

# Consultation on transitional arrangements for edible insects in Great Britain: summary of stakeholder responses

The Food Standards Agency (FSA) was seeking stakeholder comments on a proposed amendment to retained European Union (EU) legislation that provides for a transitional period under the novel food regulations for edible insects.

## Introduction

This consultation was issued on 13 July 2022 and closed on 10 August 2022.

The Food Standards Agency (FSA) was seeking stakeholder comments on a proposed amendment to retained European Union (EU) legislation that provides for a transitional period under the novel food regulations for edible insects. The proposed amendment will enable edible insects to remain on the market in England, Scotland and Wales where they are the subject of a novel food application made to authorities in Great Britain (GB) before 31 December 2023. This is in addition to meeting the pre-exiting criteria for the transitional measures set in the retained EU legislation. The proposal has been developed with input from Food Standards Scotland (FSS).

In Northern Ireland, most edible insects are considered novel under EU Food Law, as applied under the current terms of the Protocol on Ireland/Northern Ireland (NIP). These products require authorisation in line with [Commission Regulation \(EU\) 2015/2283](#), before being placed on the market in Northern Ireland. The European Commission's authorisation process, including validation, applies in Northern Ireland.

The proposals under consultation were not to alter wider policy on edible insects but to provide technical legal fixes to inoperabilities which resulted from retaining EU law in GB. Edible insects are already on the market and this proposal aims to bring them in line with the novel food legislation in a timely manner. The FSA's job, set out in law, is to safeguard public health and protect the interests of consumers in relation to food. Our fundamental mission is food you can trust, and it remains the choice of individual consumers on whether to buy or eat edible insect products.

The consultation was published on the FSA website and linked via social media channels. Emails were sent to interested parties including businesses with an interest in edible insects and local authorities were notified of the consultation launch. The FSA held a Novel Protein hybrid workshop on 14 July 2022 with 56 attendees from the food industry and other interested stakeholders where the consultation was advertised.

The FSA is grateful to those stakeholders who responded and sets out in the table below responses in order of the issues considered.

The key proposals on which the consultation sought views were:

To adapt the pre-existing transitional measures in retained EU law to the GB context, the FSA, with FSS, have developed a proposal to apply GB specific legislated transitional arrangements for the edible insects within scope of Article 35(2) of retained Regulation EU 2015/2283 provided that the insects:

- were lawfully marketed in the EU or UK (by any food business operator) before 1 January 2018
- were the subject of an application to the EU (by any food business operator) by 1 January 2019
- are the subject of an application made to GB authorities (by any food business operator) before 31 December 2023.

The edible insects in scope would be permitted to remain on the market in GB until Ministers decide on the authorisation, or until the authorisation process concludes in some other way (for example, is withdrawn by the applicant). The legislation will make it clear that food businesses supplying edible insects must pass through the GB authorisation process if they are to remain on the market in the long-term.

A total of 315 responses were received, of which 64 provided substantive comments which have been considered. These included seven food businesses and two organisations representing the edible insect and alternative protein industry, two local authorities, two other organisations, and 51 members of the public or unrelated businesses.

The industry expressed a range of views, with the majority supportive of the provision of a GB specific transitional measure to enable them to maintain products on the market while their applications for novel foods are considered. Some expressed views over the cost and time required to prepare a novel food application and the burden on small and medium businesses. This is beyond the scope of the proposed amendment to the transitional measures but we welcome these views in informing the FSA's upcoming overarching review on novel food regulation.

Other businesses, organisations and members of the public expressed safety concerns (including toxicity, bacterial and parasite contamination and potential allergen risks) and clear labelling for consumer choice and potential allergens. These are factors which will be considered as part of the process for considering applications for novel food authorisation which is necessary for these products to remain on the market beyond the transitional period. FSA and FSS have undertaken a [rapid risk assessment](#) and [technical report risk profile](#) which considers potential food safety concerns during the transition period which has been published on the FSA website.

Twenty members of the public expressed support for measures that would increase the availability and range of edible insect products as an alternative source of protein for their diets.

The FSA considered responses to stakeholders' comments are given in the last column of the table. A summary of changes to the original proposal resulting from stakeholder comments is set out in the final table followed by the actions to be implemented.

A list of stakeholders who responded can be found at the end of the document.

## Summary of substantive comments

**What effects do you think there would be from the outlined policy proposal?  
How could positive effects be increased, or negative effects be mitigated?**

Respondent	Comment	Response
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Norfolk County Council Trading Standards	"I do not think the market for edible insects is large currently so I do not think there will be great impact other than to the manufacturers."	Noted
Trading Standards South East Ltd	"The approach of the proposal appears sensible as it helps align with the EU situation and allows products to continue to be placed on the market."	Noted
Horizon Insects	"This consultation is unsound and the proposed policy contains too many ambiguities to provide sufficient clarity to businesses. If approved without the required amendments, it will prolong the uncertainty surrounding the legality of commercialising edible insects in Great Britain."	This proposal will provide clarity that edible insects must be subject to an application for GB authorisation as novel food in order to remain on the market and sets a clear end point for the transitional measures. Further comments from this respondent have been addressed below.
Members of the public 6, 13, 14, 16, 26, 27, 30, 31, 32, 37, 38, 40, 41, 45, 46, 49	"This policy contains ambiguities and it will prolong the uncertainty surrounding the legality of edible insects in Great Britain. The industry has already been brought to its knees and does not need further transitional measures."	As above
Member of the public 10	"I think the proposal to allow insect based foods will have positive environmental effects but will have limited appeal for most of the population. To mitigate these negative effects I believe it will be necessary to use insect protein in a way that closely resembles more familiar foods. (Perhaps that's stating the obvious)."	Noted
Member of the public 12	"Action towards placing edible insects on the market is a step in the right direction. The current situation has been detrimental to the industry in slowing British business down, whilst the competition from abroad goes ahead. Large funded businesses have been able to continue finding R&D without sales, whilst smaller businesses have not."	Noted
ADAS Climate and Sustainability	"Introducing a legislated transitional measure, to support provision of increased clarity regarding novel food authorisation arrangements required for businesses producing edible insect product will increase visibility and consistency across this niche sector."	Noted
ADAS Climate and Sustainability	"Perceived negative effects can be mitigated through encouraging the sector to engage with the policy. This can be achieved through attendance and talks at key industry events and/or holding interactive support sessions for the industry to raise questions and obtain clarification surrounding the new policy."	Noted
Member of the public 39 (potential new food business)	"This proposal provides an important step forward in the development of the UK Insect industry and gives a clear timeframe for applications and help refine our company's strategic planning."	Noted
Rethink priorities	"It is our opinion that the outlined policy proposal will contribute to solving the current uncertainties regarding the legal status of edible insects in Great Britain (GB), which will greatly benefit the sector. Additionally, standards for continued authorisation of insect-derived products and a clear timeline will also help in creating a level playing field for insect producers."	Noted
Allergy UK	"We understand that edible insects may play a role in the future in meeting nutrition needs especially for sustainable high protein low-cost alternatives to meat. We have read the National Food Strategy June 2022 and that insects make up one of the key innovative areas for development alongside lab grown meat and increasing plant-based alternatives. Whilst this market is niche, it could escalate quickly with insects being added to foods stuffs like burgers and protein supplements especially in a powdered format which could increase the risk to our community."	Noted
Allergy UK	"Allergy UK appreciate that there is no edible insect sales legislation in place due to the UK leaving the EU without a replacement. This puts food producers in a difficult position and sends mixed messages to the allergic community. Allowing foods to continue to be sold pending outcomes appears concerning given the lack of clear information around labelling changes."	Comments noted, further comments from this respondent on allergy risks and labelling are addressed in the relevant sections below.
Allergy UK	"Furthermore, education and awareness are not mentioned in this consultation and there are inaccuracies and omissions around allergy."	This is beyond the scope of this consultation. Further discussion on allergy risks are provided in the relevant section below.
St Mary the Virgin Church, Bedfordshire / Member of the public 43	"The proposal would allow about 20 UK bug businesses to continue trading which I see as a negative impact and would therefore see closure of the insect FBOs for humans as a positive move. Therefore, I recommend scrapping the proposed transitional arrangements. I want all insect FBOs for humans to close down for reasons explained below."	Noted, however the purpose of the consultation was not to consider the validity of edible insect consumption. Relevant evidence on safety and other factors will be considered as part of the novel food authorisation process when applications are submitted which are required for these edible insects to legally remain on the market in the long-term.

Institute of Food Science and Technology (IFST)	"This proposal seems to be proportionate and aims to balance supporting innovation alongside consumer protection."	Noted
International Platform of Insects for Food and Feed (IPIFF)	"Welcomes this consultation Acknowledges the importance of this consultation for the sector's stakeholders and national and regional competent authorities to express their views and opinions on the possible impact of the proposed transitional measures. Highlights the opportunity provided by this consultation for the UK to clarify its position as to whether operators selling insects on its national territory may benefit from the proposed transitional period. IPIFF and its members are pleased with the possibility of the UK adopting a legislated transitional period under the EU Novel Foods (NF) Regulation for edible insects to enter the market in England, Scotland, and Wales."	Noted
Woven Network member	"It is a huge benefit to the sector, giving us time to continue selling whilst we apply for species that we think are worthwhile. Positive effects could be increased by publishing/supporting the edible insect sector in the media with announcement/publishing allergen advice on FSA website."	Noted
Woven Network member	"Negative effects (costs of applications) could be reduced if the requirements around traditional food applications were reduced."	This is beyond the scope of the consultation proposals. However, the requirements for traditional food notifications are set out in legislation and a thorough risk assessment is of benefit for businesses as it provides reassurance to consumers that products on sale are safe.
Woven Network member	"We would welcome a traditional agreement, however, we would like confirmation of the legal status of edible insects right now. Are businesses legally able to market edible insects under the existing transitional measures in the novel food regulation retained from the European Union?"	Yes, edible insects can be marketed if they meet the requirements of the existing transitional measures.
Woven Network member	"Allows GB insect businesses to legally operate, normalise edible insect foods and grow sales"	Noted
Woven Network member	"We think the FSA granting the UK edible insect market a clear transitional measure is great for the industry, but above all, it is great for the consumer education aspect. Being able to fully advertise, educate consumers is a step forward to making the edible insect industry more open. Insects should have a share of the alternative protein market and this policy proposal is just a step closer to that. Insects have been eaten for thousands of years and the UK are now showing that they are open to keep this practice going for the better of the planet."	Noted
Woven Network member	"Granting transitional measures will allow us to resume communication with larger retailers, as well as give us further confidence to start investing in this area once more."	Noted
Woven Network member	"Limiting the number of insect species allowed to be sold during a transitional period would stifle the industry. It will make any trading for companies who specialise in multiple insect species impossible. With only one species currently submitted for approval, an industry cannot thrive and grow around a single insect species. A deadline of 31st December 2023 for applications, in addition to the high cost of making an application, would discourage new SMEs from entering the market. A positive effect may be greater consumer confidence. This could be increased through clear and continued messaging from FSA/FSS highlighting the extent of the good work within the industry, and the individual businesses that are working with the FSA/ FSS in making applications. This could also help mitigate the negative effects for the companies involved."	This proposal amends the previous transitional measures and does not further limit the foods which can legally remain on the market. Any new insect species will require authorisation prior to being placed on the market as all novel foods do and as has been the case since 1 January 2018.
Woven Network member	"There would be little benefit to the new policy since all it seems to do is clarify what is in place, and imitate the EU position, rather than truly seek to advance the sector by maximising the freedom that Brexit delivers."	This proposal uses powers in the European Union (Withdrawal) Act 2018 which allows alterations to be made to retained EU law so that it remains operable in GB. Wider policy changes are beyond the scope permitted by this legislation. However, the FSA is planning a separate wider policy review on novel food regulation.
Woven Network member	"FSA consultation could have included a clear separate section that indicates the financial impact that this has had on businesses that have perhaps had to close down or lose their investment. The statement could be a potential window to redress potential claims to insurances and perhaps the sector could have a special fund set aside by the government to aid the recovery of the same."	This is outside the scope of the consultation. The estimated costs quoted relate to the direct costs of the proposed changes to amend the legislation and apply a GB specific transitional measure.

## Status of edible insects as Novel Foods

Respondent	Comment	Response
Horizon Insects Ltd	<p>"We object in principle to further transitional measures, and ask for the FSA to reclassify insects as 'not traditional but not novel' as done already in countries outside the EU. The FSA should also carry out its own risk assessment, establish microbiological criteria and regulate edible insects under general food law.</p> <p>There is a clear case for the FSA to shelve the proposal under this consultation and take a more proactive approach, as other countries outside the EU have done. Edible insects should be regulated in GB under general food law like it is already the case in countries like Australia, New Zealand, Canada and the US. The FSA should also refer to the recent work from other countries within the Commonwealth, like Uganda, that has recently created a comprehensive set of food standards for edible insects.</p> <p>[The response also made further comments and examples regarding the challenges of the Novel Food approval process]"</p>	<p>The classification of insects as novel food was beyond the scope of this consultation. A blanket exemption of edible insects from novel food legislation would require a wider policy review which the FSA does not consider appropriate without further evidence on safety and other factors.</p> <p>'Novel food' means any food that was not used for human consumption to a significant degree within the UK or EU before 15 May 1997 when the original novel food legislation came into effect. The majority of edible insects do not have a history of consumption in the UK and EU and therefore meet this definition and are treated the same as other novel foods.</p> <p>In 2018, prior to the UK leaving the EU, the EU replaced its existing novel foods legislation with retained EU Regulation No.2015/2283 ('2015/2283'). The update captured whole edible insects within the framework for the first time. Thereafter, all insects are considered to be novel unless they are one of a very limited number of species that were commonly consumed within the EU or the UK prior to 15 May 1997.</p>
Members of the public 6, 13, 14, 16, 26, 27, 30, 31, 32, 37, 38, 40, 41, 45, 46, 49	"We object to further transitional measures and ask for the FSA to reclassify insects at 'Not Novel'. To ensure they meet safety and hygiene standards, edible insects should be regulated under general food law."	As above
Woven Network member	"The FSA should review its approach to insects used as food and completely change its point of view. Brexit means that the UK can now adopt a global view point and not simply seek to imitate the EU. There needs to be a distinction made between a risk of a food that is new and food standards."	As above
Members of the public 6, 13, 14, 16, 26, 27, 30, 31, 32, 37, 40, 41, 45, 46, 49	"Rather than over regulate the sector through Novel Food legislation, the FSA should take a more proactive approach. The FSA should define standards to facilitate the commercialization of edible insects. like for example specifying the requirements, sampling and test methods for edible insects."	This has been noted and may be considered as part of the FSA's planned wider review on novel food regulation.
Member of the public 12	"I would question the use of novel food legislation for insects as ingredients. Whilst the food is novel to the British market, almost all food in question have been eaten in cultures abroad prior to 1997 (Insects as Human Food, F. S. Bodenheimer). The requirement to prove that insects are safe to eat is essential, but rather than treating it as a completely novel food I feel a less stringent approach would be more effective. Instead of each farm applying for approval for their insects, farms should be able to farm and sell insects according to approved methods. If they use a safe and approved method, the products should be considered safe by default."	<p>As noted above, 'Novel food' means any food that was not used for human consumption to a significant degree within the UK or EU before 15 May 1997.</p> <p>The novel food legislation already includes a simplified route for traditional foods that have 25 years' continuous use by a significant number of people in a country outside the UK or EU. No notifications have so far been made for insects as traditional foods in either the EU or UK. As no notifications were made to the EU prior to 1 January 2019, any new notification requests would not be eligible for the transitional measures and such foods could not be placed on the market until they had been authorised as traditional foods.</p> <p>The comments on alternative assessment approach has been noted and may be considered as part of the FSA's planned wider review on novel food regulation.</p>
International Platform of Insects for Food and Feed (IPIFF)	<p>"IPIFF highlights the importance of [Regulation (EU) 2015/2283 on Novel Foods] that allowed to clarify the legal status of insects and their derived products – including 'whole insects &amp; their preparations' - which are now explicitly covered under the new Novel Foods legislation.</p> <p>This was an important step for the establishment of harmonised rules for the marketing of insect products."</p>	Noted.

## Recognition of EFSA risk assessments or other internal approvals in GB

Respondent	Comment	Response
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Kric8 Ltd / Better Origin / Amgen Regulatory Consulting SL / International Platform of Insects for Food and Feed (IPIFF) / A Woven Network member	These respondents noted the duplication of submitting applications to the European Commission / European Food Safety Authority (EFSA) for EU authorisation and FSA/FSS for GB authorisation. Comments included the additional burden this places on businesses operating in both the UK and EU and that EFSA has a rigorous process for safety assessments which the UK could have confidence in. They expressed support for a system of mutual recognition between UK and EFSA or other international trading partners.	The overall novel food authorisation process is beyond the scope of this consultation. Since leaving the EU, the FSA and FSS have taken on responsibility for assessing food and animal feed safety in the UK. FSA and FSS are no longer part of the EU's risk analysis process as we were prior to EU Exit and so EFSA opinions may no longer take into account data and other factors that are specific to the UK market. As the UK retained EU legislation, the principles that govern the risk analysis process in the EU and GB remain closely aligned and so applicants may be able to use similar evidence packages for both GB and EU approval. The FSA and FSS can consider the opinions of EFSA and other bodies as part of the overall evidence package providing there is sufficient access to the underlying data to enable GB authorities to take into account any UK specific data and other factors. FSA/FSS have a duty to form a separate opinion to EFSA under the legislation. For applications that have already been reviewed by EFSA, this means the FSA/FSS need to critically evaluate the information in the EFSA opinion, and cannot just accept it.
International Platform of Insects for Food and Feed (IPIFF)	"We fully agree that adopting a transition period will undoubtedly benefit the operators due to the small size of the edible insect industry and because individual edible insects producers will ultimately need the decisions taken by the EU to remain on the market in Great Britain (GB)."	While the transitional measure maintains the existing condition that qualifying novel foods must have submitted an application to the EU prior to 1 January 2019, the foods will need a GB authorisation to remain on the market at the end of the transitional period. Decisions by the EU will not directly influence the outcome of the GB assessment which is an independent process.

## Proposed deadline for submission of applications for authorisation of 31 December 2023

Respondent	Comment	Response
ADAS Climate & Sustainability / Member of public 12 / Trading Standards South East Ltd / Member of the public 39 (potential new food business) / Better Origin / Amgen Regulatory Consulting SL / Rethink Priorities / 4 of the Woven Network members	These respondents were generally supportive of the proposed deadline for the submission of applications for authorisation. Specific comments include that this deadline does provide sufficient time to understand and prepare for the change in legislation.	Noted
Amgen Regulatory Consulting SL / Horizon Insects Ltd / Kric8 Ltd / Members of the public 6, 13, 14, 16, 26, 27, 30, 31, 32, 37, 40, 41, 45, 46, 49 / 2 of the Woven Network members	These respondents raised concerns that the deadline may not be long enough to enable small and medium businesses to raise funds and bring together the necessary evidence required for a novel food application.	These comments have been noted. However, the legislation which brought edible insects into the novel food regime was enacted in 2015 and came into force on 1 January 2018. Therefore, there has been sufficient time for businesses to gather the necessary evidence and a novel food application should already have been submitted to the EU in relation to these insect species. FSA considers that the proposed GB specific transition deadline of 31 December 2023 is a reasonable timeframe in which businesses can submit an application for GB authorisation. Any businesses unable to meet the deadline can still submit a novel food application after this date but will not be able to benefit from the transitional measures. This means the food will not be eligible to remain on the market until the application has been authorised in the same way as other novel foods, including insect species which have not had a previous application.
Member of public 10 / St Mary the Virgin Church, Bedfordshire / Member of the public 43	These respondents expressed the view that the deadline should be shorter. Specific comments were that businesses should be in a position to provide evidence more quickly and that those businesses unable to do so should not be in business.	FSA considers that the proposed GB specific transition deadline is a reasonable timeframe in which businesses can submit an application for GB authorisation which is fair to businesses of all sizes.



Respondent	Comment	Response
Norfolk County Council Trading Standards	<p>"My concern as part of a food authority is the time limits being proposed. Not in terms of safety (as I don't recall there being any particular issues with insects). However, a long time limit is being proposed to achieve compliance another 17 months potentially. Once that time limit has passed and there is non-compliance, it makes it very difficult for a food authority to act. The argument being that the product has been on the market for this long already. I think it "waters down" the effectiveness of the Novel Foods Regulations and enforcement action that may be needed in the long term. We have a similar situation with the CBD products which seems no closer to being brought to compliance due to the confusion of time extensions and again watering down the effectiveness of the regulations.</p> <p>They (manufacturers) have had a few years even now- will they comply with a new suggested date knowing that so far they have been allowed to continue to market their products? I can understand the proposed timescales although see comments above. I would have suggested to the end of 2022."</p>	<p>These enforcement challenges have been noted. However, the FSA considers that it is appropriate to provide a reasonable transitional period during which businesses can make the necessary arrangements to submit a GB application. As this legislation will not come into force until late 2022, a deadline of the end of 2022 as suggested by this respondent would not provide sufficient time for businesses to submit applications.</p>
International Platform of Insects for Food and Feed (IPIFF)	"IPIFF and its members agree that the deadline should be open and flexible to not jeopardise edible insects business operators' ongoing applications under the EU Novel Food regulation."	The FSA considers that a fixed deadline provides certainty and helps to bring these products into compliance with the novel food regime in a timely manner. Applications made to GB authorities should not impinge on ongoing applications with the EU as the two processes are separate.
ADAS Climate and Sustainability	"this deadline conflicts with the holiday season. Suggest either some flexibility with a soft deadline of December 31st and a hard deadline of early Q1 2023"	There would be over 12 months for businesses to submit their applications and so we do not consider that the final deadline landing during a holiday period should present significant difficulties.
Institute of Food Science and Technology (IFST)	"IFST are not active in submitting applications and so do not have a clear position on the deadlines, however it would be useful to understand the expected time frame for FSA risk assessment and final decision on continued use in the market."	The time frame for assessing novel food applications is set out in retained Regulation (EU) 2017/2468. Further guidance is available on the FSA website: <a href="#">Novel Foods guidance</a>
Member of public 7	<p>"Britain has still not fully exited the EU and there are other agendas trying to push through change to the detriment of the public. This deadline should be pushed back to 2030 until covid and the little tested vaccine is better understood.</p> <p>Deadline is simply to meet WEF agenda 2030 without proper public and health investigation to the food chain."</p>	It is unclear why this respondent recommends a deadline of 2030 or the relevance of COVID vaccination. These proposals are to amend existing transitional measures. The proposals are not in response to the WEF or any international organisation and has no relation to any external agenda.
Member of public 47	"To have this implemented by December 2023 seems very rushed to me. Why is this being rushed through like this? Is there a plan to substitute meat protein for insect protein and is this legislation being used to facilitate this? No, I think the deadline should be much, much later, if at all."	<p>This legislation is not part of a plan to replace meat with other sources of protein.</p> <p>The proposed deadline is the date by which food businesses must submit an application for novel food authorisation so that FSA and FSS can consider the safety of these products and other factors which should be taken into account before these edible insects can be authorised.</p> <p>Setting a later deadline, as suggested by this respondent, would extend the period before FSA and FSS would be required to assess the safety of these foods which would appear to go against this respondent's overall views.</p>
Member of the public 3	"No deadline is appropriate because these creatures should not be sold for human consumption."	All edible insects, except the very limited number of species that were commonly consumed within the EU or the UK prior to 15 May 1997, must go through the novel food authorisation process to determine their suitability to be sold as food. This proposal provides for a transitional measure to allow qualifying insects to remain on the market while such applications can be considered.
Member of the public 19	"The deadline is irrelevant, though no doubt done in the hope of getting this done before the public notices."	The reasoning for the deadline is provided in the consultation and in response to the comments above.
Member of the public 25	"I don't believe the deadline provides sufficient time for the health aspects to be fully evaluated."	The safety of these products will be determined through the novel food authorisation process before they are authorised to remain on the market permanently. The proposed deadline is the date by which food businesses must submit an application for novel food authorisation to FSA or FSS so this process can commence.

**For businesses producing insect protein, will the policy proposal affect your plans for your business (for example, expansion, or a change in the kinds of products produced)?**

Respondent	Comment	Response
Member of the public 39 (potential new food business)	"This policy helps in our strategic planning as it gives a clear timeframe for decision making. It helps to remove some uncertainty and is a welcome step forwards."	Noted
Horizon Insects Ltd	"Our business has already been impacted and European funds vouchers awarded to the company via the Valussect Interreg scheme in March 2021 for product development had to be forfeit. Even if we were to resurrect our expansion and product development plans, the Novel Food categorization of insects will be a show stopper; we would have to invest in expensive equipment to develop the product prototypes, commission the scientific data for a Novel Food dossier, submit this to the FSA, wait a couple of years, hoping that the product would eventually be approved. Applying Novel Food regulations to insects staves off innovation. We believe our case is not unique."	The classification of insects as novel food was beyond the scope of this consultation but is discussed in the relevant sections above.
Better Origin	"As a business that produces insect protein for animal feed, this policy proposal could affect business plans regarding expansion into the edible feed market – especially for Black Soldier Fly larvae derived foods; a species which is less commonly used to crickets or mealworms but represents over 80% of the global post-2010s insect farming boom."	Noted
Woven Network member	"Continue what we were doing (we were delayed in launching, but have continued since). With a concrete regulatory position, we are likely to be able to raise money, make retail/ foodservice partnerships and sell to customers much more easily, due to the improvement in perception of insects and their safety."	Noted
Woven Network member	"Yes, this proposal will increase the number of species which we are able to market."	Noted
Woven Network member	"Yes, the policy allows us to legally operate again and therefore resume marketing and sales activity. Caveat: there is a constraint on the kinds of products produced i.e. the specific insect species authorised within this GB transitional arrangement must have already been marketed and undergoing/undergone authorisation in the EU. It would be beneficial to GB companies to authorise insect species which have not already been marketed/submitted for authorisation within the EU"	Noted
Woven Network member	"Being able to open the discussion with more retailers is definitely a plus, being able to plan the range expansion accordingly too helps, and lastly, have a more black-on-white trading strategy."	Noted
Woven Network member	"Yes, species will be limited to match applications with the greatest chance of approval. Expansion into the insects as food market will not be advanced until it is clear that there will be a market to supply."	Noted
Woven Network member	"Further investment in product and production will be made if transitional measures are granted. These are currently on hold."	Noted
Woven Network member (Prosects Ltd)	"Prosects Ltd was starting the approval process to trade as an FBO at the point which the Novel Food Transitional Arrangement Article 35(2) was revoked. As a result the FSS advised that we would not receive any approval to trade without Novel Food Approval. At this point Prosects Ltd ceased all production and expansion projects and withdrew from grant applications. Without confidence that the Novel Food process is suitably robust, with clear guidance, decision making and unilateral communication we would not have the confidence to re-enter the market."	These proposals intend to provide the clarity and certainty to businesses to set out the conditions which must be met for products to legally remain on the market while applications for novel food authorisation are assessed.
Woven Network member	"A positive outlook from the FSA could boost both consumer confidence and the insect food business. The issuing of and retraction of the FSA statement on edible insects (following Brexit) could create consumer apathy and is affecting businesses. Attract new entrants into the sector and opportunities for Research and Innovation"	These proposals intend to provide the clarity and certainty to businesses to set out the conditions which must be met for products to legally remain on the market while applications for novel food authorisation are assessed. However, we are unable to pre-empt the outcome of the novel food authorisation process.
St Mary the Virgin Church, Bedfordshire	"As a Church Leader we provide lunches and refreshments and relief food to the local community. I will not collude or participate in conning British people into making an unjustified and radical departure from traditional wholesome foods."	The FSA's job, set out in law, is to safeguard public health and protect the interests of consumers in relation to food. It is not the intention of this, or any other FSA policy, to mislead or work against the interests of members of the public. It remains the choice of individual consumers on whether to buy or eat edible insect products.

## Enforcement



Respondent	Comment	Response
Norfolk County Council Trading Standards	"Will there be a steer or guidance for enforcement authorities when having to deal with non- compliance?"	Local authorities can approach the FSA should they require clarification over the novel food status of any individual product. The decision on whether to undertake enforcement action ultimately lies with the local authority.
Norfolk County Council Trading Standards	"Will there be funding for enforcement authorities?"	These proposals do not include new enforcement responsibilities and so enforcement falls within existing arrangements and funding.

## Labelling

Respondent	Comment	Response
Trading Standards South East Ltd.	<p>"The IPIFF have produced industry guidance which sets out 3 scenarios in relation to allergen warnings for edible insects.  <a href="https://ipiff.org/wp-content/uploads/2019/09/FIC-doc.pdf">https://ipiff.org/wp-content/uploads/2019/09/FIC-doc.pdf</a>  The guidance states 'It should be indicated the products have similar allergic properties that of crustaceans and molluscs as they form an entry in the list of the 14 allergens included in Annex II to the FIC Regulation. Furthermore, the allergen indication should include allergy to dust mites as well'.  The Partnership are of the opinion that these 3 types of warnings should be adopted in the transitional guidance and all insect products be labelled to highlight their potential allergenicity."</p>	<p>The FSA encourages food businesses to follow relevant industry guidance and good practice to appropriately label their products.  In addition, all food is subject to general food labelling requirements and any labelling provided must be accurate and not misleading.</p>
Allergy UK	<p>"The previous European labelling guidelines (2) requested examples like the following: The labelling of the foodstuffs containing dried Tenebrio molitor larva (yellow mealworm) shall bear a statement that this ingredient may cause allergic reactions to consumers with known allergies to crustaceans and products thereof, and to dust mites. This statement shall appear in close proximity to the list of ingredients.  <b>In addition, the European Legislation specified:</b>  Common and Latin name needed to be on the label.  Maximum volumes of insects as a proportion of the total product 10g/100g seemed typical requirement.  <b>Current labelling for insect products</b>  In the UK there appears to be a lack of consistency amongst UK edible insect businesses. Some businesses do not refer to allergy risk on their ingredients panels or emphasise ingredients by highlighting in bold or underlining. Furthermore, not all state potential allergens (crustacean, molluscs, and dust mites). Please see examples attached for further reference (3)  <b>Action requested by Allergy UK around labelling</b>  Insects within foods are referred to by their Latin name and common name to support those with allergy to make safer choices.  Insects to be highlighted on a label plus * and note placed within the same panel to explain relationship between insect allergies and those to shellfish and dust mite to educate and support those with these allergies to make safer choices.  In addition, good practice for businesses may be to add FAQs around allergy to their websites to allow further explanation of risk of both primary and cross-reactive allergic reactions as a novel food stuff."</p>	<p>As above.  The requirement for specific food safety labelling may be considered as part of a novel food authorisation once applications have been received and assessed.  The novel food authorisation can then place conditions of use on the marketing of the products, including labelling for food safety reasons, as appropriate.</p>
Members of the public 8, 9, 15, 24, 33, 34, 35, 36, 47	<p>These respondents requested clear labelling to enable consumer choice and in relation to potential allergenicity. Should include labelling in catering businesses.</p>	<p>All food is subject to general food labelling requirements and any labelling provided must be accurate and not misleading.</p>

## Safety concerns of edible insects in relation to allergens

Respondent	Comment	Response
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Members of the public 8 and 15	<p>"What is the percentage of people likely to have anaphylactic shock from eating insects? Is it worth the risk?"</p>	<p>The potential allergy risks from edible insects were considered in the <a href="#">rapid risk assessment</a> produced by FSA and FSS. This found that the frequency of allergic reactions to edible insects in the general population to be very low and the severity of illness reported by consumers in relation to allergic reactions to edible insects is generally low. It was identified that for a smaller subset of individuals with strong allergic reactions to shellfish (particularly crustaceans) and mites, the severity of illness has the potential of being high.</p> <p>The transitional measures in this proposal only apply to insect species that were already on the market prior to 2018. We are not permitting any new insect species until they have undergone a safety assessment that will consider the risks of allergic reactions and what measures may need to be put in place regarding this. In addition, those species currently on the market will have to submit their application for authorisation and undergo a safety assessment in order to continue to remain permanently on the market.</p>
Member of the public 23	<p>"As far as I am aware, very little is known of possible allergens that insects may present to people."</p>	As above.
Member of the public 29	<p>"As stated in the risk assessment this could carry a severe risk for anyone allergic to seafood. As it is HIGHLY LIKELY that the general populous will NOT read packaging or be aware of this policy it could be a very dangerous addition to the food chain."</p>	As above and as stated in the <a href="#">rapid risk assessment</a> , consumers with high reactivity to shellfish crustaceans are expected to minimise their exposure to food if appropriate labelling is in place (see earlier comments on the labelling sections above).
Members of the public 34, 36, 44	<p>"Will potential allergy advice be included on the ingredients listed? Insects contain Chitin - which although is not deemed a potential allergen; repeated exposure can desensitise individuals through regular exposure. Indeed, the website insectgourmet.com states that "In most cases, allergies to insects are associated with a job where employees deal with insects.....Exposure to chitin (from dust mites, mould, shellfish or insects) might be the primary external determinant in allergy development. Intermittent low-level exposure could induce allergy in genetically predisposed individuals. Given that allergic reactions to food stuffs and airborne particles appears to be rising - indeed in 2019, the BBC Food website stated that 'It isn't only the rate of allergies that has increased, there has also been a gradual increase in the range foods people are allergic to. Santos suggests this could be due to an increased exposure to new foods, either because they're being imported or through travel.'"</p>	As above.
Rethink Priorities	<p>"Some studies report the potential allergy risk posed by directly consuming insects like mealworms (<i>T. molitor</i>), crickets (<i>Gryllus bimaculatus</i>), and black soldier flies (<i>H. illucens</i>), even causing anaphylactic shock (Bessa et al., 2021; Broekman et al., 2016; EFSA, 2015: 31-33; FAO, 2021: 28-30; Pali-Schöll et al. 2019; Srinroch et al., 2015; Verhoeckx et al., 2014). Fortunately, this matter seems to already be under FSA's and FSS's consideration (Consultation pack, page 5)."</p>	Noted

Allergy UK	<p>"Our primary concern is the allergic potential of insects as a 'novel food' not regularly eaten by the population. There is a high risk to the allergy community if insects are used in everyday food products without safeguards and education.</p> <p>Our allergy community may react to ingestion of insects in the following ways:</p> <ol style="list-style-type: none"> <li>1. Primary sensitisation to insects (difficult to quantify as novel).</li> <li>2. Cross reactivity between certain foods (crustaceans/molluscs), dust mites and others like mealworms (used as a meat substitute).</li> <li>3. A potential risk of an allergic reaction to allergens fed to insects before the insects are consumed by the public.</li> </ol> <p><b>1. Primary sensitisation</b></p> <p>The potential risk of direct allergy to edible insects is largely unknown in the UK. There are approximately 2000 types of insects, and the understanding of allergic reaction to insects is limited.</p> <p>In May 2022, the FSA rapid risk assessment referred to insects in the consultation document (page 4-5) but it appears incomplete as the summary does not mention the potential for primary sensitisation in any depth.</p> <p><b>2. Cross reactivity</b></p> <p>There is a lack of detail around cross reactivity and some inaccuracies in the consultation document.</p> <p>There are many people with house dust mite allergy (HDM) (30% estimated) or a shellfish allergy (2% estimated) who might be unaware they can have both. In one study 87% of those sensitised to shellfish reacted to mealworms (1) which although a small study demonstrates this cross-reactivity risk.</p> <p><b>Further concerns are:</b></p> <p>Those with HDM do not normally need to check labels as it is not seen as a food allergy.</p> <p>There is a high level of underdiagnosis of allergy due to the lack of adult allergy services.</p> <p>Those who have never consumed prawns (shellfish) but have a dust mite allergy could consume current foods unwittingly.</p> <p>Generally, those with HDM allergies are not screened for shellfish or mollusc allergies.</p> <p>A significant minority of people with dust mite allergies assume it persistent hay fever so would not appreciate they are at risk.</p> <p>In order to protect these consumers and avoid unnecessary and potential fatal allergic reactions it is important that the FSA / Government puts measures in place within the legislation at the point of development.</p> <p><b>3. Allergens in insect feed</b></p> <p>Current European production guidance within their approval document (2) has the following clause to protect against this issue: A minimum 24 hours fasting period is required before the thermal drying step, to allow the larvae to discard their bowel content. Allergy UK would welcome a transfer of this requirement to the new UK guidance, where appropriate."</p>	<p>These concerns have been noted and will be considered as part of the full novel food authorisation process of any relevant insects species. The novel food authorisation can then place conditions of use on the marketing of the products, as appropriate.</p>
Allergy UK	<p>"Education for the public around the risks of insect allergies for those with prawn and HDM allergies. FSA education via media routes would help increase awareness in the population of this allergy risk. Allergy UK would support this education and awareness campaign."</p>	<p>The FSA welcomes Allergy UK's support in education and awareness of the public in this area.</p>
Allergy UK	<p>"Government and insect business funded independent clinical research to consider both prevalence of primary sensitisation to insects and cross reactivity within the UK population. There is a lack of UK focused allergy research around insects, as this area continues to evolve it would be imperative to have focused research to support both this novel area and the allergy community. It is also important to consider those working in food production handling insect products who also have allergies and how this could impact them."</p> <p>"Additional training needs and written information requirements for food businesses. Allergy UK have added edible insect training to our Level 2 Food and Catering Business award. We support the ongoing work of the FSA reviewing whether it will be mandatory for food businesses to provide written and verbal allergen information."</p>	<p>Noted</p>
Allergy UK	<p>"Additional training needs and written information requirements for food businesses</p> <p>Allergy UK have added edible insect training to our Level 2 Food and Catering Business award. We support the ongoing work of the FSA reviewing whether it will be mandatory for food businesses to provide written and verbal allergen information."</p>	<p>Noted and the FSA welcomes Allergy UK's work in this area.</p>
Members of public 42, 48	<p>These respondents mentioned the risk of allergic reactions among a list of other safety concerns.</p>	<p>As above.</p>

## Safety concerns of edible insects (excluding allergens)

Respondent	Comment	Response
St Mary the Virgin Church, Bedfordshire / WhoPoo app / Rethink Priorities / Members of the public 1, 2, 3, 4, 5, 9, 17, 18, 21, 22, 23, 25, 33, 34, 36, 42, 43, 44, 48, 50	A variety of food safety concerns were raised by several respondents including transmission of insect parasites, harmful and food poisoning bacteria, pesticide residues and natural toxins produced by insects. Several respondents also had concerns around the feed or substrates used in insect farms. References were provided to a number of sources in support of these concerns.	The potential risks from edible insects was considered in the <a href="#">rapid risk assessment</a> produced by FSA and FSS . This found that the frequency of exposure to harmful microorganisms or heavy metals to be very low and the severity of illness from exposure to edible insects contaminated with harmful microorganisms or heavy metals to be low. The transitional measures in this proposal only apply to insect species that were already on the market prior to 2018. We are not permitting any new insect species until they have undergone a safety assessment that will consider potential health risks and what measures may need to be put in place regarding this. In addition, those species currently on the market will have to submit their application for authorisation and undergo a safety assessment in order to continue to remain permanently on the market. The specific references provided will, where relevant, be considered as part of the novel food authorisation process when applications are submitted.
St Mary the Virgin Church, Bedfordshire / Member of the public 43	"Why hasn't the FSA risk assessment been referenced in the consultation to enable public scrutiny?"	The FSA's <a href="#">rapid risk assessment</a> has now been published on the FSA website.
Institute of Food Science and Technology (IFST)	"This proposal seems to be proportionate and aims to balance supporting innovation alongside consumer protection. We would urge that as more products come onto the market (GB and elsewhere), that the rapid risk assessment is refined further and any adverse notifications are incorporated into the assessment. Considering the need for more data to inform potential risks associated with edible insects, it would be useful to understand the formal process to capture adverse events and incorporate these into the risk assessment and evaluation processes."	The <a href="#">rapid risk assessment</a> provides an assessment of the risk during the transitional period while these products go through the full novel food authorisation process. The authorisation process will include a more thorough consideration of the specific risks associated with each application. The novel food authorisation can then place conditions of use, as appropriate, to mitigate the risks.

## Positive views from members of the public on consuming edible insects

Respondent	Comment	Response
Members of the public 6, 10, 11, 12, 13, 14, 16, 26, 27, 28, 30, 31, 32, 37, 38, 40, 41, 45, 46, 49	These members of the public expressed their desire to have greater access to products containing edible insects. They noted that 1900 insect species have been identified as potentially edible and would appreciate access to a greater variety of edible insects on the market. Other views were expressed regarding the benefits of eating insect protein as an alternative to traditional protein sources in the efforts to minimise the effects of climate change and other environmental benefits.	This was beyond the scope of the consultation which regards proposals to enable edible insects on the market prior to 1 January 2018 to remain on the market while they go through the novel food authorisation process. However, these comments have been noted.

## Potential impact to traditional farming/environment

Respondent	Comment	Response
WhoPoo app / Members of the public 17, 21, 34, 36, 44 and 50	These respondents expressed concerns on the impact to traditional farming and the environment from increased insect farming. Views were expressed that this could lead to a move away from traditionally farmed products that would impact on rural and farming communities and the risk of infestations should insects escape. Other views raised concerns that edible insect products would largely be processed foods which may be seen as having a lower nutritional value.	The edible insect market is a small contributor to the overall food industry. This consultation regards proposals to enable edible insects on the market prior to 1 January 2018 to remain on the market while they go through the novel food authorisation process and so this is unlikely to lead to a significant shift in the market away from traditionally farmed foods as a direct result of these proposed amendments to the legislation. Potential impacts on dietary nutrition may be considered as part of a full novel food authorisation. The novel food authorisation can then place conditions of use on the marketing of the product, as appropriate.

## Publish a list of approved or permitted insects

Respondent	Comment	Response
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Amgen Regulatory Consulting SL. / Woven Network member / Horizon Insects Ltd	These respondents requested a list of the edible insect species covered by the transitional measures.	It is the FSA's understanding that the following insect species were subject to applications to EFSA and will therefore be covered by the transitional measures if this proposal is accepted: lesser mealworm ( <i>Alphitobius diaperinus</i> larvae), house cricket ( <i>Acheta domesticus</i> ), yellow mealworm ( <i>Tenebrio molitor</i> ), banded or decorated cricket ( <i>Grylodes sigillatus</i> ), bird grasshopper / desert locust ( <i>Schistocerca gregaria</i> ), migratory locust ( <i>Locusta migratoria</i> ), and black soldier fly ( <i>Hermetia illucens</i> larvae). However, under the proposed amendment to the legislation, these species will only continue to qualify for the transitional measures after 31 December 2023 if an application for novel food authorisation is received by FSA or FSS before this date. A list of applications undergoing consideration is available on <a href="#">the register of regulated product application</a> on the FSA website.
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## Cost and time to apply for novel food status

Respondent	Comment	Response
Kric8 Ltd	"Hopefully, there have been a number of edible insect businesses that have raised large financial backing through crowdfunding so hopefully one of those can provide the funding to submit the required application. After 2 years of not being able to trade you are now asking for a payment of 10,700.00 from small start-ups who were already struggling trying to introduce a new food ingredient onto the market, the EU has already approved a small number of insects why not just accept them for the UK."	The cost estimate of £10,700 is not a charge or cost which would be applied to businesses applying for novel food authorisation. This is the total estimated cost to all food businesses and enforcement authorities based on the time for relevant employees and officials to familiarise themselves with the legislative changes. The estimated cost per business is £840. Since leaving the EU, the FSA and FSS have taken on responsibility for assessing food and animal feed safety in the UK. FSA and FSS are no longer part of the EU's risk analysis process as we were prior to EU Exit and so EFSA opinions may no longer take into account data and other factors that are specific to the UK market.
Horizon Insects Ltd	"We also note that the estimated cost in the consultation paper "of £10,700 to businesses and Local Authorities in Great Britain", has been badly miscalculated. The cost to businesses alone is approximately £100k; this is the estimated cost for each insect species. Since the UK edible Insect industry sector comprises small and micro businesses and since the risks identified thus far only concern allergenicity, which can be mitigated with clear labelling, we request that the FSA conducts a review into identifying ways to minimise the burden on small and micro businesses."	The estimated costs quoted in the consultation relate to the direct costs of the proposed changes to amend the legislation and apply a GB specific transitional measure. The cost to food businesses of applying for novel food authorisation are not affected by this proposed amendment as the requirement to apply for novel food authorisation existed prior to this proposal and is not being altered. Therefore, these costs have not been taken into account in the impact assessment.
Better Origin	"It's important to note that application submission will slow down innovation in this sphere as edible insect startups, where most innovation is happening, are often small and not resourced appropriately for these dossiers."	As above, this is not an impact of the proposed changes in the consultation. However, these comments will be considered as part of the FSA's planned wider review of the novel food regime.
Woven Network member	"Enable a fast-track approval of novel foods which are already widely consumed in other parts of the world"	The novel food legislation already includes a simplified route for traditional foods that have 25 years' continuous use by a significant number of people in a country outside the UK or EU. The traditional food notification procedure has reduced data requirements reflecting their wide use in other parts of the world. There is a four-month period within which the review is conducted. If there are no objections the product is authorised and placed on the authorised list.
Woven Network member	"The former (risk) is minimal when insects used as food is viewed in a global context since there are many millions of people who regularly consume them. While this may not be usual in the EU, this does not increase the risk of the product itself. In fact some insects have been consumed in the EU and seeking to force applications based on the fact that a new species is proposed seems to have little basis in science. Why is a Silent Cricket forced to make an application, when a house cricket already has a history of consumption. Its like forcing Tilapia to be assessed because it has only been eaten in the EU relatively recently and before that we ate cod. A global view should be taken where insect consumption has a clear history, and few identified risk factors."	As above.

## Ethical or religious concerns

Respondent	Comment	Response
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Member of the public 19	"The idea of eating insects is deeply offensive to Muslims, to the extent that eating products using dyes originating from insects is haram. Consider that they represent a large percentage of the UK's population, such a move would inevitably be a large problem."	A wide range of food products are on the UK market that do not meet the dietary requirements of certain faith groups. These groups will typically seek out foods that have been certified as meeting their religious requirements (e.g. halal or kosher foods). This proposal will not impact these designations or the availability of such foods.
Member of the public 20	"I as a vegetarian I have no wish to eat any animal whether it be mammal, insect ,poultry or fish and I have concerns that keeping these animals (as insects are) on a commercial basis will lead to mistreatment, damage and pain to these creatures. It was originally thought that fish did not feel pain and it has now been shown by studies that this is not true and may well not be true for insects. Will there be measures put in place to ensure these creatures are treated with respect unlike in commercial industrial meat/poultry facilities where sometimes conditions are deplorable. Also although in some countries insects are part of the diet ,and seen as a good source of protein, there have been no studies of a diet based completely on insect protein and what effect continuous ingestion of processed insect protein will have on the body."	The concerns have been noted but are beyond the scope of this consultation. These aspects may be considered as part of the evidence package for the novel food applications for individual foods.

## Length and promotion of consultation

Respondent	Comment	Response
Better Origin / Members of the public 9, 25, 29, 34, 36 and 44	These respondents commented on the time provided for consultation. They expressed views that the 4-week period was insufficient time for stakeholders to provide an adequate response to the consultation. Further comments suggested that the consultation should have been more widely publicised.	The proposals in the consultation make only minor changes to the exiting transitional arrangements and on this basis 4-weeks was considered sufficient time to gather views. Key interested parties were directly notified by email and through a workshop on novel proteins that occurred towards the start of the consultation period. Responses were received from a range of interested parties with 315 responses received in total. The FSA is therefore satisfied that sufficient opportunity was available for interested parties to contribute to this consultation.

## Marketing and promotion of edible insects

Respondent	Comment	Response
ADAS Climate and Sustainability	"Positive effects can be increased through a structured marketing campaign which is targeted at the primary entities currently operating in the insect sector. Structured marketing of the legislated transitional period will raise awareness and increase facilitation for businesses to apply for the UK's Regulated Products Authorisation System. Where possible, reassurances on likely future policy direction should be provided, to promote longer term investment. Marketing campaigns to shift public perception on insect protein consumption will benefit the development, growth and commercialisation of the insect sector both from a food and feed perspective."	This is beyond the scope of the proposals in this consultation. The role of the FSA is to safeguard public health and protect the interests of consumers in relation to food. While this may include guidance and advice to consumers, it is not the role of the FSA to promote specific food products. The FSA was created to be separate from the direct promotion of the food market so that it could publish independent policy proposals that dealt with food safety and consumer interests.
Woven Network member	"It would help if the FSA statement could include a positive outlook as [to] the potential growth of the sector. Food safety regulations are a continuous process as opposed to a punitive end and a means to stifle the growth of the insect-as-food sector that could create many jobs along the supply chains (not to mention the nutrition benefit)."	As above.

## Other comments

Respondent	Comment	Response
Member of the public 39 (potential new food business)	"The global insect industry is extremely competitive and is attracting considerable investment particularly in Europe and the USA. The UK is falling behind in the development and distribution of new insect-based products and we urgently need a clear legislative foundation from which to build this new industry so that we can move forward faster. This proposal is a welcome step in the right direction."	Noted



Respondent	Comment	Response
St Mary the Virgin Church, Bedfordshire Member of the public 43	"What regulations are in place to ensure" appropriate practices are in place?" Does the UK Healthy and Safety Executive have sufficiently trained inspectors to safeguard public health?"	<p>Under UK food and animal feed regulations of food businesses to ensure that all food and feed placed on the market is safe, that its quality is what consumers would expect, and that it is not labelled in a false or misleading way.</p> <p>Local authorities inspect and enforce food and feed regulations in food producers, food processors, catering establishments, takeaway and food delivery, retailers and approved dairy, meat and fish establishments.</p> <p>Local and port health authorities in England, local authorities and the Animal and Plant Health Authority (APHA) in Wales and Scotland, and local authorities and the Department of Agriculture, Environment and Rural Affairs (DAERA) in NI are responsible for imported food controls.</p>
Institute of Food Science and Technology (IFST)	"It would be helpful to clarify the application process for business operators post this transitional arrangement."	Edible insect applications will follow the same process as other novel food applications. Further information and guidance is available on the FSA website, <a href="#">Novel foods guidance</a> .
Woven Network member	"Retain our current high food standards to protect consumer"	Noted
Woven network	<p>"Everyone (regulators, government, businesses, and ultimately consumers) is in agreement that the current regulatory situation is damaging, needs change, and presents an opportunity for the UK to do things differently. Current bureaucracy is slowing advancements within the sector. When the time comes, Woven and its members are keen and ready to input feedback and ideas into future consultations regarding general reform of the novel foods process</p> <p>Overall, members view the policy proposal as a positive step forward:</p> <p>A transitional arrangement should be implemented for the UK edible insect sector to move forward and grow"</p>	Noted
Woven Network member	"FSA consultation and statement of the position of the edible insect sector in the UK should be clearly communicated to the sector as well as other government departments. A clear case is a recent call for innovation funding by KTN that expressly excused insects as food in the eligibility criteria for application. This is obviously impacting the access to funds for the sector that has already lost so much"	The FSA considers that this proposal sets out a clear position on the transitional measures in GB and clarifies the requirement that edible insects must undergo a novel food authorisation in order to remain on the market in the long-term.
Better Origin	"Moving forward, a better use of resources would be to provide industry with guidance on food compliance when producing insect protein for the UK food market. This could also include guidance on achieving appropriate hygiene of end products, collating of information regarding the feeding/feedstock required for food-producing insects (e.g., a re-package of the IPIFF HACCP report), and packaging and other requirements needed to market such products safely."	Conditions of use may be placed on authorised novel foods once they have gone through the authorisation process.
Members of the public 65-315	Comments from these members of the public were not relevant to the subject of the consultation. They either expressed a negative view or disgust on the principle of edible insects, interpreted the consultation as a policy of consumers unknowingly buying insect products and / or linked this policy to global conspiracy theories.	The proposals under consultation were not to alter wider policy on edible insects but to provide technical legal fixes to inoperabilities which resulted from retaining EU law in a GB context. The FSA's job, set out in law, is to safeguard public health and protect the interests of consumers in relation to food. Our fundamental mission is food you can trust and it remains the choice of individual consumers on whether to purchase edible insect products.

## Respondent: Horizon Insects Ltd (other comments provided)

**Comment:** "Insects are "permitted to remain on the market", yet they are "not authorised" until they have gone through the GB authorisation process.

- we will continue to be unable to obtain liability insurance for our products
- online retailers, shops and supermarkets will refuse to stock them
- the lack of liability insurance will spill onto public events and venues where insects are being served (ie. food festivals, schools, restaurants etc.).

**Response:** An authorised novel food is one which appears in the list of novel foods in the Annex of retained Commission Implementing Regulation (EU) 2017/2470. Adding foods to this list can only be done with the agreement of ministers in England, Wales and Scotland following advice from FSA and FSS. There is no status of “provisionally authorised” in the legislation.

**Comment:** Food safety certification bodies will not certify or renew businesses’ certifications. Confirm that they will be provisionally regarded as authorised. This is until the deadline set out by the proposed UK Transitional Measures, or until a specific species is assessed by the FSA and found to be unsafe. Should be no issue for the FSA to declare edible insects as provisionally authorised. Why is the FSA refusing to provide a much-needed statement to this effect?

**Response:** An authorised novel food is one which appears in the list of novel foods in the Annex of retained Commission Implementing Regulation (EU) 2017/2470. Adding foods to this list can only be done with the agreement of ministers in England, Wales and Scotland following advice from FSA and FSS. There is no status of “provisionally authorised” in the legislation. The transitional measures provide for a legal route by which qualifying foods can remain on the market while applications for novel food authorisation are processed.

**Comment:** It is also our view that the submission to the FSA a Novel Food dossier for Acheta Domesticus, by an organization purporting to represent the edible insect industry, before any post Brexit opportunity for policy adjustment could be explored, has created an unwelcome precedent for the sector.”

**Response:** The FSA welcomes the early submission of applications for novel food authorisations to bring these edible insects into full compliance with the novel food legislation.

**Comment:** “Our recommendation is: Do away with the EU Transitional measures Article 35(2) and introduce the UK specific transitional measures.

a. Produce a detailed list of insects that are authorised in GB, albeit provisionally. The insects will remain provisionally authorised, until the deadline set out by the UK Specific Transitional period, or until a specific species is assessed by the FSA and found to be unsafe.

b. If an application is received before the end of the UK Specific Transitional period, the product/insect will remain authorised, albeit provisionally, until such time as the FSA has made a final decision or the application is withdrawn.

i. Because of the time lapse between submitting an application and the application undergoing the initial validation process, an application is considered as ‘received’ as soon as it is submitted and before the completion of the validation step (we are aware that an application submitted to the FSA in December 2021, has still not completed validation in July 2022)

c. The list of insects as per point a. above should indicate intended use and processing method and any other parameters that FSA considers relevant to the provisional authorization. Doing away with Article 35(2) will allow baselining the new regulations and provide much needed clarity.

**Response:** As above, there is no legal status of “provisionally authorised”. However, the proposal provides the mechanism to allow qualifying edible insects to remain on the market while applications are processed in much the same way that this respondent suggests. The transitional measures will allow these products to remain on the market until those applications which are submitted to FSA and FSS are concluded, either as they have been

approved and can therefore remain on the market as authorised novel foods, the application is rejected by FSA and FSS or withdrawn by the applicant. The legislation will clearly specify when an application is judged to have concluded and therefore the transitional measures will cease to apply for that insect species.

Aspects relating to intended use and processing methods are considered as part of the authorisation process. These additional details did not form part of the transitional measures in the original EU legislation and FSA do not consider it is appropriate to include them and potentially pre-empt the outcome of the authorisation process.

**Comment:** The inoperability of the current consultation proposal. The inaccuracies and ambiguities in the consultation paradoxically create a situation whereby companies that have already applied to the FSA or will apply before December 2023, will be excluded by the UK transitional measures. According to "Policy proposal" - second and third bullet points on page 4 [quoted below]], both these conditions have to be met "were the subject of an application to the EU (by any food business operator) by 1 January 2019; and are the subject of an application made to GB authorities (by any food business operator) before 31 December 2023." Take Company X that had been selling Scorpions since 2011 in the UK. The Company did not apply to the EFSA in 2019 because of the cost, and it was forced to stop selling its Scorpions. The company now wants to apply to the FSA. Under the current proposal, UK Transitional measures will not apply to Company X. Or take Company Y that had been selling Tarantulas since 2011 in the UK, applied to the EFSA in 2019, but its application either did not pass the EFSA validation phase or was rejected as a later stage, or it was withdrawn later by the Company, because of the change of the authorization regime announced by the FSA after Brexit. Are Tarantulas to be regarded as having been "the subject of an application" in this case? If not, UK Transitional measures will not apply to Company X under the current FSA's proposal. This we hope reinforces our view that the EU Transitional measures are not needed and should not be made a prerequisite to the UK Transitional measures. Pursuing this approach makes a travesty of both the EU and the proposed UK Transitional measures."

**Response:** This proposal is to amend the existing transitional measures so they reflect the requirement to submit an application for authorisation in GB and provide time for food businesses to make such an application. If an edible insect species was not the subject of an application to the EU prior to 1 January 2019 then they did not qualify under the existing transitional measures and will also not qualify under the amended transitional measures. If a food business is unsure about the status of a particular product, they should first discuss this with their local authority and provide the evidence to support any claims that the food qualifies under the conditions as set out for the transitional measures.

**Comment:** A revised consultation should be launched to clarify:

- The meaning of "Were the subject of an application"
  - a. Are these applications that are still under EFSA's scrutiny, plus those for which the EFSA has expressed a scientific opinion?
  - b. Does this include applications for authorisation of a novel food or also a notification of a traditional food from a third country?
  - c. Does this include an application made for an insect species, irrespective of the processing method, quantity of insect within the product, intended use etc?
  - d. Does this include all applications, irrespective of the stage they reached in the EFSA approval process?
- The meaning of "Any food business operator".

- d. Does this also include those food operators protected under Article 26(1) of the EU Novel Food Regulation?
- e. If the above under d. are excluded, is there an exception for those data protected applications, for which the EFSA has already published a comprehensive scientific opinion in its journals?"

**Response:** It is not considered that these points require further consultation. If a food business is unsure about the status of a particular product, they should first discuss this with their local authority and provide the evidence to support any claims that the food qualifies under the conditions as set out for the transitional measures.

Qualifying products are those that were the subject of an application for authorisation received by the European Commission by 1 January 2019. Under this proposal, there will not be any requirement for it to continue to be subject to a continuing application by EFSA as this requirement is replaced by the need for the edible insect to be the subject of an application to FSA or FSS received by 31 December 2023. EFSA opinions made after 31 December 2020, the end of the EU Exit Transition Period (following the UK's exit from the EU), will also not affect the qualification of these foods under the proposed GB transitional measures.

For the amended GB transitional measures, only edible insects where an application for authorisation of novel food has been submitted to FSA or FSS by 31 December 2023 will qualify. Applicants are welcome to submit notification of a traditional food from a third country but these will not qualify for the revised transitional measures.

The legislation will not include reference to "any food business operator" and simply refer to whether the novel food (edible insect) was subject to an application for novel food authorisation. Where an application is received, other food businesses, not just the applicant, may make use of the transitional measures for that insect species.

#### **Comment:**

"Additional considerations on the EU Transitional measures. We know that at least 3 insect species were the subject of the Belgian Insect Industry Federation dossiers [BiiF], submitted to the EFSA in 2019. These were not data protected (under Article 26(1) of the EU Novel Food Regulation), and therefore all companies in the EU/UK plus 3rd countries allowed to export to the EU (as per Regulation EU 2021/405) could continue to sell their products in the EU/UK. Unless companies had themselves applied to the EFSA, they were bound to sell products matching the description/intended use/processing method of those applied for by the BiiF.

In other words, because insects are regulated as Novel Food, the authorization is intrinsically linked to scientific data, that is in turn linked, amongst other things, to specifics of processing, intended use, quantity of insect in each product, etc.

In fact, following our request for clarification on the above, the FSA confirmed [Dec 2021], that indeed different sets of scientific data are required to support different preparation methods and different percentages of insect protein within products. It is remarkable that now the FSA, with its simple statement, that permitted insects are those that "were the subject of an application", considers it has provided any degree of clarity to businesses. "Were the subject of an application is a very broad and unclear statement and does not cater for cases where an application to the EFSA in 2019 diverges from an application made to the FSA.

Suppose, for example, the BiiF only applied to the EFSA for heat treated mealworms but not freeze dried.

- a Company Z in the UK should not be permitted to sell freeze dried mealworms.
- what is the view of the FSA on this?
- what about other drying methods? Will microwave drying be potentially considered?

The same would apply to a company that wants to use more than x% insects in its products.

Suppose, for example, the BiiF only applied to the EFSA for pasta containing up to 50% of mealworms.

- a Company K in the UK should not be permitted to sell pasta with a 51% content.
- what is the view of the FSA on this?

This is another reason that an application to the EU, being a prerequisite for the validity of GB transitional measures, is unworkable. Furthermore, the BiiF dossier submitted to the EFSA in 2019 is based on criteria and guidelines set out by FASFC (Federal Agency for the Safety of Food Chain in Belgium). So now a prerequisite for products to remain on the GB market (albeit unauthorised) is based on the criteria set out by a 3rd country.

Furthermore, UK companies have no full visibility over what insects, processes etc are currently covered by applications made to the EFSA, therefore we would not know what is permitted and what is not. This is why the FSA's guidance needs to be clear and conclusive.

We see two possibilities:

a. As well as the list of the list of insects that we request the FSA produces under 2a) , the FSA should produce a list of parameters, like for example the drying method, quantity allowed in each product type etc. (We assume that UK companies will only be allowed to sell products that match exactly what the BiiF applied for [to the EFSA in 2019].

or

b. As well as the above list, the FSA clarifies that these insects will be allowed irrespective of processing method etc. provided the finished product is compliant with current food law, plus any other checks the FSA deems necessary at this stage, to ensure the product is safe.

**Response:** Aspects relating to intended use and processing methods are considered as part of the authorisation process. These additional details did not form part of the transitional measures in the original EU legislation and FSA do not consider it is appropriate to include them and potentially pre-empt the outcome of the authorisation process.

However, it will be of benefit to food businesses to ensure that any products which they wish to continue marketing when the transitional measures have concluded are subject to an application for novel food authorisation to FSA and FSS so that they can ultimately be authorised and the product allowed to remain on the market in the long term.

**Comment:** Page 4 "policy proposal" - first and second bullet points. Please clarify if both (and in fact all three conditions under the bullet points) have to be met.

**Response:** Yes, all conditions have to be met in order for a product to remain on the market after 31 December 2023.

**Comment:** "Rapid risk assessment page 5. "What are the remaining six categories examined." and why are they mentioned at all in this document?"

**Response:** The full [rapid risk assessment](#) has now been published on the FSA website.

**Respondent: International Platform of Insects for Food and Feed (IPIFF)**  
**(other comments provided)**

**Comment:** "About the proposal: its benefits"

1. IPIFF and its members consider that the proposal benefits edible insect producers by providing a clear timeline and greater certainty about the pathway to continued authorisation of their products in GB.
2. IPIFF stresses that the proposed transitional period can ensure stability for the insects' sector in the UK, by ensuring predictability of the rules & authorisation procedures.
3. We strongly agree that this proposal ensures certainty for local authorities and businesses to which edible insects will be covered by the transitional arrangements while setting a clear deadline for applicants to submit their applications for authorisation.
4. IPIFF reiterates that the proposed transitional period maintains legal clarity for insect business operators, which is vital for their business decisions & marketing strategies. The non-adoption of a transitional period may place their production activities at risk.
5. IPIFF agrees that the proposal ultimately benefits consumers in GB by supporting the edible insects' industry to move towards authorisations for their products and enabling a more compliant market overall.

About the proposal: an opportunity for the future

1. IPIFF recalls that for business operators to function, a solid & stable regulatory framework is vital. We believe the transitional period can help ensure such.
2. IPIFF wishes that this amending legislation be applied to Great Britain's entire territory to help a consistent policy approach during and, as well, after the proposed transitional period.
3. IPIFF considers the adoption of this proposal to be useful to look toward the future by solidifying harmonised standards and procedures between the EU and the UK. This is vital for the sector's development and, in the end, benefits both territories' economies and consumers.
4. IPIFF believes that business operators and national authorities must work closely to develop international validated and harmonised standards to allow this young business sector to achieve its full potential. Its return to the diversification of food supply chains, environmental protection, economy, and sustainable development is undeniable."

**Response:** Noted

## **Respondent: Better Origin (other comments provided)**

**Comment:** 1) There is a clear consumer desire to shift towards alternative, sustainable, and ethical sources of protein. A recent FSA survey asked participants in the UK to review their preferences of alternative protein sources, one of which being insect protein. Many participants listed environmental, health and welfare reason to switch from traditional animal/livestock protein sources to alternative ones. Consumers are becoming more conscious and the demand for sustainable lifestyles and ethically produced proteins is accelerating at rate that exceeds previous trends. Food consumers are adopting a more critical lens, focusing on land use, use of agrichemicals and health and welfare as measurements of ethical goods, all of which insect protein provides long-term solutions for. This is especially the case as no sustainable animal protein could grow at the same scale as insect protein.

In addition, green agricultural practices underpin many of the commitments outlined in the UK 25-Year Environmental Plan as well as the new UK Food Strategy. However, slow development in this area proves to be a large bottleneck in achieving environmental sustainability. The UK Research and Innovation report on alternative proteins highlights insect protein as one of three priority sectors where further investment and development need to be undertaken. Therefore, legislation that supports insect farming industries will subsequently be supporting a widely established sustainable solution to many environmental and welfare issues.



2) More specifically, insect protein reduces the opportunity cost of using protein for animal feed vs for food. There is considerable focus on the current food crisis as a result of the war on Ukraine, and unavailability of grains and other necessities for crop/livestock production.

Although this issue has been packaged as a 'food crisis', this appears to be more of a 'feed crisis' as the majority of food that could feed people is being fed to animals. The magnitude of the impact of political wars can be reduced as our reliance on crops for feeding animals is reduced. This can be mitigated through insect protein in two direct ways:

- widescale, localised farming of insects for feed instead of producing or importing traditional feed sources for animals
- legalising the production and consumption of safe edible insects as an alternative source of protein for people.

Industries need to rely more on locally sourced goods and less on international supply chains. The Covid pandemic has highlighted many weaknesses in our global food supply chains, and the impacts this will have on widespread global food security. Enabling the authorisation of previously marketed products, and encourage developments within this industry, will help mitigate the increasingly visible threat of weak supply chains and ultimately food insecurity.

A delay in defining formal legislative stance on insect protein use and source, and lack of transparency regarding future stances on legalities of insect farming, needs to be avoided to help aid in a smooth transition. Since EU Exit, the industry felt lack of clarity and indecision in the UK's stance on edible insects, which left a huge impact on industry growth, confidence and halted any potential innovations. To avoid these, industry needs to see timely and clear stances on legislation, especially given the length of time it took to introduce this transitional period. In addition, several government departments, and agencies, including Defra, FSA, FSS, have previously expressed support towards sustainable protein production practices, such as insect farming. They continue to be the appropriate bodies to progress conversations regarding insect protein and farming, positively influencing the public's perception and trust in these products as they continue to be marketed."

**Response:** This is beyond the scope of the consultation but has been noted.

## Summary of changes made

### Comment/Issue:

Safety concerns raised regarding the risks to groups sensitive to certain allergies

### Response:

The FSA is aware of these concerns and this was noted in the [FSA's rapid risk assessment](#). The FSA will continue to review this and consider whether further work in this area is required.

The transitional measures in this proposal only apply to insect species that were already on the market prior to 2018. We are not permitting any new insect species until they have undergone a safety assessment that will consider the risks of allergic reactions and what measures may need to be put in place regarding this. In addition, those species currently on the market will have to submit their application for authorisation and undergo a safety assessment in order to continue to remain permanently on the market.

### Comment/Issue:

Request for a list of the edible insect species covered by the transitional measures.

### **Response:**

It is the FSA's understanding that the following insect species were subject to applications to EFSA and will therefore be covered by the transitional measures if this proposal is accepted:

- lesser mealworm (*Alphitobius diaperinus* larvae)
- house cricket (*Acheta domesticus*)
- yellow mealworm (*Tenebrio molitor*)
- banded or decorated cricket (*Gyllodes sigallatus*)
- bird grasshopper / desert locust (*Schistocerca gregaria*)
- migratory locust (*Locusta migratoria*)
- black soldier fly (*Hermetia illucens* larvae).

However, under the proposed amendment to the legislation, these species will only continue to qualify for the transitional measures after 31 December 2023 if an application for novel food authorisation is received by FSA or FSS before this date. A list of applications undergoing consideration is available on the [register of regulated product application](#) on the FSA website.

### **Comment/Issue:**

Request for clarification on the meaning of "Were the subject of an application" and whether this means applications that are still under EFSA's scrutiny, plus those for which the EFSA has expressed a scientific opinion?

### **Response:**

If a food business is unsure about the status of a particular product, they should first discuss this with their local authority and provide the evidence to support any claims that the food qualifies under the conditions as set out for the transitional measures.

Qualifying products are those that were the subject of an application for authorisation received by the European Commission by 1 January 2019. Under these proposals, there will not be any requirement for it to continue to be subject to a continuing application by EFSA as this requirement is replaced by the need for the edible insect to be the subject of an application to FSA or FSS received by 31 December 2023. EFSA opinions made after 31 December 2020, the end of the EU Exit Transition Period (following the UK's exit from the EU), will also not affect the proposed GB transitional measures.

### **Comment/Issue:**

Request for clarification on the meaning of "Any food business operator"

### **Response**

The legislation will not include reference to "any food business operator" and simply refer to whether the novel food (edible insect) was subject to an application for novel food authorisation.

Where an application is received, other food businesses, not just the applicant, may make use of the transitional measures for that insect species.

### **Comment/Issue:**

## Response

These comments were beyond the scope of the proposals in this consultation but have been noted and may be considered as part of the FSA's planned wider review on novel food regulation.

## Actions to be implemented

- Legislation to be drafted to implement the proposals to allow eligible edible insects to remain on the market. After 31 December 2023, only those edible insect species that are subject to an application for novel food authorisation submitted to the appropriate GB authorities (FSA and FSS) will be permitted to remain on the market
- the legislation will also provide a clear definition to when the transitional measures end, which will be the point where all valid applications relating to that insect species have concluded. An application can conclude when an application is approved and the novel food is authorised, if the application is rejected by FSA and FSS as it is invalid or approval is not justified, or if the application is withdrawn by the applicant
- the legislation will not include reference to “any food business operator” and simply refer to whether the novel food (edible insect) was subject to an application for novel food authorisation
- the FSA will take general comments regarding the novel food regulatory system into account in the FSA's planned wider review on novel food regulation.

## List of respondents

### Local Authorities

1. Norfolk County Council Trading Standards
2. Trading Standards South East Ltd

### Businesses and organisations related to edible insect and alternative proteins

3. ADAS Climate & Sustainability
4. Amgen Regulatory Consulting SL.
5. Better Origin
6. Horizon Insects Ltd
7. International Platform of Insects for Food and Feed (IPIFF)
8. Kric8 Ltd
9. Member of public 39 (potential new food business)
10. Rethink Priorities
11. Woven Network C.I.C (provided a collated response from their network of 30 members with individual comments anonymised: Archipelago, Crunchy Critters, Earth and me, Eat Grub, Ento Collective, Grub Consultancy, Gymsect, New Foods Ltd t/a HOP®, Horizon Insects\*, Insect Power, Instar Farming/Bugvita, Kric8\*, Lallemand, Mini Feasts, Monkfield Nutrition, Mr Bug, Nutribug/ThailandUnique, Peregrine Live, ProSects Ltd, Protein Rebel, Saved Food, Short-Horn Super Seasonings, Small Giants/Poseative Ltd, Some Grub, The Cricket Farm, The Cricket Hop Co, The Grub Kitchen/Bug Farm Foods, Throne farms, UK Tiny Farms, Yum Bug).

Two members, indicated by \*, also submitted individual response.

### Other businesses

12. St Mary the Virgin Church, Bedfordshire
13. WhoPoo app

### **Other organisations**

14. Allergy UK
15. Institute of Food Science and Technology (IFST)

### **Members of the public**

16. Responses from 49 members of the public have been anonymised in the table above.

A further 250 responses from members of the public were not relevant to the subject of the consultation. They either expressed a negative view or disgust on the principle of edible insects, interpreted the consultation as a policy of consumers unknowingly buying insect products and / or linked this policy to global conspiracy theories.