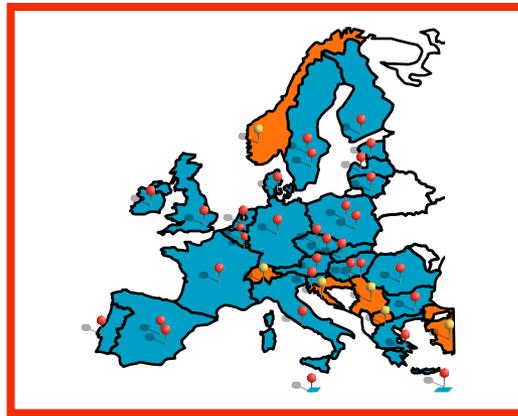
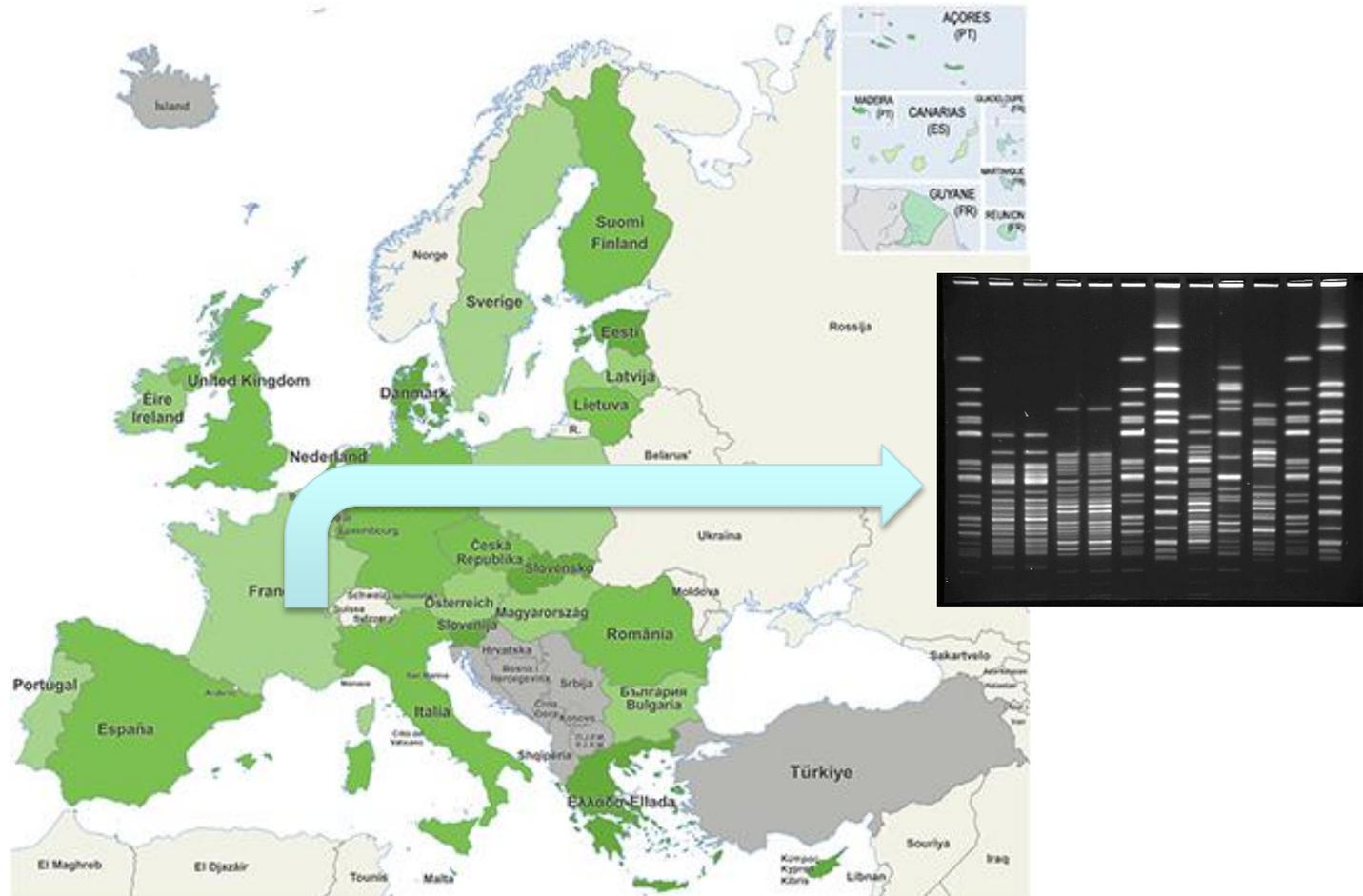


Molecular typing of food-borne pathogens

The role of the network of Reference Laboratories (RLs) for *E. coli*



RLs for *E. coli*: How do they contribute?



Preparedness: Plan-Do-Check-Act

- **Plan:** Reconnaissance of the existing skill and availability of equipment and softwares
- **Do:** Train those RLs who need
- **Check:** Assess Proficiency of the RLs in Molecular Typing
- **Act:** Intervention in case of underproficiency- Advice, further training, ad hoc visits

Plan: Inventory of the expertise on molecular typing of VTEC

- **A semi-structured questionnaire was administered to the NRLs for *E. coli* in March 2012**
- **32 out of 32 recipients (100%) returned the questionnaire**

Plan: Inventory of the expertise on PFGE typing of VTEC

- **23 out of 32 NRLs have PFGE equipment available**
- **13 reported very good experience (6 certified in the previous Pulsenet EQA)**
- **Remaining 10 reported poor-to-sufficient skill and were included in the first rank priority need for training in the EU RL training program on Molecular Typing (“Do” step)**

Plan: Inventory of the expertise on PFGE

Serogroup	No. of strains isolated in the year:		
	2010	2011	Average per year
O157	1,122	1,143	1,133
O26	224	377	300
O103	94	216	155
O145	43	75	59
O111	25	25	25

Serogroup	No. of strains typed in the year:		
	2010	2011	Total
O157	240	204	444
O26	85	209	294
O103	102	36	138
O111	10	25	35
O145	7	15	22
Total	444	489	933

Plan: Inventory of the expertise on virulotyping of VTEC

Genes	No. of NRLs applying the method (%)
<i>vtx</i> -genes (subtyping by the PCR method tested in the 6 th PT of the EU RL VTEC)	28 (87.5%)
<i>fliC</i> (H-genotyping)	11 (34.4%)
<i>eae</i> (intimin)	32 (100%)
<i>eHly</i> (entero-hemolysin)	13 (40.6%)

Do: Train those RLs who need

- Treated in a dedicated presentation in this workshop

Check: Assess Proficiency of the RLs in Molecular Typing

- First round (**Facultative**) conducted jointly with the ECD FWD Network (Dec12 – Feb 13)
- 2nd round in the Spring 2013
- Request: Profile production and sending of the .tiff files to the EU RL for evaluation
- Evaluation: **individual** with score assignement to the quality of profiles (not participant-to-participant evaluation)

Act: Intervention in case of underproficiency

- Advice
- Training stages
- Ad hoc visits- Routine visits program started on 2012 with the objective to visit all the NRLs.
- Prioritization based on the needs (underproficiency in PT programs including those on PFGE, need for advice in PT organisation, specific needs of the NRLs...)