Summary of the dossier: Migratory locust (*Locusta migratoria*)

Applicant: Belgian Insect Industry Federation (BiiF), 15 rue Fernand Bernier, 1060 Saint-Gilles, Belgium

This is an application for authorisation to place on the market heat-treated locust nymphs or adults of the migratory locust (*Locusta migratoria*) as a novel food in the European Union (EU) for consumption as such and/or as an ingredient in additional food groups (protein products excluding dairy analogues,, packaged locust flour, confectionary, salads and savoury sandwich spreads, bakery gods, ready to eat savouries and snacks, nut spreads, soups and broths, and sauces.

The application has been compiled in line with the administrative and scientific requirements of Commission Implementing Regulation (EU) 2017/2469 laying down for applications referred to in Article 10 of Regulation (EU) 2015/2283 of the European Parliament and of the Council on novel foods. It is also in line with the European Food Safety Authority (EFSA) guidance on the preparation and presentation of an application for authorisation of a Novel Food in the Context of Regulation (EU) 2015/2283.

Migratory locust (Locusta migratoria (Linnaeus 1758)) is an Orthoptera belonging to the Acrididae family. This insect species has a large distribution in temperate and tropical parts of the eastern hemisphere. It is mainly graminivorous and can strongly harm a wide range of cereals. This insect can be mass-produced in the aim to sell adults for human consumption. *Locusta migratoria*, in particular in the dried form, is a foodstuff of high nutritional value. It contains high amounts of polyunsaturated fatty acids, including the essential ones linoleic and α-linoleic acids, vitamins B1, B2, B3 and B12, and essential amino acids, without leading to deficiency in other nutrients. Microbiological, chemical and heavy metal analyses have demonstrated the compliance of this insect species with guidelines proposed by FASFC (Federal Agency for the Safety of Food Chain in Belgium), EU food safety regulations, and criteria defined by FAO respectively.

The production system put in place ensures the safety of the commercialized products by respecting Good Hygiene and Good Manufacturing Practices, traceability, compulsory notification and labelling requirements as well as a management of chemical and microbiological hazards and a self-checking system based on the HACCP-principles.

The traditional consumption of *L. migratoria* in developing countries as well as the growing commercialization in Europe of food products containing *L. migratoria* adults (thanks to transitional authorizations given by some European countries for the commercialization of this insect species under certain conditions), with no negative consumer health impact reported, support the absence of detrimental effects on human health. This product could then be considered as a valuable proposition of meat alternatives by providing more sustainable proteins with a premium nutritional profile.

Apart from cases of allergic reactions, no negative effect from chitin has been reported after the consumption of migratory locusts. Only limited cases of allergic reaction due to *Locusta migratoria* consumption has been reported. However, a recommendation not to exceed the consumption of 95g of dried *Locusta migratoria* will be made in order to comply with the amount daily consumed reported as safe for human health by EFSA (5g of chitin/day) and to minimise even further the low

allergenic potential of chitin present in the novel food. Nevertheless, people allergic to shellfish, crustaceans and mites should avoid consuming products containing *Locusta migratoria*. This warning will be clearly mentioned on the labelling of products containing this insect species.