



# German national reference laboratory for food additives and flavourings

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# Good reasons for a National Reference Laboratory (NRL) for food additives and flavourings

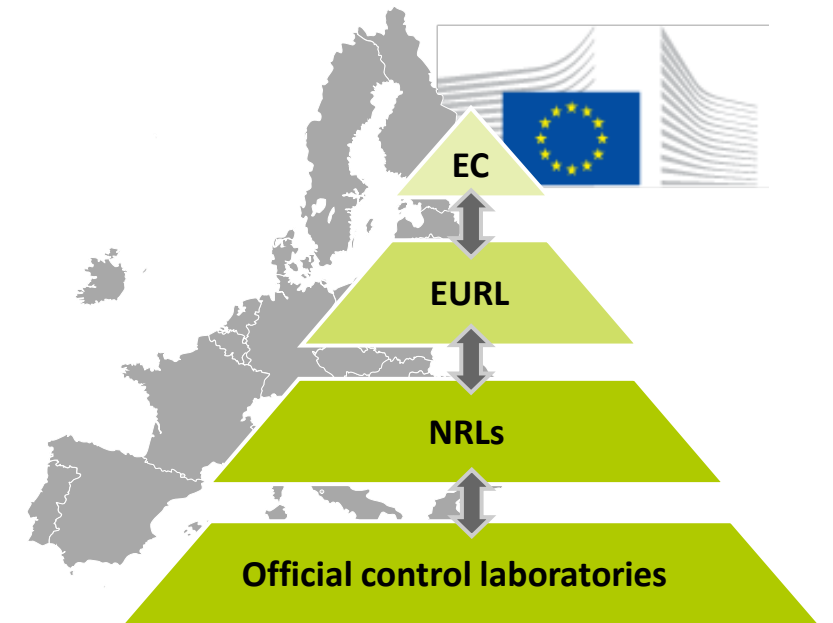
➔ Since 2010, the European Member States have been obliged to systematically monitor the consumption and use of food additives<sup>1</sup> and flavourings<sup>2</sup> on the basis of a risk-based approach.

<sup>1</sup> Art. 27 (1) Regulation (EC) No 1333/2008

<sup>2</sup> Art. 20 (1) Regulation (EC) No 1334/2008

## Challenges of (quantitative) chemical analysis

- Diversity of analytes
  - Diversity of food matrices
  - Huge range of concentration and levels
  - Limited availability of reference substances and reagents, and inter-laboratory comparative tests
- ➔ **Limited number of valid analytical methods**



# NRL for food additives and flavourings

## History

**01/2021**

Application of BfR as NRL

**03/2021**

Appointment of BfR as NRL and delegation of tasks

**07/2021**

Official-Kick-off

NRL build-up phase

**11/2023**

1<sup>st</sup> meeting with national network

**06/2024**

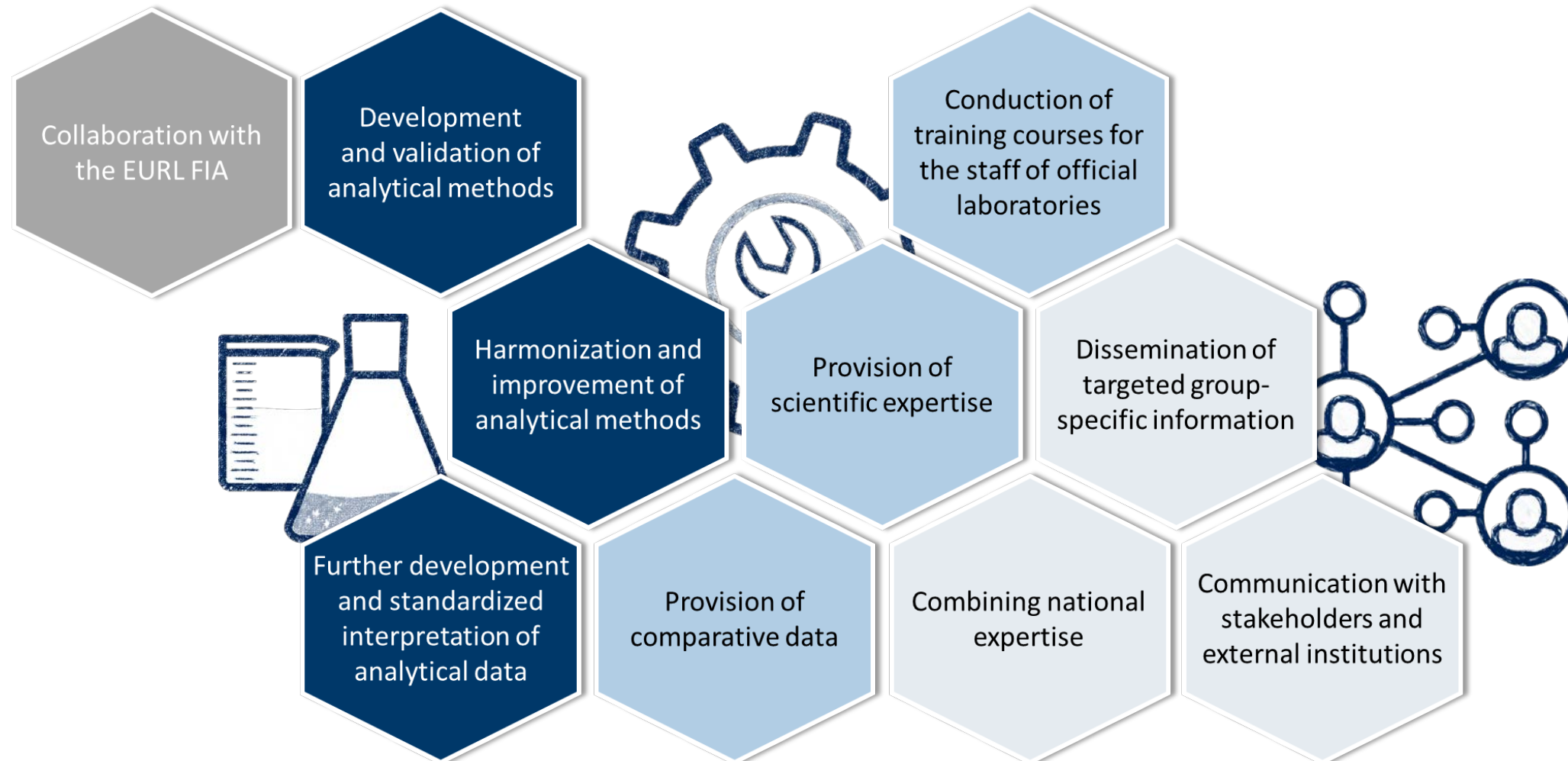
2<sup>nd</sup> meeting with national network

**06/2025**

3<sup>rd</sup> meeting planned

# Responsibilities and tasks of NRLs

according to Art. 101 of Regulation (EU) 2017/625



# BfR's reference laboratories

## Synergies

### 22 Reference laboratories

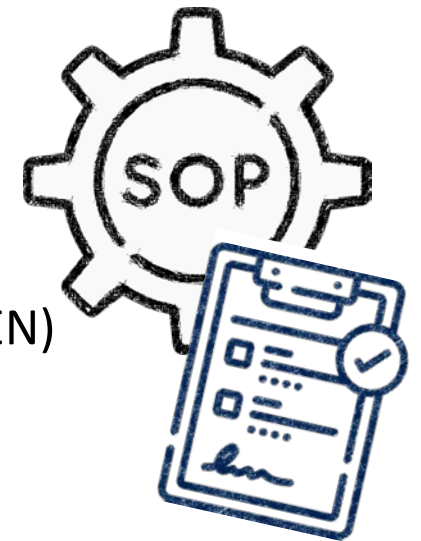
- 15 NRLs according to Regulation (EC) 2017/625

e.g. NRL for additives for use in animal nutrition

- 7 specialized laboratories and laboratories with a reference function

e.g. Senior expert office for the import control of wine

- ➔ Development: Participation in numerous reference procedures (e.g. for OIV, DIN, CEN)
- ➔ Standardization activities: OIV, DIN, CEN, ISO
- ➔ Accredited and well-equipped laboratories



# Current activities of the NRL for food additives and flavourings

## Support by the preparation of multi-annual monitoring plan



- NRL gives advise with regard to
  - Availability of analytical methods / analytical feasibility
  - Development / harmonisation of analytical methods

# Current activities of the NRL for food additives and flavourings

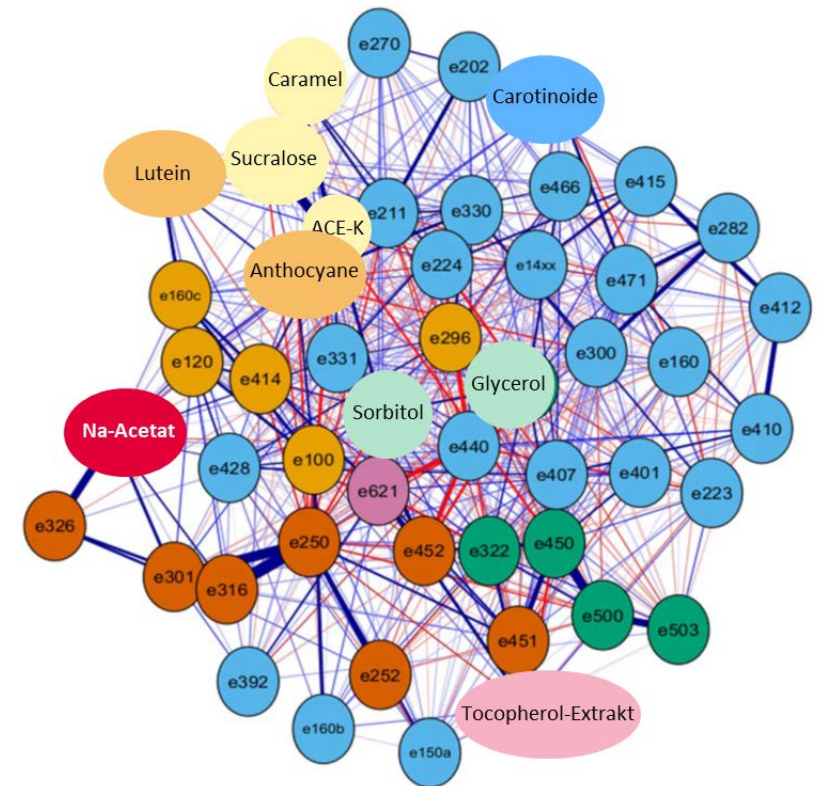
## Development and validation of a multi-analyte method for food additives

**Aim:** Development of robust, quantitative **multi-analyte methods** with high sample throughput and simple sample preparation

- First focus: **Analysis of sweeteners**
- Development of a **liquid chromatographic** method in conjunction with **mass spectrometric** detection



LC-QTrap6500  
Sciex



Chazelas, E. et al. *Scientific reports* 10, 3980; 10.1038/s41598-020-60948-w (2020).



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