International catering waste: a case for smarter regulation

Introduction

The airline industry has been subject to criticism for the lack of cabin waste recycling and with continued global passenger growth, cabin waste volumes are set to increase significantly. Limited research by the International Air Transport Association (IATA) indicates that the sector generated 5.7 million tonnes of cabin waste in 2017 and with current passenger growth rates, this waste volume could double in the next 10 years. The sector is also keen to demonstrate its contribution to the Sustainable Development Goals (SDGs) including Target 12.3 which calls for a 50% reduction in food waste by 2030. However, without the adoption of smarter cabin waste regulations cabin waste volumes will continue to grow and this SDG Target will not be achieved.

A number of countries with economically important agriculture sectors such as Australia, Canada, European Member States, New Zealand and the USA, have imposed strict controls on catering waste from international flights based on animal health concerns. These controls often preclude the reuse and recycling of any materials due to the perceived risk of transferring animal disease by contaminated ingredients served in airline meals and beverages. Although, the in-flight catering sector operates under strict hygiene and ingredient source controls it currently focuses on human and not animal health concerns.

In order to determine the potential risks to animal health posed by international catering waste (ICW), IATA commissioned a study from a food safety and animal health consultancy (Food Control Consultants Ltd.). The results of the study indicate that governments may not have adopted a risk-based approach to ICW regulations and the report presents a strong case for the development of smarter regulation which maintains animal health controls whilst facilitating the circular economy.
Results

Some of the key findings from the study include:

- **Animal disease outbreak**: There is no evidence that ICW from airlines has caused an animal disease outbreak, even prior to the implementation of prescriptive legislation in force in many countries.

- **Risk assessment**: There is no evidence that quantitative risk assessments of animal disease outbreaks from ICW were undertaken prior to the implementation of legislation.

- **Regulatory impact assessment**: There is no evidence that regulatory impact assessments including airline industry consultations were undertaken prior to the implementation of ICW legislation. It is unclear if regulators are aware of the environmental, social and economic impacts of this legislation, including international implications.

- **Milk and milk products**: All milk and milk products served in-flight are subject to heat treatment and hence there appears to be no scientific justification for classifying milk and milk product components in catering waste as high risk.

- **Honey**: Although normal processing of honey will destroy most bee pathogens, a number of countries with high bee health status including Argentina and New Zealand have bans on the importation of honey. Other countries have conflicting regulations that allow the personal import of honey yet categorize catering waste containing honey as ICW.

- **Illegal import of meat**: The report indicates that the concealed smuggling of meat products in passengers’ baggage represents a more significant risk to the introduction of animal diseases than that posed by catering waste from international flights.
Recommendations

Some of the key recommendations of the report include:

- **Adoption of harmonized recycling guidance by regulators** that allows for the recycling and reuse of materials uncontaminated by animal by-products (meat).
- **Mutual recognition of the animal health controls** by countries with a similar status, such as North America and the European Member States, in order to downgrade the risk classification of catering waste, facilitating reuse and recycling. For example, Figure 1 demonstrates that a significant number of countries are currently free from the important risk animal disease indicator of Foot and Mouth Disease (FMD).

![Figure 1 Foot and Mouth Disease (FMD) Status Map (OIE 2017)](image)

1. **Develop and implement new ingredient source controls** that preclude animal as well as human disease vectors from meal ingredients.
2. **Introduce a menu plan** that minimizes animal health risk based on the following ingredient hierarchy: zero food provision, vegetarian, cheese, fish, chicken, lamb, beef & pork.

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Foot and Mouth Disease (FMD) is often used as a model for import risk analysis and control measures for the prevention of incursion of animal diseases because of its highly infectious nature, its modes of transmission (including through animal products), its wide range of susceptible species (including cattle, sheep, goats and pigs) and its serious animal health and socio-economic impact.
• **On-board segregation of recyclables** using the IATA published guidance on recycling from international flights to minimize the potential for contamination by animal products.

• **Segregation of waste streams at airports and catering facilities** based on animal health status of countries of origin and destination.

• **Segregation of recyclables in the cabin cleaning waste streams** based on visual inspections at airport material recovery facilities (MRFs).

### Actions

Airlines and their catering partners based in countries that impose strict ICW regulations should meet with their regulator to demonstrate the results of this study and promote a risk based approach to enforcement. The adoption of smarter ICW regulation will result in less cabin waste, more material recovery, financial benefits and improved customer satisfaction whilst supporting regulators in maintaining high animal health status. Airlines and regulators should cooperate on joint initiatives that raise awareness of the growing challenge of animal products concealed in luggage on international flights. In addition, regulators should ensure that controls are in place to minimize the potential that recyclables are fed to livestock and that they are stored in conditions that minimize disease vectors (insects and rodents).