



Molecular typing data collection of STEC isolates from food and animals

Basic Course on the use of BioNumerics, EU-RL VTEC, Rome 12-13 June 2014

Molecular typing data collections in the EU

Human side: ECDC to collect molecular typing data from foodborne pathogens isolated from human cases

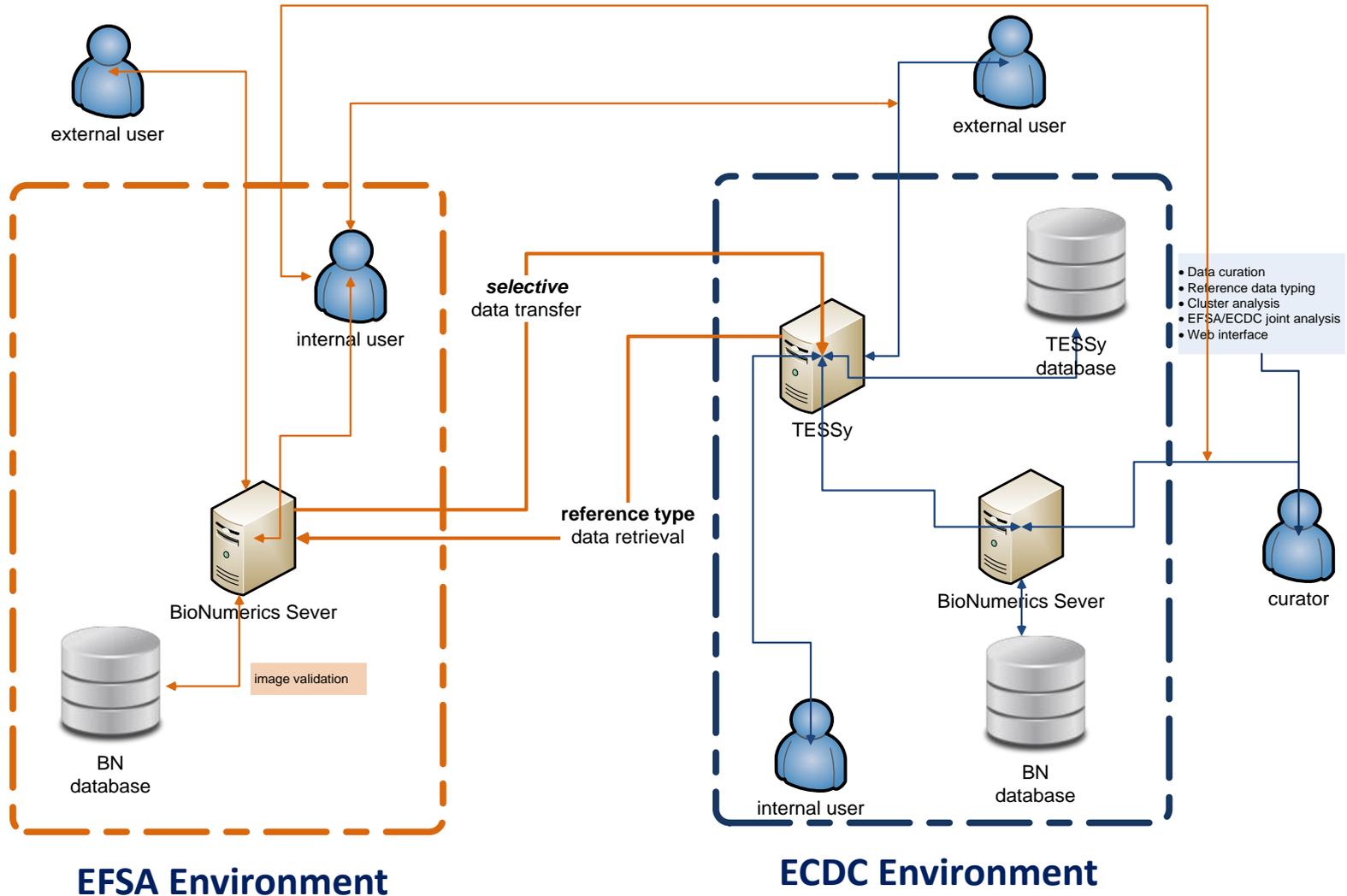
Veterinary side: EFSA, in collaboration with relevant EU Reference Laboratories (EURLs), to collect similar data from food, feed and animal isolates

A pilot project is going to be run, starting at the end of this year

The data collection will cover initially *Salmonella*, VTEC and *Listeria* with **PFGE** method (and MLVA only for *S. Typhimurium*)– other methods and pathogens can be taken aboard later

Regular joint analyses of the data by ECDC, EFSA and EURLs – integration at EU level

Structure of the Molecular Typing Data Collection and Analysis (MTDCA) system



MTDCA system

EPIDEMIOLOGICAL DATA (PARTLY SENSITIVE)					TYPING DATA (NOT SENSITIVE BY ITSELF)		
ID	Country	Animal/Food Type	Area in the country	Date of Sample	Serotype	PFGE_XbaI	AST_NAL
EFSA-001	XX	Smoked salmon	X	2012-06-01	STANLEY		S
EFSA-002	XX	Turkey	Y	2012-07-01	STANLEY		R

- **Epidemiological Data:** data about an isolate in terms of sampling time and place, origin (food/ animal type, country of origin, producer) etc. - **partly sensitive data**
- **Typing Data:** the results of typing experiments performed on an isolate. e.g. serotype, PFGE pattern, antimicrobial susceptibility results, MLVA results – **non sensitive data**
- **Joint EFSA-ECDC analyses** to be carried out only with non-sensitive or anonymised data.

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Standard Operating Procedures (PFGE, image acquisition, image quality assessment, curation) are under development and will be made available

Member states/NRLs will be asked to participate in the pilot phase, providing molecular typing data

In line with the orientations provided in the Vision paper, a **Scientific Collaboration Agreement** will be signed by all parties to define data ownership, access, use, publication, procedures and confidentiality.