration

person who is part of professional service provider who is in direct contact with client

3.3

animal welfare

minimization of pain, suffering or distress to vertebrate species in compliance with relevant legislation

3.4

asset

anything tangible or intangible that is capable of being owned or controlled to produce value and that is held to have positive economic value and represents value of ownership that can be converted into cash or other human benefits

3.5

awareness

having cognizance (able to take note or identify) that something such as a fact, situation, condition or problem exists and is relevant

3.6

biocidal product

substance or mixture, in the form in which it is supplied to the user, consisting of, containing or generating one or more active substances, with the intention of destroying, deterring, rendering harmless, preventing the

action of, or otherwise exerting a controlling effect on, any harmful organism by any means other than physical or mechanical action

substance or mixture, generated from substances or mixtures which do not themselves fall under the first paragraph, to be used with the intention of destroying, deterring, rendering harmless, preventing the action of, or otherwise exerting a controlling effect on, any harmful organism by any means other than physical or mechanical action

Note 1 to entry: A treated article that has a primary biocidal function will be considered a biocidal product.

[SOURCE: Regulation (EU) No 528/2012, modified — for editorial reasons, "any" was deleted at the very beginning of each of the two definitions, the final Note 1 to entry was originally a normal paragraph and the verb "shall" it originally contained was replaced with "will".]

3.7 biological control

use of natural substances or organisms to control and manage pests

EXAMPLE Bacteria, viruses, pheromones, fungi, natural predators.

3.8 chemical control

use of active substances to eliminate, repel or inhibit the development of pests

3.9 competent person

<Pest Management> trained person who has the skill, knowledge, practical competence and responsibility required to deliver professional pest management services

Note 1 to entry: The required competences for each role are specified in Annex A.

3.10 contamination

presence of unwanted extraneous materials or microorganisms

3.11 disinfection

process of destroying, reducing or containing microorganisms

Note 1 to entry: When this is part of a pest management activity or this activity is associated with a pest management measure.

3.12 environment

surroundings (indoor and outdoor) or essential conditions in which an organism (person, animal or plant) lives and operates and which can impact upon its survival, development and growth

3.13 habitat modification

man-made alterations to the dwelling or immediate environment of an organism that impacts on the activity and/or the population of that organism

3.14 health protection

<Pest Management> promoting and protecting health and well-being by minimizing the health impacts of any harmful organisms including pathogens and disease vectors

3.15

integrated pest management

IPM

Careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment

[SOURCE: FAO]

3.16

material safety data sheet

MSDS

document provided by the manufacturer profiling the hazards associated with a substance or product

Note 1 to entry: See Article 31 of Regulation 1907/2006 for requirements of Safety Data Sheets.

3.17

monitoring

process of maintaining pest specific regular surveillance over an agreed period of time and keeping a systematic record of the progress towards or deviations from a defined level

3.18

non-target species

organism that is not the target of the control

3.19

pest

organism, which is harmful for humans, for humans' activities, assets or products which they use or produce or which is unwanted or harmful to animals or the environment

Note 1 to entry: The grouping of pests is based on their general importance. Depending on the situation individual pest species can belong to more than one group. See Annex C for a list.

3.20

pest infestation

presence of pests or signs of their presence

3.21

pest management

measures of all types which consist of damage assessment, pest infestation assessment, pesticide application, documentation and prevention

3.22

pesticide

plant protection product or biocidal product used for the control of pests

Note 1 to entry: Plant protection product is defined in Regulation (EC) No 1107/2009. Biocidal product is defined in 3.3 and in Regulation (EU) No 528/2012 (Article 3, 1 (a)).

3.23

physical control

managing pests using temperature, sound, electricity, air movement or humidity and mechanical methods such as traps, fences, barriers

3.24

professional service provider

private or public enterprise, structure or organisation consisting of one or more persons specifically qualified, certified or licensed and regularly trained, working according to a standard in which required levels of knowledge and service approach are prescribed

3.25

professional user

person who is part of Professional Service Provider who is regularly trained and uses/applies pesticides in the course of their activities

EXAMPLE Example of professional user is technician or field agent.

3.26

public health

<Pest Management> protection of humans against the negative influences on health caused by pests

3.27

sales

part of the professional service provider who is in direct contact with the client and able to make a formal pest management proposal for the client

3.28

service provider

private or public enterprise, structure or organisation consisting of one or more persons which provides (pest management) services

[SOURCE: based on CEN Guide 15 definition, adapted to the pest management field.]

3.29

stored product pest

pest which develops in or on stored goods, causing damage making them unfit for consumption, further processing or sale

3.30

technically responsible person

person within a professional service provider who is accountable for assuring the training and competence of professional users and their compliance within the field to the defined service protocols (which include inspection, identification of pests, risk assessment, service planning, evaluation of alternative service approaches, defining the conditions under which control measures are applied and validation of service effectiveness)

4 Professional approach to pest management

The professional service provider shall:

- demonstrate that they have followed a process which is aligned with Figure 1;
- demonstrate that this process is conducted by competent persons fulfilling a role as described in Clause 5 and Annex A who shall implement their knowledge into their recommendations, proposals and daily practices;
- develop and present a pest management plan to the client which is mindful of the declared requirements, impact and risks associated with the individual client's specific environment and which encompasses the processes of prevention and/or control as necessary in order to obtain both adequate sanitary and environmental conditions and to avoid further proliferation of any infestation;

- implement with the client the agreed control processes and shall be able to provide detailed records and evidence of competence of each step within these control processes;
- provide a report on the service conducted and assess to what extent the objectives identified in the pest management plan have been achieved along with any recommendations for actions by the client in order to assure maintenance of a sanitary environment post service.

NOTE It is acknowledged that the way a service is commissioned can vary significantly from service provider to service provider depending upon their business model (e.g. direct sales, web or phone enquiry, call centre, etc.), however regardless of the client enquiry / sales process followed in order to demonstrate that a professional approach has been adopted when considering and creating appropriate recommendations and proposals a professional service provide will complete all the steps in Figure 1.

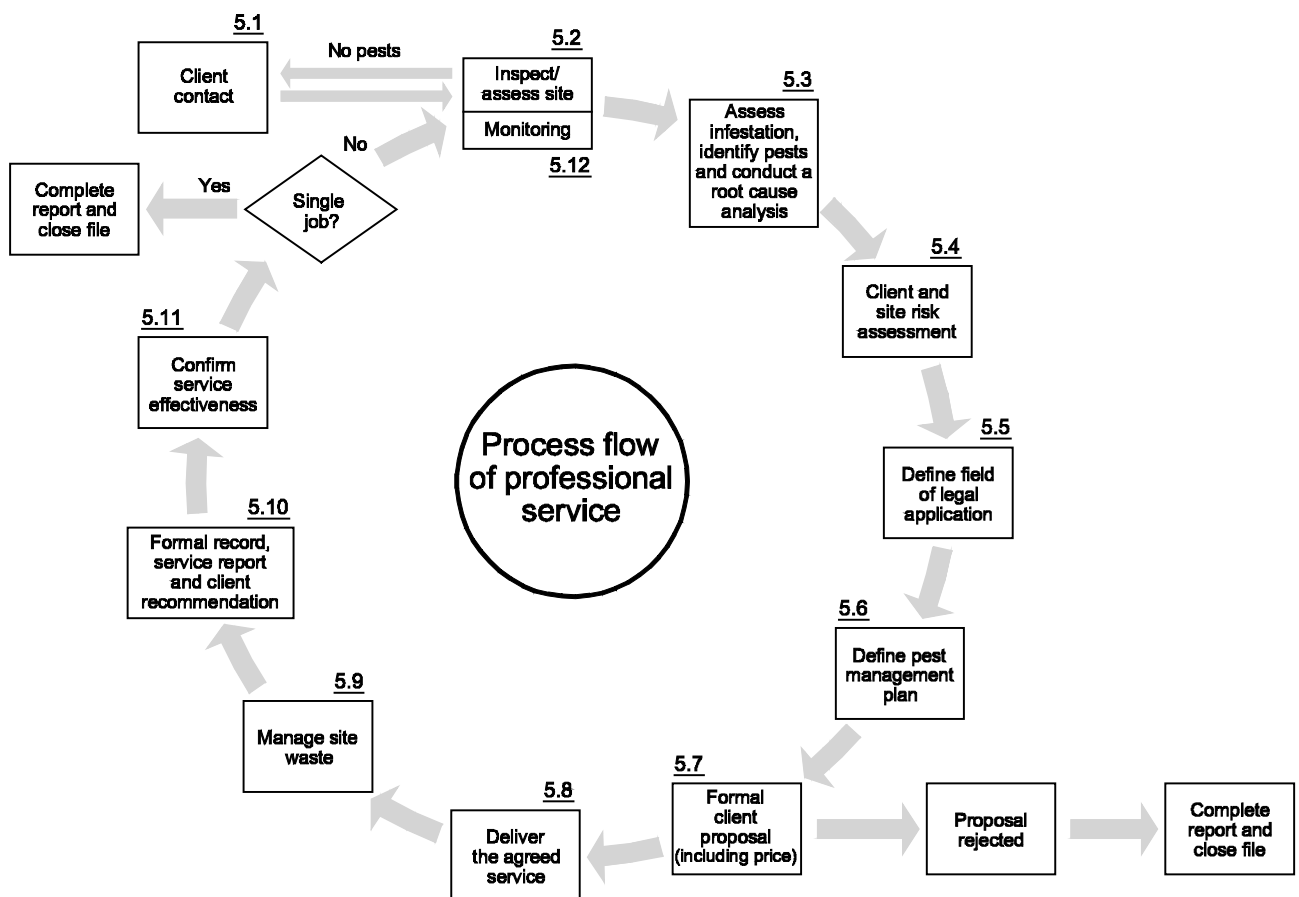


Figure 1 — Process flow for professional pest management services

5 Process flow of professional service

5.1 Client Contact

The professional service provider shall establish and record the declared requirements of the client taking specific account of any relevant risk factors or client concerns which may impact upon the choice of service to be proposed (e.g. nature of clients business, nature and value of assets impacted, location, etc.).

5.2 Inspect/Assess site

A thorough assessment shall be conducted by a competent person in order to determine whether there is pest activity or whether the potential to support an infestation exists. The results shall be explained to the client

before any program of intervention is designed or implemented. The assessment shall provide a diagnosis of the situation as requested by the client and shall include:

- the detection and identification of the pest species;
- an assessment of the extent and distribution of their presence;
- an assessment of the local contributory factors which would favour their further proliferation;
- identification of measures required to be taken to mitigate the risks of further proliferation of contamination, infestation or re-infestation;
- review and evaluation of the effectiveness of previous inspections, treatments and interventions.

Where this activity is conducted as part of a regular service contract and where no pest infestation is identified the service activity shall move to monitoring.

The service provider shall record all inspections in accordance with any agreed contract and in compliance with 5.1.

5.3 Assess Infestation, Identify pests and conduct a root cause analysis

When a pest activity is detected, a thorough assessment shall be conducted by a competent person fulfilling a role as defined in Annex A and Clause 6. The results shall be recorded and explained to the client before any program of intervention is designed or implemented; the assessment shall provide a diagnosis of the situation and at a minimum shall include:

- the detection and identification of any pest species as well as an assessment of the extent and distribution of their presence;
- the identification of the potential for, or the presence of, pest species/organisms;
- an assessment of the local contributory factors which would favour their further proliferation;
- the identification of preventive measures, including client corrective actions required to mitigate the risks of further infestation; a distinction shall be made in the recommendations where the client is accountable for taking a corrective action or modifying local practices;
- a review and evaluation of the effectiveness of previous inspections, treatments and interventions. Particular note shall be made and recorded of situations where the client has failed to act upon previous recommendations designated as within their accountability and the potential impact on sustaining the current infestation.

Where the presence of pest organisms is identified, the professional service provider shall make all reasonable endeavours to establish and trace the possible sources of the infestation; these findings shall be taken into account both within any formal recommendations and in design of any preventive and treatment strategies.

5.4 Client and site risk assessment

Business sectors need to comply with varying third party specifications and a professional service provider shall be able to appreciate that these factors contribute to their client's requirements. The service provider shall define their response and recommendations based upon any potential threat to health, assets and the environment identified within the client's own environment.

When considering alternative treatment strategies (see (6) of Annex A) the pest management company or organisation shall consider:

- any implications arising from the requirements of the nature and structure of the premises, environment and location, activities being performed at the site;
- the client's attitude to risk (i.e. the nature of the pest organisms, the likelihood of presence and/or proliferation and a realistic assessment of the potential consequences any such presence would have on the client);
- potential impact of the intervention on the environment and non-target species.

5.5 Define field of legal application

The technically responsible person shall establish formally which regulations are applicable and then select an appropriate control strategy to be included in the pest management plan for the client.

NOTE Different control scenarios are subject to different European regulations (see Annex B).

5.6 Define pest management plan

Following the fulfilment of the requirements in 5.1 to 5.5 the professional service provider shall propose a pest management plan. The plan shall define the appropriate strategy, a timetable of actions and take into account the type of client / industry and any relevant local site factors.

In addition the client shall be advised of any area or practice of their operation that could impact on the proposed strategy. Likely scenarios could include the following:

- a) during the assessment of the site, no presence of pests was found and the internal environment was correct (i.e. the conditions are not favourable for the proliferation of pests). Periodic monitoring shall be continued in order that the results of the diagnosis are maintained;
- b) during the assessment of the site, no presence of pests was found, but the internal or local external environment is such that it could possibly facilitate establishment of an infestation. The professional service provider shall consider and advise on:
 - 1) methods concerning the structure and construction;
 - 2) the prevailing hygiene/sanitary conditions and environment;
 - 3) actions to train and develop client's behaviour or practices;
 - 4) direct control methods over pests in the immediate external vicinity.
- c) during the assessment of the site, the presence of pests was found. The activities indicated in point b above shall be used, and in addition, methods of direct control over the pest within the interior of the site.

When defining appropriate methods of control, the principles of integrated pest management shall be followed and include consideration of the following strategies or rational combinations thereof as appropriate for each pest species identified:

- habitat modification;
- biological control;
- physical control;
- chemical control.

When selecting the control methods consideration shall be given to:

- risk to local environment;
- potential to contaminate environmental compartments e.g. agricultural soil or surface waters;
- potential for primary and secondary poisoning of non-target animals.

5.7 Formal client proposal

In cases where the original sales process did not involve a direct visit to site, the service provider shall verify any pre-information before proceeding with service. The professional service provider shall present the most relevant findings of 5.2 to 5.6 in a logical and sequential way to the client and shall detail the logic on which the proposed pest control service strategy is based. It shall comprise, as appropriate, the following elements:

- a) risk of infestation on the site (existence and likelihood of access);
- b) identification and information on the species of arthropods, rodents and other vertebrates that have been detected in the survey;
- c) likely origin of the stated species and location within the site;
- d) assessment of the level of contamination/pest infestation and the extent to which it is distributed across the client site;
- e) advice to the client of the potential risks associated with the presence of the infestation;
- f) factors that influence the access or proliferation of the pests including local site conditions, structures, sanitary hygiene, work practices; this ensures correct information is provided to the owner of the site;
- g) a description of the proposed control strategy and details of the methods of intervention, including, where needed, additional steps to restore sanitary conditions on site;
- h) a description of the proposed preventive strategy, with details of the methods and client's responsibility for follow-up the respective duties according to service provider recommendations;
- i) where necessary, an assessment of the need to obtain external assistance (for example: requirement for municipal services to access an external sewer);
- j) a risk assessment of the implications of the treatment strategy and how this will be deployed;
- k) other information of technical interest that is relevant to specify the situation at this stage, to determine any urgent environmental correction measures, technical control operations with reference to future actions, including preventive actions, to be conducted by the client or service provider;
- l) a quotation for the client to sign his acceptance and approval to proceed.

The professional service provider shall record and present items b), g), k) and l) in writing and, as appropriate, should record and present the other items.

In cases where there is no ongoing contract and the service requested by the client is not recurring the requirement for a formal document may be limited to g) and l).

In the case that following an exchange of information between the service provider and the client and where no contract is agreed the service provider may not provide the formal proposal.

The formal client proposal shall include provision to follow up to ensure the service has been effective and that there is no further treatment is required.

5.8 Deliver the agreed service

The professional service provider shall deliver service as follows:

- selecting the appropriate method of control including any active ingredient and formulation where required (always following the label required);
- using a suitable method of application;
- correct storage and transportation.

5.9 Manage site waste

The professional service provider shall manage and dispose of waste safely and in a manner that will avoid adverse impacts on the environment, people and non-target species. The service provider shall act in accordance with relevant local and European legislation and codes of practice.

NOTE For the purposes of this standard waste includes animal carcasses, bird excrement, materials and equipment that have no useful purpose and require disposal (to include but not restricted to spent baits, traps, pesticide containers, packaging and light bulbs).

5.10 Formal record, service report and client recommendation

5.10.1 Internal record

The professional service provider shall retain on file a record of the pest management plan and service delivered which shall include (see 5.1), but is not limited to the following:

- client name and address serviced;
- date, time and type of service delivered;
- name of the product employed, the quantity used, the method and area of application;
- details of any corrective/preventive actions recommended to the client;
- details on progress (or otherwise) of any previous recommendations made to the client;
- identification of the professional user.

5.10.2 Service report and recommendation

The professional service provider shall issue a report to the client at agreed intervals. The report shall include but is not limited to the following:

- identification of the service provider;
- client name and address;
- confirmation that the agreed service has been completed and reports any deviation;
- date, time and type of service delivered, including a record of the products used and area of the application;
- any recommendations of actions to be taken by the client to prevent recurrence
- re-entry period into the treated area, if applicable.

5.11 Confirm service effectiveness

The professional service provider shall demonstrate service effectiveness by confirming that the results achieved are in accordance with the objectives in the plan agreed with the client. This may also include additional recommendations for actions to be completed by the clients or the professional service provider.

Following the successful completion of the service the file is closed for single jobs or moved into monitoring or regular service contracts.

5.12 Monitoring

For regular service contracts, the professional service provider shall define and recommend to the client an appropriate frequency of surveillance visits (see 5.6) which assures the protection of the client's assets.

The professional service provider shall record the outcome of each visit and, where evidence of pest activity is discovered, propose suitable interventions in accordance with the process flow of professional services.

6 Competence and requirements

6.1 Competence

6.1.1 As a general requirement, personnel having the roles identified in Annex A shall be able to demonstrate sufficient competence in literacy and numeracy to enable them to be able to fulfil their responsibilities including reading, writing, calculating and communicating verbally with clients and being able to interpret client requirements and technical requirements specified in labels, MSDS sheets and service protocols.

Annex A provides details of the competencies necessary for each role in a professional service provider.

6.1.2 The professional service provider shall have in its permanent staff (i.e. not occasional), a technically responsible person with accountability for supervising the attainment and maintenance of practical and theoretical knowledge along with the necessary technical skills for the performance of pest control activities and their verification within the company.

6.1.3 The professional service provider shall ensure that the training activities and professional experience are documented and updated continually in order to demonstrate the adequacy of its competence in terms of the range of pests serviced and the methods of pest management used. This document shall be available upon request.

6.1.4 Prior to commencing delivery of any service in their sector, staff shall participate in specific training and qualifying courses which include a final formal evaluation to verify their comprehension and achievement of competence levels described in Annex A.

6.1.5 Where staff undergo training to fulfil one of the roles described in Annex A, a training log shall be maintained to show what training has been completed and the results of the assessment of competence. The record shall be retained in the staff training records.

6.1.6 The professional service provider shall ensure that people who are in training to fulfil a role defined within Annex A shall work under direct supervision of the technically responsible person or the designated competent person.

6.1.7 Staff shall have knowledge of the impact of available strategies on target and non-target species.

6.1.8 The professional service provider shall ensure that the knowledge and skills of their staff continues to be current and of relevance, by establishing a system of continuing professional development and training for the technically responsible person and each professional user. This update shall be taken when it is considered necessary by the technically responsible person and shall be reviewed at least every three years.

6.1.9 At least once per year professional competence shall be demonstrated by each professional user through assessment by the technically responsible person or their nominee using a combination of training records, site visits and personal observation, and be recorded formally. Where there has been a shortfall, the technically responsible person shall be able to demonstrate that a corrective intervention has been made and recorded in the professional user's personal file or training log.

6.2 Management of equipment

The technically responsible person shall have a detailed list of the vehicles and equipment used in the delivery of the service with related documentation which includes an adequate maintenance schedule. The maintenance schedule shall include the calibration and adjustment of those items that require it.

6.3 Supply and use of pesticides

6.3.1 The technically responsible person shall give preference to methods and interventions in accordance with the principles of Integrated Pest Management (IPM).

6.3.2 The technically responsible person shall ensure that only products approved by the competent authorities are used by the professional users.

6.3.3 When selecting pesticide(s) for use consideration shall be given to:

- aspects concerning the efficiency;
- effectiveness (including the consideration of resistance management) and selectivity of the product;
- environmental and human impact;
- animal welfare impact.

6.3.4 The pesticides shall only be used following the instructions stated in the product label.

6.3.5 The technically responsible person shall provide information to the professional user, to advise the client about risks with respect to the products used, which can include potential impact on persons, goods, and non-target species that may be exposed.

This shall include information about any re-entry restriction period.

6.3.6 The technically responsible person shall ensure that all precautions are taken to prevent accidental spillages or contact with non-target species. In the event of a spillage or contact with a non-target species an appropriate clean up protocol shall be used and a record of the event shall be maintained.

6.4 Documentation and recording

6.4.1 A procedure shall be documented for each type of service to be provided by the professional service provider.

6.4.2 The professional service provider shall:

- document the type of service that is to be provided to the client and keep on file for a minimum of one year or more in accordance with client and legal requirements;
- record evidence of activities performed and results achieved to include date of intervention, pest, infestation, techniques and pesticides used and any other relevant information;

- provide information on the specific pest management plan based on the risk assessment necessary to establish the agreed control processes and include the responsibilities, rights and duties of each of the parties to the contract;
- complete a formal review and assessment of the results including any further recommendations for the client.

6.4.3 During the delivery of services, the professional user shall prepare accurate records when on site to include information on:

- the products, the quantities used and their active ingredients;
- recommendations to be adopted by the client before, during and after the intervention, to ensure a safe and effective service for client, non-target species and the environment.

6.4.4 Where the services provided require continuous monitoring or control the records shall include:

- the actual plan stating the location and other information of control points;
- planned monitoring schedule.

6.4.5 Assessment of the investigation, if necessary root cause of pest infestation and proposals/measures to be carried out by the professional service provider or the client; e.g. additional treatment, additional monitoring systems, improvement of structures, processes, handling.

6.4.6 The professional service provider shall provide documentation:

- to inform and educate the clients;
- that demonstrates the efficacy of the services provided;
- that specifies any actions that are necessary by the client in order to prevent further infestation.

6.5 Insurance

The service provider shall protect the interests of their clients and members of the public by having an appropriate level of public liability and professional indemnity insurance.

7 Subcontracting

When the professional service provider subcontracts the provision of pest management services to a third party, it shall remain responsible for ensuring that those services are provided in compliance with the requirements of this European standard.

Annex A (normative)

Required competences

Table A.1 specifies the competences (based on skill, knowledge and understanding) required by an individual fulfilling specific roles in the delivery of professional pest management services.

A single individual may fulfil multiple roles in the offering or delivery of services.

Table A.1 — Required competences

Task	N.	Required Competence The person carrying out this role shall be able to...	Roles			
			Technically Responsible person	Professional user	Sales	Administration
(1) First Contact: Problem definition Client context Location	1.1	Define client type, pest problem and associated risk/action priority for client type and its specific business requirements	Yes	No	Yes	Yes
	1.2	Collect relevant information concerning pests (activity, layout, environment, design, previous pest, treatment, risk factors)	Yes	Yes	Yes	No
	1.3	Pass to the technically responsible person all information in accordance with the risks	—	Yes	Yes	Yes
(2) Assess Client Site	2.1	Describe the relevant biology and behaviour of public health pests and any other pests against which service is provided (including life cycle, habitat and food preferences)	Yes	Yes	Yes	Awareness

Task	N.	Required Competence The person carrying out this role shall be able to...	Roles			
			Technically Responsible person	Professional user	Sales	Administration
	2.2	Detect and identify the common pest species associated with public health risks and the pests against which their service is provided (including indicators or non-target species) Note: Annex C gives an indication of the common European pests	Yes	Yes	Yes	No
	2.3	Estimate the level of infestation and define the extent of its distribution and risk to the client's environment	Yes	Yes	Yes	No
	2.4	Identify and assess the factors that might impact on control or influence the entry, distribution and proliferation of pest infestation at the client location, building structure and environment	Yes	Yes	Yes	No
	2.5	Describe the purpose and correct use of inspection tools and methods	Yes	Yes	Yes	No
	2.6	Explain appropriate control methods and their potential impact on humans, target and non-target species and plant organisms within the context of the client's environment	Yes	Yes	Yes	No
	2.7	Identify preventive measures required to be taken to mitigate the risks of further proliferation of contamination or re-infestation	Yes	Yes	Awareness	No
	2.8	Evaluate the effectiveness of previous inspections, treatments and interventions	Yes	Yes	Yes	No

Task	N.	Required Competence The person carrying out this role shall be able to...	Roles			
			Technically Responsible person	Professional user	Sales	Administration
(3) Root Cause Analysis	3.1	Communicate the likely root causes of infestations, based on the information from Task 2 and, where necessary, recommend the application of further investigations	Yes	Yes	Awareness	No
(4) Client & Site Risk Analysis	4.1	Conduct and document an operational health and safety risk assessment for the services to be provided on the site	Yes	Yes	Yes	No
	4.2	Explain to the client the implications to health and safety of site location factors, including moving vehicles, electricity, confined spaces, proximity of risk area to other work areas	Yes	Yes	Yes	No
	4.3	Identify the potential commercial impact of different pests on the client's business and explain the trade-offs between efficacy, speed and toxicity of alternative approaches to control.	Yes	Yes	Yes	No
	4.4	Describe the key requirements of local and European safety, environmental, animal protection and animal welfare legislation/regulations relevant to the pest management services that they offer	Yes	Awareness	Awareness	No
	4.5	Identify on-site constraints (access, working from height, non-target species, site audit requirements, regulations applying to the site or client) which will impact upon pest management protocols	Yes	Yes	Yes	No

Task	N.	Required Competence The person carrying out this role shall be able to...	Roles			
			Technically Responsible person	Professional user	Sales	Administration
	4.6	Identify potential routes for contaminating the environment and recommend appropriate preventive interventions	Yes	Yes	Yes	No
	4.7	Describe pre-treatment site preparation including any necessary exclusions, warnings or special measures	Yes	Yes	Yes	No
	4.8	Describe post-treatment site clean-up, including any necessary exclusions, warnings or special measures	Yes	Yes	Yes	No
	4.9	Use equipment for working at heights correctly	Yes	Yes	Awareness	No
	4.10	state the impact of the selected control method on animal welfare of target and non-target species	Yes	Yes	Awareness	No
	4.11	Determine and correctly state the client's expectations of the pest management process, including acceptable levels of pests that will be tolerated	Yes	Yes	Yes	No
	(5) Define field of application	5.1	Select the correct products and tools for specific pest management jobs and correctly explain the selection, taking into account the customer's attitude to risk, their location and the environment of the job	Yes	Yes	Awareness
5.2		Explain how specific pest management jobs shall be carried out in order to comply with legislation applicable to the specific field	Yes	Yes	Yes	No

Task	N.	Required Competence The person carrying out this role shall be able to...	Roles			
			Technically Responsible person	Professional user	Sales	Administration
(6) Define alternative pest management strategies including monitoring	6.1	Describe the use of physical methods of insect killing (temperature, controlled atmosphere) in different environments and products	Yes	Yes	Yes	No
	6.2	Describe the use of mechanical systems and products which can facilitate the removal, and/or prevent the entry/access of non-target animals and target pests into the building and surrounding site	Yes	Yes	Yes	No
	6.3	Describe the use of sustainable products including procedures and requirements for pest species control with minimum chemical impact	Yes	Yes	Yes	No
	6.4	Describe the use of pheromones, attractants and traps to catch and continuously monitor both the presence and activity of the targeted pests and non-target animals	Yes	Yes	Yes	No
	6.5	Describe criteria for the placement of traps for relevant pest species in different environments, products and materials	Yes	Yes	Yes	No
	6.6	Correctly use instruments and safety materials in the installation of traps and accessories in different environments	Yes	Yes	No	No

Task	N.	Required Competence The person carrying out this role shall be able to...	Roles			
			Technically Responsible person	Professional user	Sales	Administration
	6.7	Detect and identify common vertebrate and invertebrate species (including indicators and non-target species) in traps in different types of location NOTE Annex C gives an indication of the common European pests.	Yes	Yes	Yes	No
	6.8	Organize a continuous work programme with high level of attention to: <ul style="list-style-type: none"> • monitoring activities • the management of technical information • The elaboration and collation of relevant data and its quick communication and transmission to the client 	Yes	Awareness	No	No
	6.9	Recommend and justify, based on 6.1 to 6.8, the best combination of methods to be applied to the client's situation	Yes	Yes	Yes	No
	6.10	Explain environmental management factors that should contribute to an integrated pest management programme specific to the target pests	Yes	Yes	Yes	No
(7) Prepare a pest management plan for the client	7.1	Communicate with clients and colleagues clearly and effectively in writing and orally, including presenting pest management plans and professional reports	Yes	Yes	Yes	Yes

Task	N.	Required Competence The person carrying out this role shall be able to...	Roles			
			Technically Responsible person	Professional user	Sales	Administration
	7.2	Present details of pest identification, risk of infestation (existence of pests and their possibility of future access), likely origin, distribution and extent of the population	Yes	Yes	Yes	No
	7.3	Identify factors that favour the access or proliferation of the pests, including preventive measures and external assistance.	Yes	Yes	Yes	No
	7.4	Plan the use of physical, physical-chemical and/or biological measures (for chemical treatments to include the choice of pesticides, application technique, safety procedures)	Yes	Yes	No	No
	7.5	Define a formal client proposal	Yes	No	Yes	No
	(8) Maintenance, transport. Storage and calibration of equipment	8.1	Describe health and safety procedures including all associated rules and the use personal protective equipment that may be required for the protection of life and health	Yes	Yes	Awareness
	8.2	Demonstrate the correct storage, carriage, handling and use of equipment	Yes	Yes	No	No
	8.3	Describe the correct storage, use, transport, handling and disposal of hazardous substances, their possible adverse effects and protective measures	Yes	Yes	No	No
	8.4	Describe the different equipment that is used depending on the type of treatment being provided	Yes	Yes	Awareness	No

Task	N.	Required Competence The person carrying out this role shall be able to...	Roles			
			Technically Responsible person	Professional user	Sales	Administration
	8.5	Ensure that all equipment is maintained and where necessary calibrated	Yes	Yes	No	No
(9) Implement an agreed pest management plan	9.1	Clearly and effectively interpret service information in relation to job and tasks	Yes	Yes	No	Yes
	9.2	Describe and demonstrate the correct use of non-chemical methods of control	Yes	Yes	No	No
	9.3	Correctly carry out arithmetic, including calculation of dilution factors and application rates	Yes	Yes	Yes	No
	9.4	Explain the potential impacts of service activities/interventions on, personal health, clients' and bystanders' health, including required access restrictions and re-entry period to the treatment zone	Yes	Yes	Yes	No
	9.5	Correctly select, prepare and apply pest control products	Yes	Yes	No	No
	9.6	Describe and recommend hygiene intervention required to leave a sanitary environment for the client	Yes	Yes	Yes	No
	9.7	Assess accident risks and describe first aid measures, especially in terms of poisoning and fumigation accidents	Yes	Yes	Awareness	No
	9.8	Describe how to store and transport hazardous substances/preparations safely and actions to be taken in the case of a spillage	Yes	Yes	No	No

Task	N.	Required Competence The person carrying out this role shall be able to...	Roles			
			Technically Responsible person	Professional user	Sales	Administration
	9.9	Explain the duty of care to the client	Yes	Yes	Yes	No
	9.10	Establish service level agreements for treatment and control measurements	Yes	No	Yes	No
	9.11	Collect all relevant information from the client proposal (including address, contact person, level and type of infestation, risk analyses, agreed method of treatment and preparations, other special agreements)	Yes	Yes	Yes	Yes
	9.12	Describe the impact and any potentially adverse effects of service intervention on the surrounding environment	Yes	Yes	Awareness	No
	9.13	Explain and interpret correctly the MSDS, labels and application instructions and operate in compliance with them	Yes	Yes	No	No
	9.14	Calculate square and cubic meters (area and volume) to find out the application rate and attenuation of pest control products	Yes	Yes	Yes	No
	9.15	Describe and transport, store, handle and dispose of pesticides correctly and safely	Yes	Yes	Awareness	No
	9.16	Demonstrate how to manage correctly accidental spillages and the disposal of hazardous waste (pesticide, pesticide package, contaminated protective clothing and tools)	Yes	Yes	No	No

Task	N.	Required Competence The person carrying out this role shall be able to...	Roles			
			Technically Responsible person	Professional user	Sales	Administration
	9.17	Describe the correct procedures for the collection and disposal of pest remains	Yes	Yes	Yes	No
(10) Formal report and recommendation	10.1	Use the service provider's system correctly for reporting the detection and registration of pest activities.	Yes	Yes	Yes	Yes
	10.2	Compile the report and technical service record sheet	Yes	Yes	Awareness	No
	10.3	Distinguish between 'preventive' and 'corrective' measures and identify and report the appropriate measures to the client	Yes	Yes	Yes	No
	10.4	Identify insurance measures/implications to be included in client's report/recommendations	Yes	Yes	Yes	Yes
(11) Confirm Service Effectiveness	11.1	State the client proposal and the agreed level of infestation	Yes	Yes	Yes	No
	11.2	Assess any residual level of infestation and compare with agreed level in client proposal	Yes	Yes	Yes	No
	11.3	Explain to the client how any residual level of infestation complies with the client's requirements	Yes	Yes	Yes	No
	11.4	Explain the importance of any customer's non-compliance to service provider's recommendations and its likely contribution to pest residual activity	Yes	Yes	Yes	No

Task	N.	Required Competence The person carrying out this role shall be able to...	Roles			
			Technically Responsible person	Professional user	Sales	Administration
	11.5	Establish the root cause if agreed level of infestation could not be achieved and propose appropriate corrective actions in terms of service provider and client actions	Yes	Yes	Yes	No
	11.6	Describe the correct procedure if an adverse impact upon non-target species is detected	Yes	Yes	Awareness	No
	11.7	Describe how to handle formally any customer complaint within the Service Provider's protocols	Yes	Yes	Yes	Yes
(12) Monitoring of site	12.1	Identify the presence of pests	Yes	Yes	Yes	No
	12.2	Identify the potential for infestation including site conditions that influence pest survival, such as food, water potential harbourages and temperature	Yes	Yes	Yes	No
	12.3	Identify and recommend relevant preventive measures including structural proofing, hygiene and sanitary activities, housekeeping and site and habitat modifications	Yes	Yes	Yes	No
	12.4	Review and assess the effectiveness of previous interventions, activity and inspections	Yes	Yes	Yes	No
(13) Ensuring competence	13.1	Ensure that the staff are trained to meet the required competences	Yes	No	No	No
	13.2	Assess attainment of required competences	Yes	No	No	No
	13.3	Take action to address any gaps identified in competence	Yes	No	No	No

Annex B (informative)

Field of application of the services

B.1 General information

See Figure B.1.

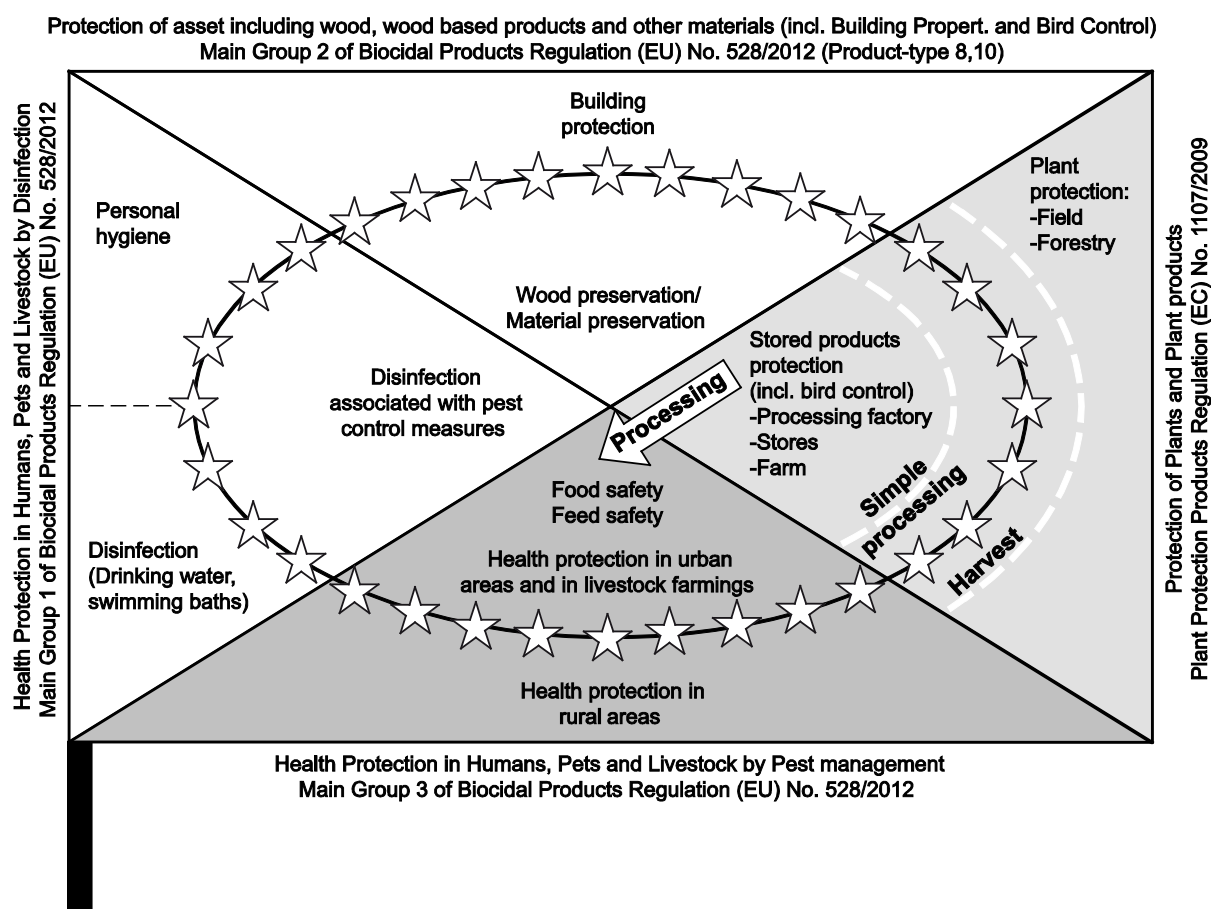


Figure B.1 — Field of application of the services

B.2 Protection of asset including wood, wood based products and Other Materials (including Building Property and Bird Control) (top zone in Figure B.1)

Scope:

- construction timber or other material;
- need for preventive or curative protection of asset including wood, wood based products and other materials.

Exception:

- industrial manufactured wood or other industrial material preservation (process-controlled impregnation);

- preventive measures against inorganic materials, physical/mechanical building/material influences.

B.3 Protection of plants and plant products (right zone in Figure B.1)

Scope:

- plants and plant products, their stores, transport devices and sites of simple processing;
- infestation by plant pests and stored products pests;
- urban, industrial and amenity sites, including domestic gardens.

Exception:

- plants in field and forestry.

NOTE Due to different national interpretations, licences, responsibilities the stored product area can be reduced in favour of the food area:

- a) by the area of simple processing of plant/plant parts or
- b) to the point of removal of the plant/plant parts from the harvesting farm or
- c) disappear completely as all plants, plant parts and their products are considered to be food or feed right from the point of them having been harvested.

B.4 Health Protection in Humans, Pets and livestock by Pest Management (bottom zone in Figure B.1)

Scope:

- urban sites, buildings, company sites, farms, private houses, gardens, etc.;
- in plant or plant product stores and plant product processing factories;
- infestation by hygiene or health pests

Exception:

- nature reserves.

B.5 Health Protection in Humans, Pets and Livestock by Disinfection (left zone in Figure B.1)

Scope:

- required disinfection of rooms, surfaces, containers, etc. associated with a pest management measure;
- application of biocides of Main Group 1 (see Regulation (EU) No.528/2012), which requires special expertise.

Exception:

- disinfection of drinking water, swimming baths, etc.;
- personal hygiene.

Annex C (informative)

List of common European pests

The professional service provider should extend this list to include any other pests for which service is provided and it may be extended locally to include National specific species.

Public Health Pests		Scientific name	Common Name
Commensal Rodents	1	<i>Rattus norvegicus</i>	Norway rat, Brown rat
	2	<i>Rattus rattus</i>	Roof rat, Black rat
	3	<i>Mus musculus (domesticus)</i>	House mouse
	4	<i>Microtus arvalis</i> ^a <i>Microtus agrestis</i> ^a	Common vole Field vole
Cockroaches & Crickets	5	<i>Blattella germanica</i>	German cockroach
	6	<i>Periplaneta americana</i>	American cockroach
	7	<i>Blatta orientalis</i>	Oriental cockroach
	8	<i>Supella longipalpa</i>	Brown-banded cockroach
	9	<i>Acheta domesticus</i>	House cricket
Ectoparasitic Pests	10	<i>Ctenocephalides sp.</i> ,	Fleas
	11	<i>Cimex lectularius</i>	Bed bug
	12	<i>Argas reflexus</i>	Pigeon Tick
Flies & Mosquitoes	13	<i>Musca domestica</i>	Housefly
	14	<i>Calliphora sp.</i>	Blow flies, Blue bottle flies
	15	<i>Drosophila sp.</i>	Fruit (Vinegar) flies
	16	<i>Clogmia albopunctata</i>	Moth fly, Drain fly
	17	<i>Culex sp.</i>	Mosquitos
	18	<i>Anopheles sp.</i>	Mosquitos
	19	<i>Aedes sp.</i>	Mosquitos
Birds	20	<i>Columba Livia</i>	Common Pigeon
Ants	21	<i>Lasius niger</i>	Garden ant
	22	<i>Monomorium pharaonis</i>	Pharaoh's ant
Wasps	23	<i>Paravespula vulgaris</i>	Common wasp
Stored Product & Textile Pests	24	<i>Plodia interpunctella</i>	Indian meal moth
	25	<i>Ephestia kuehniella</i>	Mediterranean flour moth (Warehouse)
	26	<i>Tineola bisselliella</i> <i>Tinea pellionella</i>	Common clothes moth Casebearing clothes moth
	27	<i>Oryzaephilus surinamensis</i>	Saw-toothed grain beetle

Public Health Pests		Scientific name	Common Name
	28	<i>Tenebrio molitor</i>	Yellow mealworm
	29	<i>Dermestes lardarius</i>	Larder beetle
	30	<i>Psocoptera</i>	Book lice
	31	<i>Lepisma saccharina</i>	Silver fish
Wood Pests	32	<i>Hylotrupes bajulus</i>	House longhorn beetle
	33	<i>Anobium punctatum</i>	Furniture beetle (woodworm)
	34	<i>Lyctus brunneus</i>	Powder post beetle
	35	<i>Serpula lacrymans</i>	Dry rot fungus
	36	<i>Chaetomium sp.</i> <i>Trichoderma sp.</i>	Soft rots
	37	<i>Rhinotermitidae</i>	Subterranean termites
	38	<i>Cryptotermes sp.</i> <i>Kaloterme sp.</i>	Drywood termites
^a In some countries these are protected species.			

Annex D (informative)

Environmental Checklist

Document number: EN 16636	Title of standard: Pest Management Services – Requirements and competences	TC/SC/WG number: CEN/TC 404
Work item number: 00404001	Version of the environmental checklist: 04	Date of last modification of the environmental checklist: 2013-06-06

Environmental Issue	Stages of the Pest Management Services Process													
	Recognition		Appreciation		Prescription		Implementation (deliver agreed service)					Determination	Transport, storage, disposal	
	Inspection	Identification and assessment	Site interaction	Environmental risk assessment	Define Pest Management Plan	Consider Environmental management Measures	Non chemical interventions	Chemical interventions	Treatment timing and risk to non-targets	Protective equipment for Pest technician	Results monitoring	Recovery of used biocides and animal carcasses	Delivery, transport and storage of biocides	Safe disposal of used and redundant biocides and packaging
Inputs														
Materials													5.8	5.8
Water														
Energy														
Land														
Outputs														
Air Contamination								5.7						
Water Contamination								5.7						
Soil Contamination								5.7						
Waste								5.8 5.9					5.8	5.8

Environmental Issue	Stages of the Pest Management Services Process													
	Recognition		Appreciation		Prescription		Implementation (deliver agreed service)					Determination	Transport, storage, disposal	
	Inspection	Identification and assessment	Site interaction	Environmental risk assessment	Define Pest Management Plan	Consider Environmental management Measures	Non chemical interventions	Chemical interventions	Treatment timing and risk to non-targets	Protective equipment for Pest technician	Results monitoring	Recovery of used biocides and animal carcasses	Delivery, transport and storage of biocides	Safe disposal of used and redundant biocides and packaging
Noise, heat vibration, radiation														
Other relevant aspects														
Impact on humans								5.7, 5.8, 5.10, 5.11					5.7, 5.8	5.7, 5.8
Risk to the environment from accidents, unintended use or spillage								5.7, 5.8, 5.10, 5.11					5.7, 5.8	5.7, 5.8
Non-target species							5.6	5.7, 5.8, 5.10, 5.11					5.7, 5.8	5.7, 5.8
Animal welfare							5.6	5.7, 5.8, 5.10, 5.11					5.7, 5.8	5.7, 5.8
Comments:														

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