For discussion
on 9 June 2020

Legislative Council Panel on Food Safety and Environmental Hygiene

Enhancement of the Information Technology Systems and the Food Surveillance Programme of the Centre for Food Safety

Purpose

This paper briefs Members on the latest progress in enhancing the information technology (IT) systems of the Centre for Food Safety (CFS) of the Food and Environmental Hygiene Department, and the implementation of its Food Surveillance Programme (FSP) in 2019.

Enhancement of the IT Systems of the CFS

2. The existing IT systems of the CFS were developed by contractors at different times to meet different needs. As the organisation and structure of the data vary from one system to another, the various systems cannot be completely integrated to facilitate retrieval and analysis of data. In view of this, the CFS reviewed comprehensively its IT systems at the end of 2017 and made plans to revamp the systems to increase its efficiency, reinforce its capability in food import control and surveillance, improve its effectiveness of food incident management and enhance its food traceability. The CFS is currently developing and setting up/updating in stages its five IT systems, namely the Food Trader Portal (FTP), the Food Import and Export Control System (FIECS), the Food Incident Management System (FIMS), the Food Surveillance System (FSS) and the Food Classification and Coding System (FCCS), in order of priorities.

Food Trader Portal

3. The CFS launched the first phase of the FTP on 23 December 2019 by introducing an online registration service for food traders to submit

applications for registration as food importers or distributors, renewal of registration and update of trader information by electronic means. Since the commencement of the first phase of the FTP, more than 750 food importers or distributors have successfully completed registration through the FTP as at the end of May 2020.

4. On 30 March 2020, the second phase of the FTP was rolled out by the CFS to facilitate application for import licences for meat and poultry and import permissions for game, meat and poultry by food importers. Applicants are no longer required to send staff to submit application forms to and obtain import licences or import permissions from the CFS in person. Through access to the online system, they can also check their application status and records of past applications, as well as the lists of approved slaughtering plants and processing plants eligible for export in different places and information on the list of foods suspended from import. The use of the FTP is voluntary. The first phase of service is mainly aimed at importers and distributors of meat, poultry and game. Since the introduction of the second phase of service, more than 340 food importers have applied online for import licences or import permissions as at the end of May 2020. At present, about 84% of applications for import licences or import permissions are submitted and granted through the FTP, i.e. a large part of the related work has ceased to be performed in paper form.

5. In tandem with the launch of the online application platform, the Import Licensing Office of the CFS has increased its working days from five days to seven days a week since 30 March 2020, with operation hours extended to 9:00 pm from Monday to Friday, for expeditious handling of online applications for import licences. The time required for processing an online application for an import licence for the import of meat and poultry by air as well as import of chilled meat and poultry by land has generally been shortened to a few hours. In addition, while streamlining the application process, the CFS has also strengthened control at the import level. Unless otherwise specified, an import permission is in general no longer required for the import of meat and poultry, but all applicants are required to submit health certificates/export declarations to apply for import licences for meat or poultry. The CFS is planning to further enhance the

service of FTP by stages to cover applications for the import of milk, frozen confections and eggs starting from the third quarter of 2020.

Other Major IT Systems

6. The CFS is also preparing to develop the FIECS for supporting the workflow of food import control. Apart from supporting the vetting of applications for import permissions and import licences, the FIECS can also record details such as document checks, physical inspections and consignment arrival, and issue release letters and other notices. The FIECS will be equipped with automated functions, such as selecting food consignments for physical inspection, verifying the status of the slaughterhouse or processing plant declared in an import licence application, cross-checking the information submitted in an import licence application against the information on import bans, etc. The use of computer system to replace the manual process of data input and verification will enhance the efficiency and effectiveness of food import control. The FIECS is expected to be completed by the end of 2022.

7. The FIMS is another new system to be established by the CFS to strengthen its effectiveness in recording and tracing the actions taken by relevant units of the CFS in food incidents, so as to enhance monitoring of the progress of follow-up actions including food recalls. The FIMS is equipped with a knowledge base on risk assessments and related reference materials for effective and accurate retrieval of past records to enable quick access to information by the CFS when similar food incidents occur in future. Furthermore, the FIMS can promptly trace the sources of problematic foods to facilitate the CFS to issue clear guidelines to food importers and distributors in the first instance for effective tracing, interception and recall of the foods concerned, as well as to devise follow-up actions. The FIMS is expected to be completed by the end of 2021.

8. In addition, the CFS is developing the FCCS for use in its IT systems, under which different food products will be assigned a code to enable recording, retrieval and analysis of food data in relevant IT systems, so as to reinforce its capability in risk assessment and food traceability. The FCCS is expected to be completed by the third quarter of 2021.

9. Other than establishing new IT systems, the CFS will also revamp the existing FSS to step up food surveillance. The revamp is expected to be completed by the end of 2022. A database of retail stores will be set up under the FSS to improve the present approach of selecting and collecting food samples for surveillance by the CFS. The FSS will also interface with the FIECS, such that if imported food requiring the collection of samples for surveillance is identified, the system will alert the CFS staff concerned. Moreover, information on the food samples and food importers can be loaded into the FSS automatically, which would reduce the work involved in repeated manual input and verification of data, thus improving sampling efficiency and record accuracy.

10. The above systems will interface with each other to provide a well-connected information network in support of risk profiling and risk-based inspection for strengthened food safety control and traceability. The CFS will enhance the above IT systems in order of priorities, and interfacing of these systems is expected to be completed by the first quarter of 2024 or earlier.

Food Surveillance Programme for 2019

11. To safeguard food safety, the CFS takes food samples at the import, wholesale and retail levels for testing under the FSP and adopts a risk-based principle in determining the types and numbers of food samples to be collected and the laboratory analyses to be performed.

12. In 2019, the CFS collected about 66 200 samples for regular surveillance, targeted surveillance, seasonal surveillance and surveys on popular food items (the types of surveys and tests conducted are listed at **Annex 1**). The testing results of all, except for 114, of the aforementioned samples were satisfactory. The overall satisfaction rate was 99.8%. The unsatisfactory samples were mainly detected with pesticide residues, metallic contaminants, veterinary drug residues or preservatives exceeding the relevant standards (details at **Annex 2**). The CFS has taken appropriate follow-up actions regarding these samples, including tracing the sources of the food consignments concerned, informing the relevant authorities of the

places of origin, instructing venders to stop selling the implicated batches of foods, requesting the importers/distributors to recall and dispose of the implicated foods as needed, making public announcements and explaining to the public the food safety risks involved, etc.

13. The implementation of the FSP is kept under regular review by the CFS. Taking into account the earlier views of the Audit Commission and the Public Accounts Committee of the Legislative Council, as well as food surveillance results, food incidents in Hong Kong and other economies and the relevant risk analyses, the CFS took measures to improve the FSP in 2019 by reallocating some of the resources for testing pesticide residues in fruits and vegetables which are of relatively low risk to the testing of other food hazards, and increasing the proportion of online food samples for microbiological testing. Moreover, the CFS has stepped up surveillance in light of food safety incidents of public concern (e.g. the Brazilian meat incident). The relevant measures and work are set out in the following paragraphs.

Metallic Contamination in Food

14. The provisions of the Food Adulteration (Metallic Contamination) (Amendment) Regulation 2018 (Cap. 132V) (the Amendment Regulation) on certain types of fresh food with a shorter shelf life first came into force on 1 November 2019[1]. The CFS has suitably allocated resources to step up sample tests on metallic contaminants in food so as to monitor the compliance with the Amendment Regulation. In the past five years (i.e. from 2015 to 2019), the CFS conducted testing for metallic contaminants on 27 930 samples under the FSP and the overall satisfaction rate was 99.7%. From November 2019 to May 2020, over 1 790 samples with shorter shelf life have been tested for metallic contaminants. Among these samples, 1 777 did not exceed the maximum levels adopted after the implementation of the Amendment Regulation and only 13 samples were found

[1] With the Amendment Regulation coming into force, the number of metallic contaminants regulated has increased from 7 to 14 and the number of maximum levels for metallic contaminants in respect of different foods has risen from 19 to 144. The Amendment Regulation first took effect on 1 November 2019 on certain types of fresh food with a shorter shelf life (i.e. fresh fruit and vegetable and their juices, fresh meat and edible offal of animal and poultry, aquatic animals and poultry eggs). It will cover all food from 1 November 2020 onwards.

unsatisfactory. The overall satisfaction rate was 99.3%. Of the 13 unsatisfactory samples, 9 were vegetables, fruits and related products and 4 were aquatic and related products. The CFS has followed up on the test results, and the risk assessments indicated that the unsatisfactory samples would not pose any harm to human health.

Strengthening Sample Tests on Online Food Sale

15. At the same time, the CFS has stepped up surveillance on the safety of online food sale. In 2016, the number of online food samples collected for testing per year increased more than a double from about 1 500 to about 4 000. The sample size was further increased by 20% to approximately 4 900 in 2019, together with an increase in the proportion of samples assigned for microbiological testing. The testing results of all, except for 7, of the online food samples collected last year were satisfactory. The overall satisfaction rate was 99.8%. The 7 unsatisfactory samples consisted of 5 aquatic product samples, 1 fruit sample and 1 honey sample. They were detected with metallic contaminants, pesticide residues or veterinary drug residues exceeding the relevant safety standards. The CFS has taken appropriate follow-up actions and will continue to closely monitor the safety of food available for sale online.

Follow-up on Imported Brazilian Meat

16. In the wake of the Brazilian meat incident in 2017, the CFS has increased sampling of meat imported from Brazil for testing immediately. A total of approximately 6 100 samples of meat, poultry and their products (including 374 samples of meat from Brazil) were collected for testing in 2019. The testing results of all, except for 16, of the aforementioned samples were satisfactory. The overall satisfaction rate was 99.7%. The unsatisfactory samples were detected with preservatives, veterinary drug residues or pathogens exceeding the relevant safety standards. None of these samples involved meat imported from Brazil.

17. Apart from enhanced testing, the CFS held rounds of discussions with the Brazilian authorities and laid down specific requirements on the import of Brazilian meat into Hong Kong by the end of 2019. These

requirements are based on food safety principles and in line with the standards of the World Organization for Animal Health, the Codex Alimentarius Commission, the Hazard Analysis Critical Control Point System and Good Manufacturing Practices, and have strengthened risk-based veterinary audit and drug monitoring programmes, etc. The Brazilian authorities have drawn up a list of eligible establishments [2] according to the specific import requirements and revised the official health certificates of beef, pork, poultry meat and eggs to enhance traceability. Specimens of the newly revised health certificates are available on the website of the Brazilian authorities to facilitate the verification of the authenticity of health certificates.

18. The CFS held a briefing on 20 November 2019 to prepare the trade for the new arrangements in respect of the specific import requirements. A letter was further issued at the end of March 2020 to remind the trade of these new arrangements. The Brazilian authorities, on their part, have published a list of Brazilian establishments eligible for exporting meat, poultry meat and eggs to Hong Kong under the new arrangements on their website as early as in November 2019. The new arrangements have been operating smoothly since their implementation on 18 May 2020.

Advice Sought

19. Members are invited to note the content of this paper.

Food and Health Bureau
Centre for Food Safety, Food and Environmental Hygiene Department
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[2] As at May 2020, there were 447 eligible establishments on the list.

Annex 1

Surveillance and Survey Projects under 2019 Food Surveillance Programme

(A) Regular Food Surveillance

Covering major food groups such as fruits and vegetables, meat, poultry, aquatic products, milk and cereals.

(B) Targeted Food Surveillance

(i) Sulphur dioxide in meat
(ii) Metallic contaminants in food
(iii) *Listeria monocytogenes* in ready-to-eat foods
(iv) *Vibrio parahaemolyticus* in ready-to-eat foods
(v) *Salmonella* in ready-to-eat foods
(vi) Coagulase-positive staphylococci organisms in ready-to-eat foods
(vii) *Bacillus cereus* in ready-to-eat foods
(viii) *Clostridium perfringens* in ready-to-eat foods

(C) Seasonal Food Surveillance

(i) Lunar New Year food
(ii) Rice dumplings
(iii) Mooncakes
(iv) Hairy crabs
(v) Lap mei
(vi) Poon choi

(D) Surveys on Popular Food Items

(i) Hot pot food and soup base

Annex 2

Sample Test Results of 2019 Food Surveillance Programme

Food groups	Number of samples tested*	Number of unsatisfactory samples (unsatisfactory rate)	Testing items (number of unsatisfactory samples)
Vegetables, fruits and related products	28 300	40 (0.14%)	Pesticides (23) Metallic contaminants (9) Preservatives (5) Undeclared allergens (2) Colouring matters (1)
Milk, milk products and frozen confections	10 000	13 (0.13%)	Hygiene indicators (13)
Aquatic products and related products	6 100	31 (0.51%)	Metallic contaminants (18) Veterinary drug residues (13)
Meat, poultry and related products	6 100	16 (0.26%)	Preservatives (12) Veterinary drug residues (3) Pathogens (1)
Cereals and cereal products	3 400	5 (0.15%)	Preservatives (4) Metallic contaminants (1)
Others	12 300	9 (0.07%)	Pathogens (6) Veterinary drug residues (1) Aflatoxin (1) Benzo[a]pyrenes (1)
Total	**66 200**	**114 (0.17%)**	

* Figures are rounded to the nearest hundred.