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Pest management services - Requirements and competences

Services de gestion des nuisibles - Exigences et compétences

Schädlingsbekämpfungsdienstleistungen - Anforderungen und Kompetenzen

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (FprEN 16636:2014) 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 document is currently submitted to the Formal Vote.

Annex A is normative.

Annexes B, C and D, are informative.

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 [6]).

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 web site (see Web sites [2]).

NOTE 2 The food industry uses professional pest control services and the providers of the services have 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 professionalise the European Pest Management industry. This not only supports 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 check list.

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:

- 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. See Annex E for other derivate definitions]

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 shall be considered a biocidal product.

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

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 (in the field of 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 (in the field of Pest Management)

promoting and protecting health and wellbeing 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 art. 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

all measures 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 (in the field of 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 The 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 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.

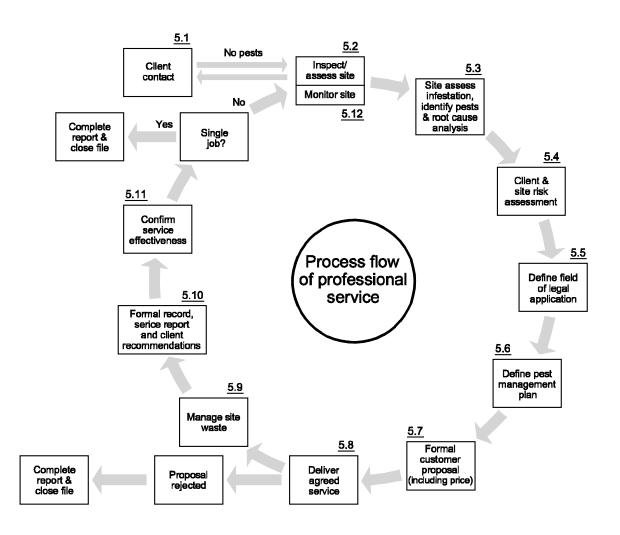


Figure 1 — The process flow for professional pest management services

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 and monitor 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 preventative 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;
- 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:
 - methods concerning the structure and construction;
 - the prevailing hygiene/sanitary conditions and environment;
 - actions to train and develop client's behaviour or practices;
 - 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;
- I) 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 I).

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 Disposal of 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 carcases, 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 s 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 that 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 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.

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

| Task | N. | Required Competence | | Role | es | |
|--|-----|--|--------------------------------------|----------------------|-------|----------------|
| | | The person carrying out this role shall be able to | Technically Responsible person | Professional user | Sales | Administration |
| (1) First Contact: Problem definition | 1.1 | Define client type, pest problem and associated risk/action priority for client type and its specific business requirements | Yes | No | Yes | Yes |
| Client context Location | 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 | Awarene ss |

Table A.1 — Required competences

| Task | N. | Required Competence | | Rol | es | |
|------|-----|---|--------------------------------------|----------------------|-----------|----------------|
| | | The person carrying out this role shall be able to | 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 preventative 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 | | Rol | es | |
|---------------------------------------|---|--|----------------------|-----------|----------------|----|
| | The person carrying out this role shall be able to | 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 | | Role | es | |
|---------------------------------------|------|--|--------------------------------------|----------------------|-----------|----------------|
| | | The person carrying out this role shall be able to | 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 | No |
| | 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 | | Role | es | |
|--|---|--|--------------------------------------|----------------------|-------|----------------|
| | The person carrying out this role shall be able to | The person carrying out this role shall be able to | 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 | | Role | es | |
|--|------|---|--------------------------------------|----------------------|-------|----------------|
| | | The person carrying out this role shall be able to | 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 | Yes | Yes | Yes | No |
| | | indication of the common European pests | | | | |
| | 6.8 | Organize a continuous work programme with high level of attention to: • 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 | | Role | es | |
|--|-----|---|--------------------------------------|----------------------|-----------|----------------|
| | | The person carrying out this role shall be able to | 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 preventative 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 maybe required for the protection of life and health. | Yes | Yes | Awareness | No |
| | 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 | | Role | es | |
|---|-----|--|--------------------------------------|----------------------|-----------|----------------|
| | | The person carrying out this role shall be able to | Technically Responsible person | Professional user | Sales | Administration |
| | 8.9 | 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 | | Role | es | |
|------|------|--|--------------------------------------|----------------------|-----------|----------------|
| | | The person carrying out this role shall be able to | 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 | | Role | es | |
|---|------|--|--------------------------------------|----------------------|-----------|----------------|
| | | The person carrying out this role shall be able to | 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 | | Role | es | |
|--------------------------------|------|--|--------------------------------------|----------------------|-----------|----------------|
| | | The person carrying out this role shall be able to | 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.

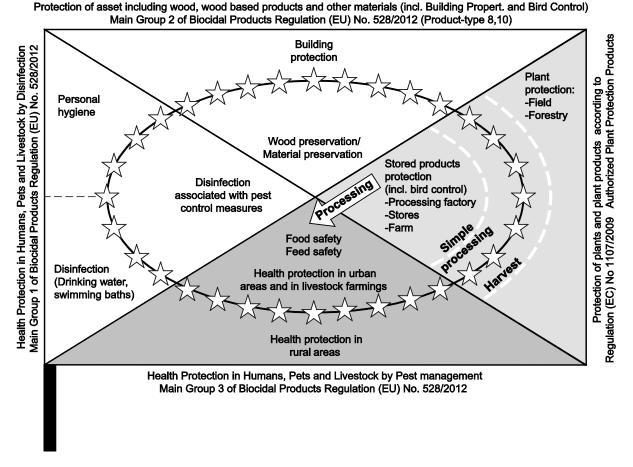


Figure B.1 — Field of application of the services

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

| Public Health Pests | | Scientific name | Common Name | | | | | | |
|---------------------------|----------|------------------------------------|-----------------------------|--|--|--|--|--|--|
| | 27 | Tenebrio molitor | Yellow mealworm | | | | | | |
| | 28 | Dermestes lardarius | Larder beetle | | | | | | |
| | 29 | Psocoptera | Book lice | | | | | | |
| | 30 | Lepisma saccharina | Silver fish | | | | | | |
| | 31 | Hylotrupes bajulus | House longhorn beetle | | | | | | |
| | 32 | Anobium punctatum | Furniture beetle (woodworm) | | | | | | |
| | 33 | Lyctus brunneus | Powder post beetle | | | | | | |
| | 34 | Serpula lacrymans | Dry rot fungus | | | | | | |
| Wood Pests | 35 | Chaetomium sp. Trichoderma sp. | Soft rots | | | | | | |
| | 36 | Rhinotermitidae | Subterranean termites | | | | | | |
| | 37 | Cryptotermes sp. Kalotermes sp. | Drywood termites | | | | | | |
| * In some countries these | are prot | ected species | | | | | | | |

Annex D (informative) Environmental Checklist

| Document number: FprEN 16636 | Titleofstandard:PestTC/SC/WG number:CEN TC 404ManagementServices–Requirements and competences |
|---------------------------------|---|
| Work item number: 00404001 | Version of the environmental Date of last modification of the environmental checklist: 04 |

| Environment | Stages of the Pest Management Services Process | | | | | | | | | | | | | |
|--|--|----------------------------------|------------------|----------------------------------|------------------------|---|-------------------------------|--|--|---|--------------------|--|--|--|
| al Issue (deliver agreed service) | Recognition | | Appreciation | | Pre | escripti on | | Implementation (deliver agreed service) | | | | | Transport, storage, disposal | |
| | Deter minati on | Identification and assessment | Site interaction | Environmental risk assessment | Define Pest Management | 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 |
| | | | | | | | | | | | | | | Inspecti on |
| | Enviro nment al risk assess ment | | | | | | | | | | | | 5.8 | 5.8 |
| Inputs | | | | | | | | | | | | | | |
| Materials | | | | | | | | | | | | | | |
| Water | | | | | | | | | | | | | | |
| Energy | | | | | | | | | | | | | | |
| Land | | | | | | | | 5.7 | | | | | | |
| Outputs | | | | | | | | 5.7 | | | | | | |
| Air Contaminati on | | | | | | | | 5.7 | | | | | | |
| Water Contaminati on | | | | | | | | 5.8 5.9 | | | | | 5.8 | 5.8 |
| Soil Contaminati on | | | | | | | | | | | | | | |

| Environment al Issue (deliver agreed service) | Stages o | | | | 1 | | | | | | | Determi | _ | |
|---|-----------------------|----------------------------------|------------------|----------------------------------|------------------------|---|-------------------------------|--|--|---|--------------------|--|---|---|
| | Recognition | | Appreciation | | | scripti on | | Implementation (deliver agreed service) | | | | | Transport, storage, disposal | |
| | Deter minati on | Identification and assessment | Site interaction | Environmental risk assessment | Define Pest Management | 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 |
| Waste | | | | | | | | | | | | | | |
| | 5.8 | | | | | | | 5.7, 5.8, 5.10, 5.11 | | | | | 5.7 5.8 | 5.7, 5.8 |
| | | | | | | | | 5.7, 5.8, 5.10, 5.11 | | | | | 5.7 5.8 | 5.7, 5.8 |
| Noise, heat vibration, radiation | | | | | | | 5.6 | 5.7, 5.8, 5.10, 5.11 | | | | | 5.7 5.8 | 5.7, 5.8 |
| Other relevant aspects | | | | | | | 5.6 | 5.7, 5.8, 5.10, 5.11 | | | | | 5.7 5.8 | 5.7, 5.8 |

Bibliography

Bibliography

- [1] Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market.
- [2] Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides;
- [3] Directive 98/8/EC of the European Parliament and of the Council of 16 February 1998 concerning the placing of biocidal products on the market;
- [4] Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC
- [5] Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products;
- NOTE: This Regulation will take place of Directive 98/8/EC starting from September 2013
- [6] WHO. "Public health significance of urban pest" Bonnefoy X, Kampen H, and Sweeney K. Public Health Significance of Urban Pests. Copenhagen: WHO, 2008. ISBN 978-92-890-7188-8 (www.euro.who.int/document/e91435.pdf)

Web sites

http://ec.europa.eu/food/animal/welfare/policy/index_en.htm for EU animal welfare policy objectives

http://eur-lex.europa.eu/de/index.htm

http://www.codexalimentarius.org/

http://www.daff.gov.au/animal-plant-health/welfare/aaws/humaneness-of-pest-animal-control-methods

http://www.eea.europa.eu/

http://www.epa.gov/pesp/publications/ipm/ipm_in_buildings.pdf

http://www.europeanbiocides.net/

http://ec.europa.eu/environment/biocides/

http://echa.europa.eu

http://www.cepa-europe.org