

COMPARATIVE ASSESSMENT AND SUBSTITUTION: Guide for UK applicants for Plant Protection Product authorisation

Summary

- Comparative assessment and substitution is required by Regulation (EC)1107/2009.
- Individual Member States undertake the assessment.
- This guidance is provided for applicants seeking authorisation of plant protection products in the UK. Other Member States may provide their own guidance.
- Supplements the EU guidance for applicants.
- Explains what information is required for a comparative assessment, when it should be submitted and how it should be presented.

What are the legal requirements for comparative assessment and substitution?

1. In summary, Article 50 of 1107/2009 specifies that ‘a comparative assessment shall be performed by Member States when evaluating an application for authorisation for a plant protection product containing an active substance that has been approved as a candidate for substitution’. Article 50 explains the need to weigh up the risks and benefits in line with the regulation requirements (Annex IV) in considering whether there is a significantly safer alternative control or prevention method that could be substituted without specified adverse consequences on crop protection. Member States must not authorise a plant protection product or must restrict its use where this assessment concludes that there is a suitable significantly safer alternative.
2. Candidates for substitution are approved active substances meeting one or more of the conditions listed in Annex II point 4 of Regulation 1107/2009. They have all been evaluated and are approved for use in the EU in authorised plant protection products. Uses of plant protection products considered under the comparative assessment process have all been evaluated and all have an acceptable risk assessment in accordance with Regulation 1107/2009.
3. We would like applicants to provide information to enable us to fulfil our responsibilities under Article 50.

What about optional comparative assessments (Article 50(2))?

4. The UK will not be undertaking any of the optional comparative assessments allowed for by Article 50(2). Therefore this guidance only considers the requirements for essential comparative assessment and substitution.

When should I provide information for comparative assessment?

5. EU guidance on comparative assessment comes into force on 1 April 2015. The list of Candidates for Substitution comes into force on 1 August 2015. Since CRD will not be undertaking optional assessments under Article 50(2), in practice this means you will need to provide information for comparative assessment from 1 August 2015.

6. You only need to provide the information in this guidance for applications that you make considered via the 'data', 'data-plus', 'mutual recognition' or 'following zonal' streams for:

- New products and new or additional uses of plant protection products containing one or more active substances approved as a candidate for substitution;
- Renewals of plant protection products containing one or more active substances approved as a candidate for substitution.

(See also 'transitional arrangements' for 'following zonal' applications).

7. Comparative assessment is not required for other applications even if the product contains a candidate for substitution. As with other applications, any relevant conclusions will be applied to any parallel imports and identical 'back to back' products.

How should I submit the information?

8. Your conclusion on comparative assessment and substitution should be included in the national addenda to the draft Registration Report (dRR) as shown in Annex 1. Your detailed consideration of this, using the form attached to this guidance in Annex 2, should be provided as the supporting 'data'. Instructions for completion are given below.

What does the information need to cover?

9. Consider steps 1-10 of Annex 2 (and the instructions for completion) and decide which steps you need to complete for your product.

10. Where the application is for an amendment to the authorisation to include additional uses, your comparative assessment need only consider the additional uses requested. Where the application is for renewal of authorisation you should consider all major uses of the product.

How do I address comparative assessment for Zonal applications where the UK is the rapporteur Member State?

11. As comparative assessment and substitution is a Member State responsibility it cannot be considered appropriately by the zonal rapporteur Member State. It remains the responsibility of the individual Member States

and you should follow their advice and procedures. You should include the UK comparative assessment information in your application in the National addenda.

Transitional arrangements for UK 'following zonal' applications:

12. 'Following zonal' applications submitted before 1 August 2015 will be accepted in the UK once the zonal rapporteur has completed their work. Where these 'following zonal' applications are for Article 43 renewals or include additional uses, and the product contains a candidate for substitution, a comparative assessment will be required. HSE will request your information on comparative assessment when the 'following zonal' application is sifted prior to acceptance.

How will comparative assessments be completed in the UK?

13. We aim to enable both applicants and HSE identify quickly and with minimum effort those uses of plant protection products where a substitution would not be appropriate even if a significantly safer alternative exists. This is because a comparison of risk assessments to determine whether one method of control is significantly safer than another is complex and potentially very time-consuming. A comparison of risk assessments will only be undertaken by HSE where it is initially identified that a substitution may be appropriate.

14. If your information in the form 'applicant information to support the process of comparative assessment' (Annex 2) indicates that a substitution may be appropriate, HSE will complete a more detailed comparative assessment following the approach outlined in the EU guidance on comparative assessment here:

http://ec.europa.eu/food/plant/docs/pesticides_aas_guidance_comparative_assessment_substitution_rev_1107-2009.pdf

15. The properties of an active substance that mean it is a candidate for substitution will define the first aspect of the comparison to determine whether there are significantly safer options. For example, if the active substance is classified persistent and toxic (two of the Persistent, Bioaccumulative and Toxic criteria), the comparative risk to the environment will be considered first; if the active substance is classified as a Category 1B Carcinogen, then comparative risk to humans will be considered first.

16. If we conclude that an alternative control might provide a significantly safer option in this first comparison, HSE will consider other areas of the risk assessment. If these require strict risk reduction measures, a substitution will not be appropriate. For example, if it is concluded that product 'A' might be a significantly safer option for the pesticide user to control pest 'Z' than product 'B' (and the active substance in product 'B' was a candidate for substitution due to a significantly lower AOEL). It will be necessary then to check whether there are strict environmental risk reduction measures required for the use of product 'A'. If there is a requirement for a large 'no spray buffer zone' to protect surface water, it is likely that substitution will not be appropriate.

17. Taking all of these aspects into consideration, HSE will make an expert judgement on whether a substitution is appropriate and thus whether authorisation can be granted for the uses considered.

Regulatory action at the end of comparative assessment

18. If HSE concludes that a substitution for any of the uses of your product is appropriate, we will propose withdrawal or amendment of that use in line with Article 50(5). This will take effect three years after the decision to withdraw or amend the authorisation, or at the end of the approval period for the candidate for substitution, where that period ends earlier. You will have the opportunity to consider the proposals for an amendment or withdrawal of an authorisation in line with Article 44 of EU Regulation 1107/2009. This provides an opportunity for the authorisation holder to submit comments or to provide further information.

What if the availability of alternatives changes after a decision to substitute my product has been made?

19. If you believe that suitable significantly safer alternatives to your product are no longer available and a comparative assessment would not reach the conclusion that a substitution is appropriate, you may make an application for re-instatement of your product using the appropriate regular application route. If the active substance is still approved as a candidate for substitution, this application should include a new consideration for comparative assessment together with any other data or information that may be required for re-instatement at that time.

Does a decision to withdraw uses in this way have any implications for Prior Informed Consent (PIC)?

20. PIC applies to substances that have been banned. As candidates for substitution are approved active substances, decisions taken under these comparative assessment arrangements do not have implications for PIC.

Instructions for completing Annex 2, the form ‘applicant information to support the process of comparative assessment’ for the UK

Whilst this guidance sets out steps in the order most likely to be an efficient approach for most products, you may choose, in line with EU guidance, to start your consideration at any step. If you conclude at any step that substitution would not be appropriate for the uses of your product, you do not need to complete any remaining steps.

Step 1.

Is your product authorised for use only in the home garden?

Your information for comparative assessment of home garden products is to state ‘home garden use – significantly safer alternatives not available’.

A generic consideration of the UK requirements for home garden authorisation has concluded that significantly safer plant protection products are not likely to be available. This is because products cannot be authorised for home garden use in the UK if personal protective equipment (PPE) is required to mitigate risks to the user, and such products are used in small localised areas, so risks to people and the environment are low. Non-chemical alternatives have been considered and these non-chemical alternatives are options that a gardener can consider for the specific situation that needs treating, including as a part of a programme of integrated pest management. Information on these alternatives is available at:

<http://www.hse.gov.uk/pesticides/user-areas/garden-home.htm>

Step 2.

Do you want to make use of the derogation in Article 50(3) for uses where it is necessary to acquire experience first through using that product in practice?

Examples where you may wish to use this derogation include a new use (a first use of an active substance on that crop or against that pest; significant advance in formulation type; introduction of a new active substance to a sector of agriculture).

You will need to make the case that there is a need to gain experience, but you do not need to provide any further information to support a comparative assessment.

If you seek to make use of this derogation any authorisation will be limited to a shorter period, not exceeding five years, following which a new application with a comparative assessment will be required to continue the authorisation.

Step 3.

Is your proposed new/additional use a minor use?

Minor uses are defined as:

‘Use of a plant protection product on:

- any crop other than a major crop (major crops are: cereals (other than rye and triticale), oilseed rape, grassland, sugar beet, potato (other than seed), forage maize and beans dry harvested);

or

- a major crop against a minor pest for which no practicable control measures are available’.

(see HSE pesticides website page:

<http://webarchive.nationalarchives.gov.uk/20151023155227/http://www.pesticides.gov.uk/guidance/industries/pesticides/topics/pesticide-approvals/minor-use-support/uk-minor-uses-introduction.htm>)

If the additional use(s) are minor uses state ‘minor use – further comparative assessment is not required’, and you need provide no further information.

Step 4.

What is/are the major use(s) of your product to be considered in a comparative assessment?

You need to consider all major uses at renewal, but only the proposed new/amended use in other applications.

In line with EU guidance, consideration of alternative control measures in a comparative assessment is required for major uses of the product. ‘Use’ means specific crop/pest combinations and the level of control claimed. If it is clear that you can complete an assessment without listing all of the details (eg of levels of control) of the individual uses of the product (for example where there are few alternative products authorised for use on the crop), this is acceptable.

Step 5.

What other options are available for the proposed uses to be assessed?

a) Non-chemical alternatives:

Defra has funded research into non-chemical alternatives available in the UK (PS2809)¹. This research concluded that few, if any, non-chemical alternatives suitable to substitute for uses of plant protection products are available. Thus you do not need to consider non-chemical alternatives further and appropriate reference to this publication will be sufficient.

These non-chemical alternatives are options that a grower can consider for the specific situation of the crop that needs treating, usually as a part of a programme of integrated pest management.

b) other authorised plant protection products:

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<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=17861&FromSearch=Y&Publisher=1&SearchText=PS2809&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description>

Relevant information on alternative plant protection products is available from a range of sources including specialist agronomic advisory databases and the British Crop Protection Council 'The UK Pesticide Guide' (also known as 'the green book'). Please list the alternative products, providing the information specified in the table. If there are many alternative products, it is unlikely to be necessary to consider them all. You may be able to select one or two products containing each of the possible alternative active substances as examples.

Information about the chemical mode of action of the active substances in your product and of the alternative active substances can be found in information published by the relevant resistance action committees and groups. The British Crop Protection Council 'The UK Pesticide Guide' ('the green book') includes this information.

Information on resistance and chemical modes of action can be found here: <http://webarchive.nationalarchives.gov.uk/20151023155227/http://www.pesticides.gov.uk/guidance/industries/pesticides/advisory-groups/Resistance-Action-Groups>

The Herbicide Resistance Action Committee (HRAC) has produced a list of herbicide resistance groups which is at: <http://www.hracglobal.com/>

The Insecticide Resistance Action Committee (IRAC) list of modes of action for insecticides at: <http://www.irac-online.org/modes-of-action/>

The UK Fungicide Resistance Action Group (FRAG) has produced an interactive search that may assist you in this process for fungicides here: <http://frag.fera.defra.gov.uk/cropspecific.cfm>

The Fungicides Resistance Action Committee (FRAC) list of fungicide modes of action is at: <http://www.frac.info/publications/downloads>

Step 6.

Is the chemical diversity of the active substances in alternative products adequate to minimize the occurrence of resistance?

For each use considered, specify how many different modes of action are available. If there are four modes of action or fewer available, substitution will not be appropriate as the chemical diversity of the active substances is unlikely to be sufficient to minimise the occurrence of resistance. European Plant Protection Organisation (EPPO) guidance requires at least four modes of action to manage a high resistance risk. Whilst lower levels of resistance risk might be managed with fewer modes of action, the impact of the re-registration programme and of other legislation, such as the Water Framework Directive, can, in practice, further reduce the availability of alternatives.

Where more than four modes of action are available, please provide a further analysis of whether you consider the chemical diversity is sufficient to

minimize the occurrence of resistance. For example, information about specific resistance problems for a particular use might mean additional concern is merited. This additional information will be considered by HSE in reaching a judgement as to whether substitution would be appropriate.

Step 7.

What are the potential consequences on minor uses if the uses considered for your product are lost?

Please include a list of the minor uses of your product. These may be label recommendations or Extension of Authorisation for Minor Uses (EAMU). You can search for EAMUs at: <https://secure.pesticides.gov.uk/offlabels/search.asp>

Minor uses are defined as:

'Use of a plant protection product on:

- any crop other than a major crop (major crops are: cereals (other than rye and triticale), oilseed rape, grassland, sugar beet, potato (other than seed), forage maize and beans dry harvested);

or

- a major crop against a minor pest for which no practicable control measures are available'.

(see HSE pesticides website page:

<http://webarchive.nationalarchives.gov.uk/20151023155227/http://www.pesticides.gov.uk/guidance/industries/pesticides/topics/pesticide-approvals/minor-use-support/uk-minor-uses-introduction.htm>)

Please explain the consequences on minor uses if the uses under consideration were to be replaced by a safer alternative. If there are many minor uses, you may wish to focus specifically on uses where there is likely to be sufficient chemical diversity to minimize the occurrence of resistance. You might also have specific commercial information that may be of use in explaining the consequences on minor uses.

Step 8.

Can the alternative controls be used with similar effect on the target pest and without significant economic and practical disadvantages to the user?

The claims for control that appear on the UK product labels have all been assessed against the specific requirements for product efficacy, and thus the label information will provide useful information as to whether alternatives give similar effect.

The EU guidance on comparative assessment defines significant disadvantages as 'quantifiable impairment of working practices or business activity leading to an inability to maintain sufficient control of the target organism'. Information that might provide useful evidence includes the need for and availability of specialist application equipment or techniques² for some

² Clearly some specialist application technologies are beneficial in reducing risk and do not present such disadvantages

alternative products where these would result in such a disadvantage, the availability of necessary infrastructure such as specialist storage facilities, restrictions on flexibility in the timing of treatments to respond to environmental and other conditions. Product labels often contain information about other aspects of the use of the products such as the application equipment recommended or required, the life stage of the pest that is controlled, and the pre-harvest intervals required following use. You might also hold specific commercial information useful in addressing this consideration that would support your case.

Step 9.

Is there a possible significant difference in risk?

Annex IV of Regulation 1107/2009 indicates that a range of criteria are to be used to determine a significant difference in risk. These include:

- the properties of the active substance and plant protection product;
- the possibility of exposure of different population subgroups directly or indirectly through food, water or the environment;
- the stringency of imposed restrictions on use and PPE prescribed.

List the risk mitigation measures required for your product and for the alternative controls in the table.

Information on the properties of the plant protection product and risk mitigation measures such as PPE, buffer zones or restrictions on timing of applications may be included on the product labels and in product authorisations. Most companies provide information from their product labels on their websites and you can see a copy of most UK product authorisations in the pesticides register database on the website at:

<http://www.hse.gov.uk/pesticides/topics/databases.htm>

Some differences in mitigation measures may simply reflect assessment under different guidance. The objective is to identify any significant differences that will be indicative that a more detailed consideration is required. More marginal differences will be ignored.

If there are many alternative products, it is unlikely to be necessary to consider them all. You may be able to select one or two products containing each of the possible alternative active substances to exemplify whether there are any significant differences in risk mitigation.

If the risk mitigation measures of the alternative products are significantly different, or there are other reasons to believe that there are significantly safer alternative products, HSE will undertake a more detailed comparative assessment.

Step 10

Do you have any other relevant information that will enable a comparison of risk?

This is your opportunity to provide any additional information that you consider significant in the comparative risk assessment of your product.

Annex 1

UK National addenda to the draft Registration Report (dRR)

Applicant conclusion on Comparative assessment and substitution

[Product name] contains [Active substance] which is approved as a Candidate for Substitution because [low ADI, ARfD or AOEL; two of PBT; significant proportion of non-active isomers; classified Carcinogen 1A or 1B; classified as toxic for reproduction 1A or 1B; endocrine disruption; other reasons for concern] (delete as appropriate).

The conclusion of the comparative assessment is:

suitable for substitution/not suitable for substitution (delete as appropriate)

because

(specify your conclusion for each use assessed).

For example

Bloggo contains wonderstuff, approved as a candidate for substitution because it is persistent and toxic (PT).

The conclusion of the comparative assessment is that it is not suitable for substitution because there is only one alternative mode of action available amongst alternative products for all of its uses and thus the chemical diversity remaining is not sufficient to minimise the occurrence of resistance.

Or

Bloggo contains wonderstuff, approved as a candidate for substitution because it is persistent and toxic (PT).

The conclusion of the comparative assessment is that it is suitable for substitution because the product 'lovely' is a significantly safer alternative with no significant economic or practical disadvantages. Sufficient alternatives remain available to minimise the occurrence of resistance and there are no adverse consequences for minor use authorisations.

Annex 2

Form:

Applicant information to support the process of comparative assessment

Country:	UK
Product under evaluation:	
Candidate for Substitution (active substance name)	
Reason(s) for approval as candidate for substitution	
Step 1 Is this product authorised for use in the home garden?	No. Yes - significantly safer alternatives not available
Step 2 Do you wish to use the derogation in Article 50(3) to gain experience with this product?	Yes/No If yes, please give your reasons:

Step 3

Are you applying for additional uses for your product? Yes/No

If yes, please list the uses and identify whether the use is a major or a minor use.

Crop	Pest	Major or Minor?

Step 4.

Product Overview

Uses of the product to be considered in comparative assessment (see guidance):

Crop	Pest name	Label claim and date of first authorisation

Step 5.

a) Non-chemical alternatives

Are alternative controls other than authorised plant protection products available? (See Defra research project PS2809 exploring options available in the UK here:

<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=17861&FromSearch=Y&Publisher=1&SearchText=PS2809&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description>)

Yes/No

If yes, provide details of non-chemical alternatives:

b) Alternative controls using authorised plant protection products

Use	Example product	Active Substance	Mode of Action	Resistance code	Number of modes of action

Step 6.

Consideration of adequacy of chemical diversity to minimize the occurrence of resistance (Art 50.1(c) and Annex IV.1.(a))

Are there more than 4 modes of action available for any of these uses?

Yes/No

If yes, please provide an analysis of whether the chemical diversity is sufficient to minimize the occurrence of resistance for each use with more than 4 modes of action available. (Art 50. 1c) *Examples of information that may be relevant here include but are not limited to: whether your product provides a unique mode of action; information on current resistance status for the crop/pest; whether your product has a specific role in resistance management strategies.*

Step 7.

Consideration of consequences on minor uses (Art 50.1(d) and Ann IV)

Is your product authorised for any minor uses?

Yes/No

If yes, please list the minor uses

Minor Uses (including Extensions of Authorization for Minor Uses, EAMU) for product:

Crop	Pest name	Date of first authorisation if known

What would the consequences on the minor uses be if your product is replaced by a safer alternative product for any/some/all of those uses? *Examples of information that may be useful to consider here includes but is not limited to: the minor uses involved and the alternative products available for them; significance of the pest to the growing of those minor crops in the UK; usage data for both major and minor crops; marketing/sales/other commercial data of relevance to your product.*

Step 8.

Can any alternative controls be used with similar effect on the target organism and without significant economic and practical disadvantages to the user? (Annex VI)

Examples of information that may be relevant here are: whether the label claims for level of control are the same; whether the use of alternative controls relies upon the availability of specialist equipment; whether buildings or structures required for any uses are present; whether the alternative products provide control at specific life stages of the crops or pests – for example, seed treatments or treatments with short pre-harvest intervals.

Step 9.

Consider whether any of the alternatives are likely to provide significantly safer options for control.

Compare key properties and risk mitigations from the label or authorisation for your product and for potential alternatives. It is unlikely to be necessary to consider all possible alternative products; rather, key indications of significantly safer options may be determined by selecting example products containing alternative active substances or by comparing to other alternatives.

Risk mitigations

Active substance	Example product	Human health mitigations	Environmental mitigations

Are there any alternative products that require significantly less risk mitigation?

Yes/No

Step 10

If yes, this application may require a specialist comparative assessment. Do you have any other relevant information that enables a comparison of risk?