



DISH-RI: Research Infrastructure for Food related to Nutrition and Health

## Meeting Pan-EU Food & Health RI- from challenges towards a roadmap: an introduction of two new initiatives METROFOOD and DISH-RI

## **16<sup>th</sup> September 2015**

Pre conference workshop of the 5<sup>th</sup> MoniQA International Conference on "Risks and Benefits" on "Innovative Technologies for Food Quality and Safety Management", Porto, Portugal

Programme

#### WED 16th September 2014 (9.30-12.30, including lunch)

Workshop objective: To present and discuss the two proposed research infrastructures in the domain of food and health

Chair/co-chairs: Karin Zimmermann and Isabel Castanheira 8.00-8.45 Registration (including a lunch) **Plenary: Introduction** Formal welcome and introduction of the workshop objectives: 1. Creating awareness about the new 9.00 - 9.10 (10m) Karin Zimmermann RI's and 2. Collaboration with Portuguese universities, research centre and food industry Isabel Castanheira 9.10 - 9.45 (45m) Presentation of METROFOOD Claudia Zoani Chair: Isabel 9.45 – 9.55 (10m) Plenary discussion METROFOOD Castanheira 10.00-10.30 (30min) Refreshment break Karin Zimmermann 10.30 – 11.15 (45m) Presentation DISH-RI Marc-Jeroen Bogaardt Chair: Isabel 11.15 - 11.25 Plenary discussion DISH-RI Castanheira Plenary discussion about the roadmap and collaboration of the DISH-RI and METROFOOD Chair: Karin 11.25 - 11.55the domain of food and health and the likelihood to Zimmermann join as a member Closing the workshop Karin Zimmermann 11.55-12.00 (5m) 12.00-12.30 (30m) Lunch

### **Background information**



A visual representation of the proposed- DISH-RI: Data, tools and services connecting the DISH domains in the food and health area

# The benefits of the future research infrastructure DISH-RI: research infrastructure for food related to nutrition and health

A EU Member States consortium has submitted to EFSTRI (European Society for Research Infrastructures) a conceptual design for an overarching research infrastructure needed to advance food research related to nutrition and health (**DISH-RI**). DISH-RI affects the research domains Determinants-Intake-Status-Health and will link exciting and new research infrastructures as ECRIN, EATARIS, BBMRI, CESSDA, ELIXER, SHARE, EBI etc.. The main purpose of the overarching DISH-RI will be to support the research community by integrating the currently fragmented data and tools, existing and/or needed under the different DISH domains. It will also provide services that support scientists and stakeholders for education and capacity building. The DISH-RI will not only support the research community, but also policy makers and professionals, while increasing the impact of public health nutrition strategies and improving the health of all Europeans. Private partners will be involved as providers of data and as users of the services of the RI, to foster product innovation and strengthen competitiveness. It will also benefit societal organisations and professionals by improving research and evidence to support their strategies and advice.

#### Organisation and governance

The EuroDISH project proposes a virtual RI, with a structure based upon the '<u>hub-and-spokes</u>' model. With a central hub that will be connected to expertise networks in different countries. Fragmented data from public and private sources will be brought together and integrated for stakeholders to use. An ICT platform will support standardisation, talking similar languages and using comparable formats for data, to better connect research. A central access point will provide services to researchers, stakeholders, and related RIs. In addition, a governance structure will provide the conditions for access for public or private partners, such as membership, ownership, privacy, and flexibility for researchers to innovate by sharing data. It will remain flexible and adaptive to developments in the societal and technological environment.

#### A roadmap towards more connected food and health research

The EuroDISH project has worked on the conceptual design of the DISH-RI, and a roadmap showing the stages and actions needed for its development. The goal is for the DISH-RI to be fully operational within 10 years, for which stakeholder support as well as funding at both member state and EU level is required. This concept was presented to stakeholders at the Final EuroDISH Conference held at the Expo Milano in the EU Pavilion, on 15 May, and summarised in the Milano Milestone. Participants of the workshop were invited to use this document as a first step towards the DISH-RI and to become part of the movement of innovation through collaboration.

#### **DISH-RI Partners**

| No  | Institute   | Short name | Country | Contact email  |  |
|-----|---|------------|---------|--|--|
| 1.  | Stichting DLO <sup>1</sup>                              | WUR        | NL      | karin.zimmermann@wur.nl<br>Pieter.vantveer@wur.nl            |  |
| 2.  | Wageningen University                                   | WU         | NL      |  |  |
| 3.  | Maastricht University                                   | MU         | NL      | chris.evelo@maastrichtuniversity.nl                          |  |
| 4.  | National Institute for Public health and<br>Environment | RIVM       | NL      | Marga.ocke@rivm.nl   |  |
| 5.  | University Medical Center of Groningen                  | UMCG       | NL      | j.c.g.van.t.klooster@umcg.nl                                 |  |
| 6.  | Institute of Food Research <sup>1</sup>                 | IFR        | UK      |  |  |
| 7.  | University of Surrey                                    | USurrey    | UK      | L.Timotijevic@surrey.ac.uk                                   |  |
| 8.  | Technical University of Denmark <sup>1</sup>            | DTU        | DK      | intet@food.dtu.dk  |  |
| 9.  | University of Copenhagen                                | KU         | DK      | ldra@life.ku.dk  |  |
| 10. | University of Aalborg                                   | AAU        | DK      | lmu@adm.aau.dk   |  |
| 11  | University of Aarhus                                    | AU         | DK      | klg@badm.au.dk   |  |
| 12. | National Research Council                               | CNR        | IT      | andrea.scaloni@ispaam.cnr.it<br>antonio.logrieco@ispa.cnr.it |  |
| 13. | Food and Nutrition Research Centre                      | CRA-NUT    | IT      | giuditta.perozzi@entecra.it                                  |  |
| 14. | Fondazione Edmund Mach                                  | FEM        | IT      | agostino.cavazza@fmach.it                                    |  |
| 15. | Parco Tecnologico Padano                                | РТР        | IT      | alessandra.stella@tecnoparco.org                             |  |
| 16. | University of Florence Magnetic Resonance<br>Center     | CERM       | IT      | luchinat@cerm.unifi.it                                       |  |
| 17. | Instituto Nazionale di Ricerca Metrologica              | INRIM      | IT      | a.rossi@inrim.it   |  |
| 18. | Fondazione Mediterranea Terina                          | FMT        | IT      | mariateresa.russo@unirc.it                                   |  |

Pending partners 2016: Germany, France, Slovenia, Serbia

| Research contacts:                           |   | Project coordination and media contact:                                       |  |  |
|--|---|---|--|--|
| Krijn Poppe, MSc<br>E:<br>krijn.poppe@wur.nl | Prof. Pieter van 't Veer<br>E: pieter.vantveer@wur.nl | Karin Zimmermann, BSc, RM<br>E: karin.zimmermann@wur.nl<br>T: +31 70 335 8185 |  |  |
| Wageningen UR, The Netherlands               |   |   |  |  |



#### METROFOOD - Infrastructure for promoting Metrology in Food and Nutrition

METROFOOD-RI is a new, distributed Research Infrastructure of Global Interest, by means of which it will be possible to carry out different activities supporting data collection and measurement reliability, as well as basic and frontier research in food and nutrition. The general objective is to enhance scientific excellence in the field of food quality & safety by promoting metrology in food and nutrition, allowing coordination on a European and increasingly on a global scale.

METROFOOD-RI will strength scientific knowledge, promoting scientific cooperation and encouraging the interaction between the various stakeholders and the creation of a common and shared base of data, information and knowledge. With this aim, a network of plants, laboratories and experimental fields/farms will be realized (*Physical*-RI) and an *e*-RI will be developed. The *Physical*-RI will enable to carry out different research activities supporting data collection and measurement reliability; quality & safety and traceability of food production, as well as basic and frontier research in food and nutrition. The *e*-RI will make available a new useful, free access web platform, for sharing and integrating information and data on availability of metrological tools for food analysis and will deal with integration of existing database on food, focusing on emerging needs and collection of data on food composition, nutritional contents and levels of contaminants in foods produced in different geographic regions and by applying different technologies.

#### The end users of the METROFOOD-RI could be:

- public and private research laboratories and research groups operating in different fields (metrology, food analysis, new measurement devices and systems, food composition and nutrition research; food security; food safety; food quality; food processing and product development; epidemiological studies and risk analysis)
- providers of proficiency testings;
- institutions and services (education, research, extension, input supply) that support and connect demand and supply and the government policies regarding health, nutrition and agriculture
- who seek to meet specific objectives of food security, food quality, production efficiency, livelihoods and environmental conservation in both the medium and long term;

#### METROFOOD is a **distributed research infrastructure structured on the basis of a hub and nodes model**. It will be constituted by:

• a <u>Central Hub</u>: Italy – ENEA Casaccia Research Center (Rome) + ENEA Trisaia Research Center (MT)

• <u>a network of 10 National Nodes</u>, located in: Italy, Portugal, Spain, Greece, Czech Republic, France, Romania, Hungary, Turkey, Republic of Moldova.

Some National Nodes – typically those of the Countries with more Partners (e.g.: Italy, France) – will be in turns organized in a <u>network of Centres</u>. The INT Partner (FAO) will constitute a Center of the IT Node, due to its location in Rome. If/when the Partnership will expand, additional Centers (in existing Nodes) or new Nodes for other Countries will be established.

#### **METROFOOD-RI Partners:**

Current Partnership includes Partners from 10 different Countries (8 Member States and 2 Associated Countries) + an International Partner (FAO).

| Country | METROFOOD-RI Partnership   |  |  |  |  |
|---------|--|--|--|--|--|
|         | ENEA   | Agenzia Nazionale per le Nuove Tecnologie, l'Energia e lo Sviluppo Economico                 |  |  |  |
|         | (Coordinator)  | Sostenibile  |  |  |  |
|         | ISS  | Istituto Superiore di Sanità   |  |  |  |
|         | IEO  | Istituto Europeo di Oncologia  |  |  |  |
| ІТ      | Udine Un.  | e Un. Università degli Studi di Udine  |  |  |  |
|         | Brescia Un.  | Università degli Studi di Brescia  |  |  |  |
|         | IZS-AM   | Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise                              |  |  |  |
|         | Whirlpool  | Whirlpool R&D Srl.   |  |  |  |
| PT      | INSA Instituto Nacional de Saúde Dr. Ricardo Jorge   |  |  |  |  |
| ES      | CIDETEC Fundación CIDETEC  |  |  |  |  |
| GR      | AUTH Aristotelio Panepistimio Thessalonikis  |  |  |  |  |
| CZ      | CULS Ceska Zemedelska Univerzita V Praze   |  |  |  |  |
|         | LNE  | Laboratoire national de métrologie et d'essais   |  |  |  |
| FR      | LCABIE/IPREM Universitè de Pau - Laboratoire de Chimie Analytique Bio-inorganio<br>Environnement |  |  |  |  |
| FK      | UT2A   | Ultra Traces Analysis Aquitaine  |  |  |  |
|         | ANSES  | ISES Agence nationale de sécurité sanitaire de l'alimentation, de l'environnem<br>du travail |  |  |  |
| RO      | IBA Institutul National de Cercetare-Dezvoltare pentru Bioresurse Alimentare                     |  |  |  |  |
| HU      | SZU  | University of Szeged   |  |  |  |
| TR      | TUBITAK Turkiye Bilimsel Ve Teknolojik Arastirma Kurumu  |  |  |  |  |
| MD      | ISPHTA Practical Scientific Institute of Horticulture and Food Technology                        |  |  |  |  |
| INT     | FAO  | Food and Agriculture Organization of the United Nations                                      |  |  |  |

Moreover, many other Institutes and Organizations arising from different Countries have already signed **Letters of Interest** in a future cooperation and/or inclusion in the Partnership. These Institutes arise both from Member States, Associated Countries and non-EU Countries (Austria, Slovenia, Republic of Macedonia, Germany, Italy, Spain, Brasil, Argentina, South Africa).

