



National Institute for Public Health  
and the Environment  
*Ministry of Health, Welfare and Sport*



# Workprogramme EURL-*Salmonella* June 2019-2020 General discussion Closure

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# Work programme 2019-2020



- Work programme for 2 years (2019-2020) submitted to DG SANTE in December 2018.
- Template for drafting work programme, follows Regulation (EU) 625/2017, Article 94(2).
- Final Decision of DG SANTE on agreement of work programme and budget 2019-2020 received on 9 April 2019.

Since February 2019 new contact at DG SANTE:  
Pamina Suzuki



## Activity 1

'To ensure availability and use of high quality methods and to ensure high quality performance by NRLs.'

### Sub-activity 1.1 Analytical methods

*Objectives:*

- Standardisation of methods (ISO and CEN).
- Keep track of developments in (alternative) methods.
- Provide NRLs with information on developments of relevant (standardised/new) analytical methods.





## Sub-Activity 1.1 Analytical methods

Activities in ISO and CEN as project leader or as member:

- ISO-Ad hoc group on drafting Amd.1 of EN ISO 6579-1.
- CEN-TAG3/ISO-WG10 - drafting ISO/TS 6579-4 PCR identification of monoSTM: re-testing some strains; amendment of document; launch NWIP; organisation of validation study (at DIS stage).
- ISO-WG3 Method validation, especially ISO 16140-6 (validation of alternative confirmation and typing procedures).
- ISO-Ad hoc group on harmonisation of ISO/CEN standards for microbiology of the food chain: drafting guidance document.
- ISO-Ad hoc group 'General aspects' (member): e.g. drafting proposals for Introduction in ISO's on application of the methods.
- CEN-TAG9 Improvement of the pre-enrichment step (member): discussion results experiments with test protocol.
- ISO-WG25 Whole genome sequencing (member).



## Sub-Activity 1.2 EURLs working group on NGS

### *Objectives:*

- Promote the use of NGS across the EURLs' networks.
- Build capacity on producing and using NGS data within the EU.
- Ensure liaison with work of EURLs and of EFSA and ECDC on NGS.

### *Description:*

- Working group exists of 8 EURLs and 8 activities in relation to NGS have been defined (2 meetings per year):

- |                                     |   |
|-------------------------------------|---|
| 1) Proficiency Testing              | 6) Trainings on NGS                             |
| 2) NGS laboratory procedures (SOPs) | 7) Reference and confirmatory testing using NGS |
| 3) Bioinformatics tools             | 8) Follow-up of ISO activities on WGS           |
| 4) NGS cluster analysis             |   |
| 5) Bench marking                    |   |

2019: Summaries will be drafted on outcome surveys amongst NRLs, and on collected information of different activities.



## Sub-Activity 1.3 Proficiency Tests (I)

### *Objectives:*

- Organisation of Proficiency Tests to gain information on the performance of the NRLs-*Salmonella* for detection and typing of *Salmonella*.

### *Description:*

Organisation of 3 PTs per year:

1. One study on detection of *Salmonella* in samples from the primary production stage.
2. One study on detection of *Salmonella* in food or animal feed samples.
3. One study on typing of *Salmonella* (serotyping, molecular typing).



## Sub-Activity 1.3 Proficiency Tests (II)

1. PT on detection of *Salmonella* in samples from the primary production stage: Sept/Oct 2019; matrix: chicken faeces.
  - 2a. PT on detection of *Salmonella* in food samples: February/March 2020; matrix not yet decided.
  - 2b. PT on detection of *Salmonella* in bivalve molluscs. Date not yet decided.
  3. PT on typing of *Salmonella*: November/December 2019; serotyping, molecular typing.
- Set-up studies in line (as much as possible) with EN ISO 22117 ('Microbiology of food and animal feeding stuffs – Specific requirements and guidance for proficiency testing by interlaboratory comparison').
  - Results per lab compared to pre-set definition of 'good performance'. In case of poor performance → follow-up study.





## Performance criteria PTs for typing *Salmonella*

- **4 penalty points:** Incorrect typing of *S. Enteritidis*, *S. Typhimurium* (*including the monophasic variant*), *S. Hadar*, *S. Infantis* or *S. Virchow* **or** assigning the name of one of these 5 serovars to another strain.
- **1 penalty point:** Incorrect typing of all other *Salmonella* serovars.
- For each NRL-*Salmonella* the total amount of penalty points is determined.
- 'Good Performance' is: less than 4 penalty points.
- A follow-up is obligatory for NRLs of EU-MS with 4 penalty points or more.

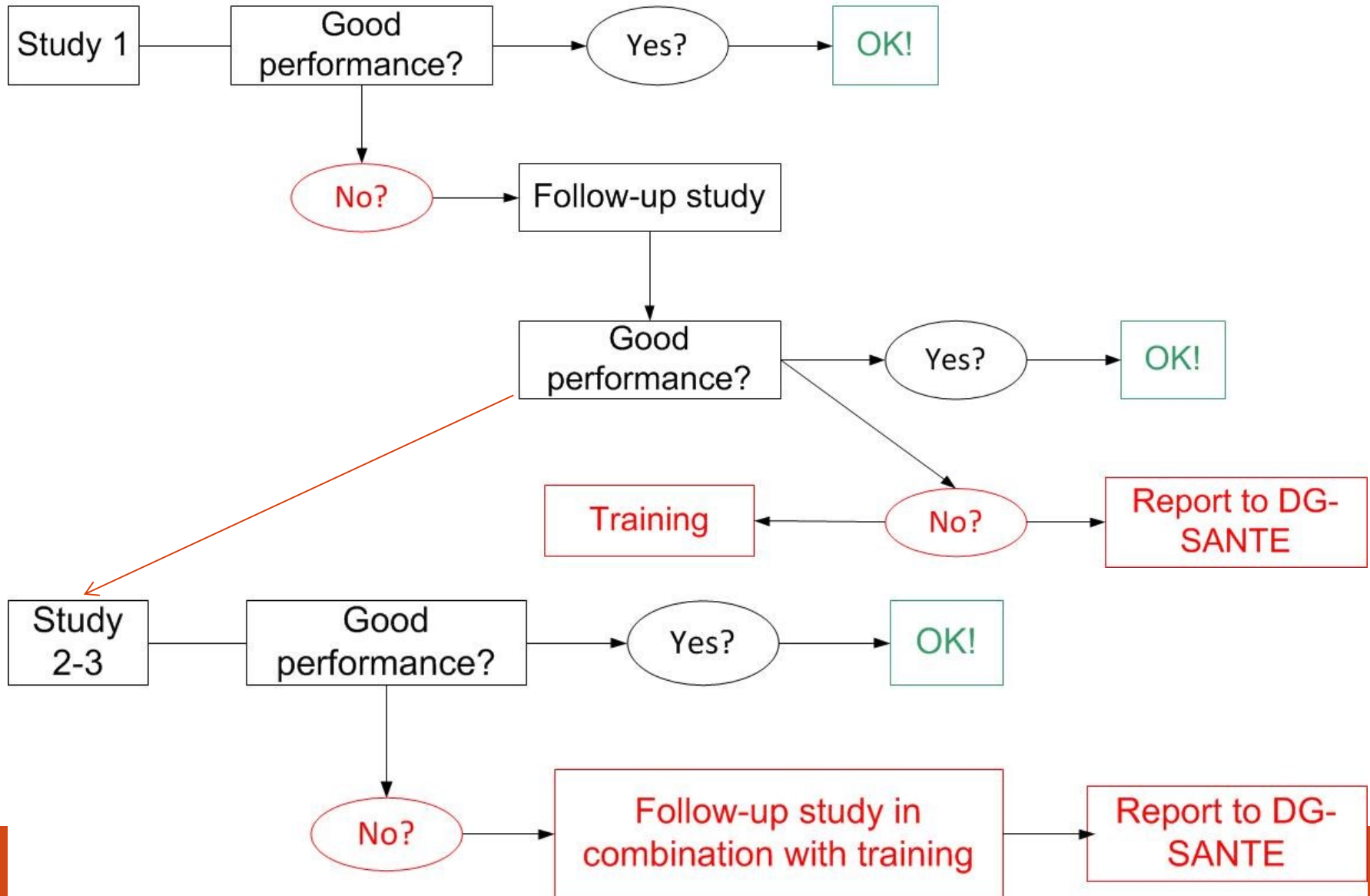




## Performance criteria PTs for detection *Salmonella*

| <b>Samples with matrix</b>      | <b>Percentage positive</b> | <b># pos samples/<br/>total # samples</b> |
|---------------------------------|----------------------------|---|
| <b>Negative samples*</b>        | 20% max                    | 1/6 max                                   |
| <b>Low level contamination</b>  | 50%                        | 3/6                                       |
| <b>High level contamination</b> | 80%                        | 5/6                                       |
| <b>Control samples</b>          | Percentage positive        | # pos samples/<br>total # samples         |
| <b>BPW</b>                      | 0%                         | 0/1                                       |
| <b>Own positive control</b>     | 100%                       | 1/1                                       |

\* 100% *Salmonella* free matrix cannot be guaranteed, 1 positive out of 6 blank samples is still considered as acceptable (20%).





## PTs: Moderate performance

- Occasionally PT results are judged as moderate performance.
  - Examples for moderate performance:
    - Mixing up of samples;
    - Electricity breakdown (samples stored at elevated temps);
    - Error when copying raw data into electronic result form.
  - Initially results are judged as poor performance; after showing raw data this may be changed in moderate performance.
- No follow-up after 1 PT with moderate performance.
- Follow-up after repeated moderate performances, e.g. after 3<sup>rd</sup> study in a row with moderate performance or in combination with earlier poor performance in PTs.
- Type of follow-up decided case by case.



## Activity 2

'To Provide scientific and technical assistance to NRLs.'

### Sub-activity 2.1 Workshop

#### *Objectives:*

- Exchange of information on the activities of the NRLs-*Salmonella* and the EURL-*Salmonella*. Exchange of information on (new) developments in the relevant work field.

#### *Description:*

- 2019: workshop in the Netherlands
- 2020: 25<sup>th</sup> workshop (!), probably in the Netherlands



## Sub-Activity 2.2 Training courses

### *Objectives:*

- To train NRLs-*Salmonella* in a specific work field.



### *Description:*

1. Training upon request of an NRL.
2. Training upon advise of the EURL (e.g. in case of repeated poor performance in interlaboratory comparison studies).
3. Joint EURLs training on WGS (basics), October 2019:
  - Organised in cooperation with EURL-VTEC and EURL-*Listeria monocytogenes*;
  - 4 NRLs per network (in total 12 participants);
  - Organised at premises EURL-Lm (Maisons-Alfort, France);
  - Call for application will start soon.



## Sub-Activity 2.3 Scientific advice and support NRLs

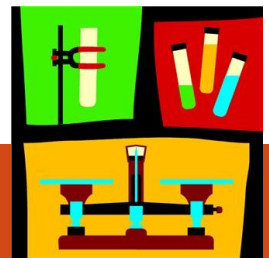
### *Objectives and description:*

- Provide scientific and technical assistance to the NRLs-*Salmonella* for the relevant work field.
- Perform confirmatory testing (samples/isolates) for NRLs when needed.
- Inform the NRLs of the activities of the EURL and other parties in the relevant work field, as well as of developments in this field.
- Maintenance of the EURL-*Salmonella* website and keeping the information on the website up to date.
- Publication of 4 newsletters per year, through the website.
- In joint working group of 5 EURLs drafting a harmonised guidance document for organisation of PTs by NRLs for national OL's, including partial outsourcing.



## Guidance document for organisation PTs by NRLs (I)

- Fall 2018: working group raised of 5 EURLs (*Listeria monocytogenes*, coagulase positive staphylococci, STEC, *Campylobacter*, *Salmonella*);
- Development of joint harmonised 'guidance document for organisation of PTs by NRLs for national networks, including partial outsourcing'.
- Based on a document of EURL-*Lm*.
- After several draft versions, Version 1 (28/02/2019) was sent to 5 EURL-NRL networks for comments, March 2019.
- Some comments received → Discussed in WG mid-April 2019.
- EURL-*Lm* incorporated comments → Draft V.2 (23/05/2019) will be reviewed by the WG.
- Final version (V.2) will be circulated to 5 EURL-NRL networks for information.







## Guidance document for organisation PTs by NRLs (II)

- Document gives guidance, for:
  - Criteria for NRLs to organise PTs in their scope and to assess performances of official national laboratories (OLs);
  - Criteria to outsource (parts of) PTs;
  - Criteria to select PT providers.
- Organisation of PTs by NRLs is MS responsibility. In case of outsourcing parts of PTs, National Competent Authority shall approve.
- Possible reasons for outsourcing (parts of) PTs:
  - Too small or too large network;
  - Economic aspects;
  - Lack of human resources.





## Guidance document for organisation PTs by NRLs (III)

- Steps which may be outsourced:
  - Steps related to test samples (preparation, hom/stab studies, mailing of samples);
  - Analysis of the results of participants; calculation of individual performance results, preparation of PT report.
- Not to be outsourced:
  - Follow-up of results of the participants;
  - Identification of corrective actions by labs concerned;
  - Assessment of corrective actions by NRL.





## Activity 3

'To Provide scientific and technical assistance to the European Commission and other organisations.'

### Sub-activity 3.1 Scientific advice and support of EC and other organisations

#### *Objectives:*

- Provide scientific and technical assistance to EC DG SANTE for the relevant work field.
- Provide assistance to DG SANTE, EFSA and (NRLs of) Member States in case of (international) *Salmonella* outbreaks.
- Collaborate with EFSA and ECDC for the relevant work field.
- Cooperation with other biological EURLs.



## Sub-Activity 3.1 Scientific advice and support EC

### *Description:*

- Ad hoc scientific and technical assistance of DG SANTE;
- Participation in working groups/scientific committees of DG SANTE, EFSA, like EFSA-ECDC Steering Committee of molecular database;
- Curation of PFGE data in EFSA molecular database;
- Assistance of DG SANTE, EFSA, NRLs and ECDC in case of outbreaks, e.g consultation of NRL network for specific info, (sub)typing of suspect isolates (MLVA, NGS), analysis of data.





## Activity 4 Reagents and reference collections

### Sub-activity 4.1 Reference strains and reference materials

#### *Objectives:*

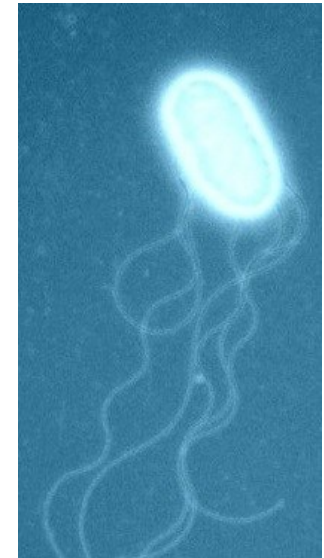
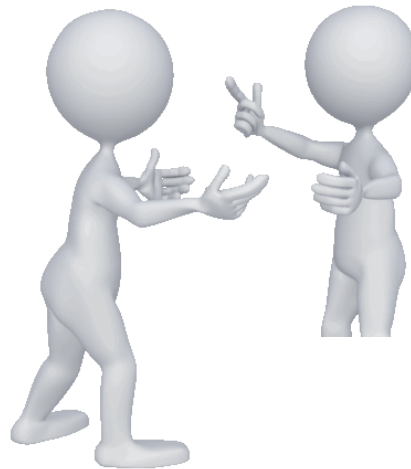
- Supply information on available culture collections and suppliers of microbiological reference materials.

#### *Description:*

- Provide link to WKLM scheme, keep contacts with WHO ref centre;
- Reference to culture collections and reference materials at website;
- Maintenance in-house culture collection;
- Provide sets of reference strains (SE and STm) for MLVA typing;
- Subactivity 4.1 is merged with 2.3 (support NRLs; keeping information on website up to date).



Other subjects to discuss??





# Closure

- Presentations soon on website – allowed to publish all?
- Make sure you have signed the attendance lists.
- Please complete evaluation form and hand over to EURL.
- Make sure you have checked the list with contact names and addresses of the NRLs.
- Make sure to send electronically completed (and signed) declaration form, together with boarding passes and all invoices by e-mail (scans), to EURL-*Salmonella* **at latest by 21 June 2019. Mind:** no receipts → no reimbursement
- For the ones who gave a presentation(s): please send abstract(s) as soon as possible, **at latest by 28 June 2019.**
- Before leaving we will have lunch.
- Direct trains to Schiphol Airport, leave Amersfoort at -:10 and -:40, platform 7 (43 min).





# THANK YOU!!

- European Commission
- Speakers
- Participants
- Noël Peters
- Jeanette van Essen
- EURL-staff



Safe journey home!!

