Implementation and testing of electronic submission in XML format of zoonoses, antimicrobial resistance and food-borne outbreak data for Croatia

Project background

European Food and Safety Authority (EFSA) and European Centre for Disease Prevention and Control (ECDC) have an important role in the area of collection and annual reporting of data on zoonosis, zoonotic agents, antimicrobial resistance, food-borne outbreaks and animal population in the EU, in accordance with the Directive 2003/99 /EC.

A move from aggregated to sample and isolate based data collection is taking place for antimicrobial resistance and prevalence data under the framework of EFSA's data roadmap. The Standard Sample Description (SSD2) model for food and feed will be EFSA's standard for transmission of prevalence data from EU Member States to EFSA. EFSA supports Member States in their move to the more automatic data transfer in eXtensible Markup Language (XML) format, with the aim to improve data quality and usability.

Within the scope of EFSA's support to EU Member States, project contract was signed between EFSA and Croatian consortium composed of Ministry of Agriculture, as consortium leader, and Ministry of Health as consortium member, in cooperation with Croatian Veterinary Institute, Croatian Institute of Public Health, Croatian Agricultural Agency and Croatian Food Agency as project manager. Contracted budget was 75.000,00 €.

The aim of the project

The aim of the project was to improve national data collection system and to develop data reporting system that enables official automatic transmission of the annual data through EFSA's Data Collection Framework (DCF) application.

Project goal

The goal of the project was to develop relevant IT solutions for automatic collection, transformation, export and submission of data from Croatian data repositories, in accordance with EFSA's data models, standard terminologies and business rules.

Methodologies

Due to the several different data models and multiple data repositories, work on the project tasks was divided into four Work Packages. The project team members, divided into 4 respective Working Groups, managed each Work Package (Table 1). Each Working Group was composed of experts from competent authorities, laboratories/institutions and experts from subcontracting IT companies.

Table 1: The remit of Working Groups

	WORKING GROUP 1	WORKING GROUP 2	WORKING GROUP 3	WORKING GROUP 4
Competent Authority	Ministry of	Ministry of	Ministry of	Ministry of
	Agriculture	Health	Health	Agriculture
Directorate/Institute	Veterinary and	Sanitary	Croatian	Veterinary and
	Food Safety	Inspection	Institute of	Food Safety
	Directorate	Directorate	Public Health	Directorate
Relevant laboratory/ Institution (Data Repository)	Croatian Veterinary Institute	Central Information System of Sanitary Inspection CIPH Health Ecology Service	Epidemiology Service	Croatian Agricultural Agency
Subcontractor	Šon product Ltd	Pardus Ltd	Apis IT Ltd	Own IT service
		InfoDom Ltd		
Data Model	Sample-based prevalence data	Sample-based prevalence data	Food-borne outbreak data	Animal populations data
	Isolate-based antimicrobial resistance data			Disease status data on tuberculosis and brucellosis
	Text form data	Text form data	Text form data	Text form data

Project results

Despite of the fact that Croatian data collection system has a high level of complexity, Croatian consortium members, in close collaboration with subcontracting IT experts, succeed to build a new national system for automatic data reporting in XML format through EFSA's DCF application.

Yearly 2016 national data on sample based prevalence of zoonoses, antimicrobial resistance, foodborne outbreaks, disease status on tuberculosis and brucellosis, animal populations and respective text forms, deriving from multiple national data repositories, were transmitted in XML format, through DCF application, using the new automated system. Reported data were visualised through Microstrategy reports in EFSA's Data Warehouse (DWH) application.

All reported data will be used during upcoming years for further improvement of human health, animal health and food safety systems at national level.

For more information, please consult Croatian Final report on this hyperlink:

http://www.efsa.europa.eu/en/supporting/pub/1333e