

# Building food safety risk assessment capacity in 2030: A vision

## *Reflection paper*

### *by the Advisory Forum Discussion Group on Capacity Building*

prepared for the 68<sup>th</sup> AF meeting in Sofia, Bulgaria, June 6-7, 2018

## Introduction

This reflection paper summarises the results of the work of the Advisory Forum Discussion Group on Capacity Building (AFDG on CB).

The **objectives** for this reflection paper are:

### A)

- To **portray the current situation in Europe** with regards to food safety risk assessment capacity building,
- To **outline the long-term vision of the AFDG on CB** for a strengthened risk assessment capacity in Europe,
- To present a summary of **ideas on how to reach the long-term goal** by implementing intermediate steps (Mid-term-, and short-term goals).

### B)

- To provide a basis for discussion for the EFSA Advisory Forum (AF) at the 68<sup>th</sup> meeting in Sofia in order for the AF to initiate the next phase of activities with regards to risk assessment capacity building.

## Terms of Reference and Members of the AFDG on CB

### The assignment

Risk Assessment institutions of EU member states and EFSA find themselves challenged by the rapid increase of requests for the provision of training to partner institutions within Europe and beyond. Thus, in September 2016, the EFSA Advisory Forum called for the creation of an AF Discussion Group (AFDG) that would assess the current situation and develop a strategy for joint international capacity building (CB) activities in food risk assessment (RA) and associated risk communication (RC).

## The members of the AFDG on CB

AECOSAN, Spain	Ana Canals
ANSES, France	Salma Elreedy, since April 2017
ASAE, Portugal	Cristina Rodrigues, until March 2017
ASAE, Portugal	Fernanda Alvarrão, since April 2018
BfR, Germany	Reiner Wittkowski, <b>Chair</b>
BfR, Germany	Nicole Gollnick
FSAI, Ireland	Pamela Byrne, since April 2017
NVWA, The Netherlands	Koen Wienk
VKM, Norway	Danica Grahek-Ogden
EFSA, Italy	Djien Liem, until February 2018
EFSA, Italy	Jeff Moon, since March 2018

## Mode of Operation and Terms of Reference

The group met twice in Berlin in 2017 and held a number of telephone conferences. The working goals for the discussion group were summarized in the Terms of Reference (TOR):

- To support the AF in developing a common European strategy for capacity building,
- To take into consideration capacity building activities by other international RA organisations within and outside the EFSA network,
- To develop realistic ideas about how to join forces, leverage expertise and achieve synergies in the area of capacity building.

## The assessment

### Capacity building: A definition

Based on the definitions of Cooke (2005)<sup>1</sup> and the United Nations Development Programme<sup>2</sup> capacity building can be considered as a process of development which leads to higher levels of skills and abilities needed to respond to current and future needs. It uses a country's human, scientific, organizational and institutional resource capabilities in order to increase the level of expertise and capacity in the subject of interest.

Capacity building implies a wide range of activities. Up to now the AFDG on CB mainly focused on the aspect of building capacity through classroom- and virtual teaching (or a combination of both).

### Capacity building requests

Most often requests for training of staff (individuals or groups) derive from **governmental institutions, ministries and universities**. Requests for training differ greatly in content and depend mainly on the food safety structures in the respective beneficiary's country. The training for building-up a basic understanding of structured RA and effective RC is most often sought after. Such needs are

<sup>1</sup> Cooke, 2005, BMC Family Practice, 6:44 doi:10.1186/1471-2296-6-44

<sup>2</sup> <http://www.undp.org/content/undp/en/home/librarypage/capacity-building/support-capacity-development-the-undp-approach.html>

met for example by short trainings through EFSA, summer schools in member states<sup>3</sup>, training within research projects<sup>4</sup>, tailor-made trainings<sup>5</sup> in the beneficiary countries, EC mechanisms such as TAIEX, EU Twinning, BTSF trainings. Further, on the level of governance, advice on how to build sustainable national risk assessment structures is often enquired. Scientific mentoring is requested in cases where partner institutions have the scientific and personal resources but still lack experience to perform risk assessments. This may be implemented by regular virtual and telephone meetings and data exchange. It may also be combined with training of guest scientists in the EU (usually for a few months) or through specific short-term training programs.

In addition to requests from governmental institutions, ministries and universities, EU risk assessment institutions receive requests to participate in capacity building for example from:

- The **European Commission** (either directly or requests via consultancies or national ministries) to participate in TAIEX, EU Twinning, BTSF trainings, ...
- **International organizations** such as WHO<sup>6</sup>, FAO, WTO, IAEA ,...
- **Multilateral, regional state unions** such as *Mercado Común del Sur* (MERCOSUR, Southern Common Market), Association of Southeast Asian Nations (ASEAN), *Comunidade dos Países de Língua Portuguesa* (CPLP, Community of Portuguese Language Countries) , Caribbean Community and Common Market (CARICOM), Economic Community of West African States (ECOWAS), League of Arab States, ...

### Status quo

It can be considered as one of our greatest assets to have a very diverse portfolio of professions in the risk assessment community. At the same time, this constitutes a bottleneck in attracting and hiring scientists to become risk assessors. To our knowledge, full graduate degree programmes in food safety risk assessment do not exist in the EU. As a consequence, most scientists learn about the opportunities of a career in risk assessment by chance and have to acquire respective knowledge and skills in a learning-by-doing process. This requires mentoring by experienced colleagues and training through available short courses.

No question, we have excellent tutors in the EU risk assessment community. But we need to keep reminding ourselves that teaching is not the core business of risk assessment institutions and their staff. The development of the EFSA EU-FORA<sup>7</sup> six-week core curriculum showed once more that experts are reaching the limit of their available time and capacity even for the training activities restricted to the EU. However, it is inevitable that we expand our commitment to educating and training scientists.

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<sup>3</sup> Example: Summer school on Introduction to Total Diet Studies, held in 2015 by ANSES (France):

<https://www.anses.fr/fr/content/summer-school-2015-introduction-total-diet-studies-programme>

<sup>4</sup> Example: within Horizon 2020-funded project “TDS-Exposure” on total diet studies, summer schools were organised: <http://www.tds-exposure.eu/workplan/training-and-spreading-excellence/>

<sup>5</sup> Example: Uruguay Summer Academy 2018 provided by BfR by decree of German Federal Ministry for Food and Agriculture:

[http://www.bfr.bund.de/en/press\\_information/2018/09/bfr\\_organising\\_a\\_summer\\_academy\\_in\\_uruguay-203977.html](http://www.bfr.bund.de/en/press_information/2018/09/bfr_organising_a_summer_academy_in_uruguay-203977.html)

<sup>6</sup> Example: WHO Chemical Risk Assessment Network activities with regards to capacity building as detailed in the Strategic Plan 2018-2020 [http://www.who.int/ipcs/network/Network\\_Capacity\\_Building\\_Strategy.pdf](http://www.who.int/ipcs/network/Network_Capacity_Building_Strategy.pdf)

<sup>7</sup> <https://www.efsa.europa.eu/en/engage/fellowship>

## **Growing demand for capacity building**

Today we are challenged more than ever by the rapid scientific and technical progress and the rapid development of global trade of food, feed and consumer products. This requires international efforts for sharing and harmonization of processes and methodologies in risk assessment. It also generates the need to share knowledge and experiences on building sustainable organizational risk assessment structures. Such efforts and initiatives exist, for example through WHO<sup>8</sup> and FAO<sup>9</sup> or recent initiatives among risk assessment institutions such as the International Liaison Group on methods for risk assessment of chemicals in food (ILMERAC). Striving for common approaches and methods in risk assessment requires a structured and sustainable approach for training our future colleagues in the EU and beyond, and providing sufficient continuing education opportunities for our current staff.

## **The vision: Strengthened risk assessment capacity in the EU and beyond**

### **Long-term goals: The vision for 2030**

Food safety risk assessment degree programmes<sup>10</sup> are established. These formal training curricula are offered by certain EU universities (with the label of “Centre of excellence for food safety risk assessment”) in collaboration with EU risk assessment institutions. These degree courses are taught using a blended-learning approach. While part of the curriculum is taught online, students and tutors will meet and interact in physical training modules at certain times during the course. This format allows students to complete the degree while employed and without the need to relocate full-time to a different city or country. Programmes are well designed to meet the needs for knowledge and skills of first-time employees of risk assessment institutions in the EU. However, non-EU students can enrol in the degree courses as well. The curricula are made of core and elective courses, allowing students a certain degree of specialization. All courses will be accredited and European Credit Transfer and Accumulation System (ECTS) credits will be awarded to successful participants.

In addition to the degree-courses, short trainings are offered as part of the continuing education initiative. Teaching formats are chosen with regards to the topic and the target group. Basic and advanced training courses will be provided.

The food safety risk assessment degree programme is constantly adapted by taking into account changes in EU legislation, and methodological and technical advancements. In general, the training by EU centres of excellence for food safety risk assessment will contribute significantly to the harmonisation of global risk assessment standards.

Sustainable, long-term funding for permanent personnel, tutors and consultants, virtual and physical infrastructure, accreditation costs, a limited number of scholarships will be provided through EU funding. Further, student tuition will cover some of the expenses.

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<sup>8</sup> International Programme on Chemical Safety - IPCS (<http://www.who.int/ipcs/methods/en/>) and WHO Chemical Risk Assessment Network (<http://www.who.int/ipcs/network/en/>)

<sup>9</sup> <http://www.fao.org/food/food-safety-quality/home-page/en/>

<sup>10</sup> Associated risk communication is included in the curriculum

### **Mid-term goals: Steps in building the sustainable EU capacity building structure**

By 2025, a European *risk assessment label* is established. Courses accredited under this label follow the guidelines developed by a group of risk assessment experts (“RA label development” team). These guidelines contain detailed information on the training contents and learning objectives of risk assessment courses. Guidelines are developed by liaising with the EU-FORA Programme Committee and the Programme Committees of already existing risk assessment training courses in EU member states. Further, the RA label development team cooperates with other EU-Agencies (such as ECDC, EMA, ECHA) and international organisations (such as FAO, WHO, WTO) to achieve synergies and prevent doubling of efforts. This facilitates the establishment of a harmonised basic risk assessment curriculum. The curriculum is added upon constantly towards the development of a complete degree course and further specific advanced training courses which will later be implemented through the centres of excellence.

The RA label development team consists of risk assessment experts from competent RA bodies and from academia. Further, experts for risk communication, didactics, and virtual teaching are part of the team. Competent partners with vast experience in building up international blended-learning degree programmes advice the RA label development team. Funding for the **development** and the **conduction** of the label courses is provided by the European Union.

The *risk assessment label* courses can be held by member state risk assessment institutions, EFSA, universities or other competent partners (other EU-Agencies, international organisations). To participate in the label course programme training, providers have to receive accreditation through an official accreditation body. Through a voucher system sponsored by the EU the payment for courses is facilitated.

The implementation of the risk assessment label system is accompanied by a comprehensive communication and advertisement campaign.

Information about the different courses is published on a comprehensive and interactive web portal hosted by the *risk assessment label* administrative office.

### **Short-term goals: Our first steps**

#### **Food for thought: The benefit of a joint approach**

As described in the section “the assessment”, a number of EU risk assessment institutions and EFSA try to meet the needs for training in the risk assessment community by measures such as summer schools, guest scientist programmes, short training courses, or even tailor-made seminars/workshops. These activities are usually organized and implemented by a single institution. Therefore, it is the institution’s task to provide all resources for the organization of such initiatives (apply for funding, identify tutors (often from its own staff), handle the registration of participants, etc.) and the implementation of these capacity building activities.

The limitation of financial and human resources is a challenge to provide

- Sufficient training opportunities for all those looking for specific risk assessment education,

- A well balanced course portfolio with basic level and advanced level courses,
- An opportunity for participants to use self-education material (by distance learning) to reach a basic level which then qualifies them to participate in a more “hands-on” and advanced training.

An approach as depicted in the sections “Long-term goals” and “Mid-term goals” considers the limitations the individual institutions face. By bundling the scientific, teaching and organizational competences of EU risk assessment institutions and EFSA we could jointly

- Further develop the currently existing curricula,
- Transform part of the applicable classroom teaching material into virtual course material with support of E-learning specialists (and therefore reduce the need for physical courses on basic risk assessment topics),
- Supervise virtual course participants.

An added benefit is that though smaller risk assessment institutions may not be able to provide training courses themselves, they usually have experts in their teams who could contribute greatly as tutors. Thereby also risk assessment institutions with limited resources can engage in the capacity building initiative and expand their own capabilities.

Thus, even in the short term, we could already provide training at a higher level, with a larger pool of tutors and a broader portfolio of teaching tools if we join forces with regards to capacity building.

### Activities and time line until June 2019

#### June 2018

- ⇒ Report to EFSA Advisory Forum
- ⇒ In case the AF agrees with the general vision illustrated above, the AFDG on CB suggests installing a **standing working group** to ensure the implementation of activities. Members of the working group shall be involved in risk assessment capacity building of their own institutions and shall therefore be highly motivated to network and interact with their European colleagues. Administrative support to the working group would be of great benefit for assisting with research task, keeping minutes and reporting back to the AF.
- ⇒ Funding for working group activities may be shared by EFSA (financial support for working group activities) and participating risk assessment institutions (working hours of staff, potentially additional travel costs, etc.)

#### Until November 2018

- ⇒ Identify and liaise with contact persons/groups at **EU-Agencies and international organisations** which are involved in implementing strategic capacity building approaches
  - Exchange of information and experiences in creating capacity building tools (physical, virtual),
  - Collect information about available knowledge exchange platforms (databases),
  - Identify areas where to join forces because of similar training objectives (for example, see WHO<sup>6</sup> Chemical Risk Assessment Network).

- ⇒ Identify and liaise with contact persons/groups at **EU MS risk assessment institutions and EFSA** which are involved in implementing strategic capacity building approaches
  - Collect information about examples on how to join forces in international capacity building (For example: Workshop on managing foodborne disease outbreaks<sup>11</sup> by ASAE, Portugal, BfR, Germany, HAH, Croatia, and ARFA, Cabo Verde, 2018). Encourage to share information about the collected examples.
- ⇒ Prepare an overview of selected practice examples for existing blended learning courses in the field of food safety and related areas (e.g. public health).

### November 2018

- ⇒ Report to EFSA 70<sup>th</sup> Advisory Forum meeting in Vienna
  - Prepare for a break out session to receive valuable feedback from AF member for further strategic planning

### Until February 2019

- ⇒ Develop criteria for a database with data on:
  - Available training courses offered by risk assessment institutions of MS and EFSA,
  - Potential tutors for training courses.
- ⇒ Investigate tools (e.g. available EFSA tools) that could be used to implement such a database. Consider that such a database should be user-friendly and easy to maintain.

### February 2019

- ⇒ Report to EFSA Focal Points
  - Prepare for a break out session to receive valuable feedback from EFSA focal points for further planning and implementation

### Until June 2019

- ⇒ Begin to build the database (see above)
- ⇒ Become a contact point for national risk assessment institutions that are in the process of preparing training courses for an international audience and whom are looking for
  - Already existing courses on the same topic,
  - Tutors.
- ⇒ Encourage active collaboration between risk assessment institutions.
- ⇒ Prepare a structure for an interactive, easy to use, open access **web portal** that maps all available training offers by EU and MS risk assessment and academic institutions that are open to an international audience.
  - Where and how could this be hosted long-term (investigate possible links with existing databases, such as the WHO Chemical Risk Assessment Network's "Risk Assessment Training Course Database"<sup>12</sup>)?

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<sup>11</sup> Workshop on managing foodborne disease outbreaks:  
[http://www.bfr.bund.de/en/press\\_information/2018/12/foodborne\\_disease\\_outbreaks\\_\\_doing\\_the\\_right\\_thing\\_at\\_the\\_right\\_time\\_with\\_suitable\\_means\\_in\\_times\\_of\\_crisis-204177.html](http://www.bfr.bund.de/en/press_information/2018/12/foodborne_disease_outbreaks__doing_the_right_thing_at_the_right_time_with_suitable_means_in_times_of_crisis-204177.html)

<sup>12</sup> <https://www.risktraindb.org/>

- Establish ways of sustainable funding. Could this web portal be hosted by DG SANTE, by EFSA or by one of the national risk assessment institutions?

⇒ Prepare the strategy for lobbying for the mid-term and long-term activities.

**After June 2019**

- ⇒ Consider the data and information collected since June 2018 to start developing a first draft for a modular master's degree curriculum (Note that the goal is to implement it by 2030).
- ⇒ Already existing and newly developed capacity building measures should be assessed in the light of being potential building blocks for a master's degree programme.
- ⇒ Identify and liaise with contact persons/groups at **European Universities** which could become strategic partners in implementing risk assessment label courses and which have the potential to become "Centres of excellence for food safety risk assessment"
- ⇒ Write a paper in the EFSA journal about the capacity building initiative