FEEDBACK ON THE 4TH MEETING OF THE
EFSA ADVISORY GROUP ON DATA

ÁKOS JÓZWIAK (HUNGARY)

82ND ADVISORY FORUM MEETING
1ST DECEMBER 2021

4TH MEETING (17TH NOVEMBER 2021)

- Discussion on project ideas (based on shared document) and next steps, including exchange of views

- Discussion on group way of working, long-term vision and desired achievements (with a draft agenda for 2022 presented)

- Focal Points working package in the data area

4TH MEETING OF THE ADVISORY GROUP ON DATA
PROJECT IDEAS

PROJECT IDEAS

- Technical document on '*EFSA's proposal for possible projects to co-create data management and analysis applications with Member States*' distributed for comments

  - Build a Data Mapping tool to convert national data to EFSA data formats

  - Build a Business Rule Engine (BRE) for data quality checking

  - Mobile application to support data collection at the sampling point

- MS feedback discussed

DISCLAIMER: These three proposals, as commented by the Member States, will be included in the EFSA's work plan and further discussed with EFSA from a technical point of view. Therefore, some modifications, adjustments, refinements, as deemed necessary, are still possible and will be discussed during the "design phase" of the three use cases.

BUILD A DATA MAPPING TOOL TO CONVERT NATIONAL DATA TO EFSA DATA FORMATS

- Purpose:
  - Map laboratory/national data format to SSD2/other formats for data collection
- Why?
  - Stems from AFTF-EFSA: Translate existing national lab data to EFSA SSD2 format
  - Continue/Extend the work of SIGMA mapping tools and Swedish pilot on data linking
  - Facilitates the work of the data providers, replace old Excel Macro Tools
- Technical details:
  - Avoid typing
  - Get EFSA catalogues via API
  - Flexible mapping with local systems

BUILD A DATA MAPPING TOOL TO CONVERT NATIONAL DATA TO EFSA DATA FORMATS
COMMENTS

- Export option of these mapping tables would also be useful to allow the use of the mapping tables generated via this tool in self-developed routines for other programs (e.g. SAS)

- Mapping "à la carte" for some features/modules (e.g. FoodEx2)

- Further extend SIGMA project to all data models

- Continue the data linking project initiated by Sweden providing a easy to use user interface

- Many MSs already have similar tools developed, however, others don't (difference in added value between MS)

BUILD A BUSINESS RULE ENGINE (BRE) FOR DATA QUALITY CHECKING

- Purpose:

  - Data validation according to EFSA's or user defined rules

- Why?

  - Foster data quality throughout the whole data reporting chain

  - We should spend more time to get insights from data rather than validating/re-validating

  - Generate pre-validated "certified data sets": Data Providers will know in advance that EFSA will accept the data transmission

- Technical details:

  - Reuse EFSA's validation rules / language

  - Should handle small dataset as well as large files

  - UI to visualize data issues and edit data

  - Audit trail: who did what (backend)

BUILD A BUSINESS RULE ENGINE (BRE) FOR DATA QUALITY CHECKING COMMENTS

- Managing BR updates (current + next year version)

- Consider input data in other formats than XML

- Ensure that error messages are precise and comprehensive, also for non-experts.

- Important to get assistance in case of questions

- Confirmation of the successful submission of the validated data set

- Web app preferred (no installation)

- Two basic use cases (business processes) are conceivable:

  - MS data are collected at national level and then transformed into SSD2 schema and validated with the tool

  - There will be a library for business rule validations, which can be used at any step of data collection

- Data enrichment API (LLDB) highly supported, LLDB should be quality checked, should also include legal limits

MOBILE APPLICATION TO SUPPORT DATA COLLECTION AT THE SAMPLING POINT

- Purpose:
  - Mobile app to automatize the process of getting accurate FoodEx2 descriptions
- Why?
  - Facilitates data correctness & completeness in the early stages of the collection chain
  - Finally contributes to data quality
- Technical details:
  - GS1 barcode decoder
  - optical character recognizer (OCR)
  - image-to-text AI: food sample images -> textual descriptions

MOBILE APPLICATION TO SUPPORT DATA COLLECTION AT THE SAMPLING POINT COMMENTS

- GS1 barcode: GS1 is a private organization and membership is voluntary – agreement and/or maintenance issues

- OCR: makes sense in combination with GS1 barcode reading

- AI solution (pattern recognition): could be not only useful for not labeled food, but as a general solution for food classification in conjunction with FoodEx2 descriptors.

- Image-to-text: a very large database might be needed for correct identification

- Specificities of some BRs are a big obstacle for finding a valid FoodEx2 code at the point of food sampling

- MS proposal for a data collection system using *blockchain technologies*: create a system that allows gradually adding information for each sample at each step of processing

4TH MEETING OF THE ADVISORY GROUP ON DATA
DISCUSSION ON GROUP WAY OF WORKING, LONG-TERM VISION AND DESIRED ACHIEVEMENTS

ASSISTING EFSA IN BREAKDOWN OF STRATEGIC OBJECTIVES AND PRIORITISATION

- Annual update of the EFSA multi-annual work programme

- Bring in, evaluate, and prioritise project ideas, and assess how they would fit into EFSA strategic objectives and also MS strategic directions

- Discussing alignment with other adjacent European strategies

- An annual review of original Task Force recommendations

  - assessing their completeness level and identifying the most important gaps

STEERING COMMITTEE
FOR THE DATA RELATED PROJECTS

- Review of the draft calls

    - channelling in MS perspective and experience

    - also performing a formal matching with the Task Force recommendations

- Providing an information exchange and consulting function

    - through discussing the status (challenges, achievements, concerns, possible connections and/or conflicts between different projects, etc.) of the ongoing projects
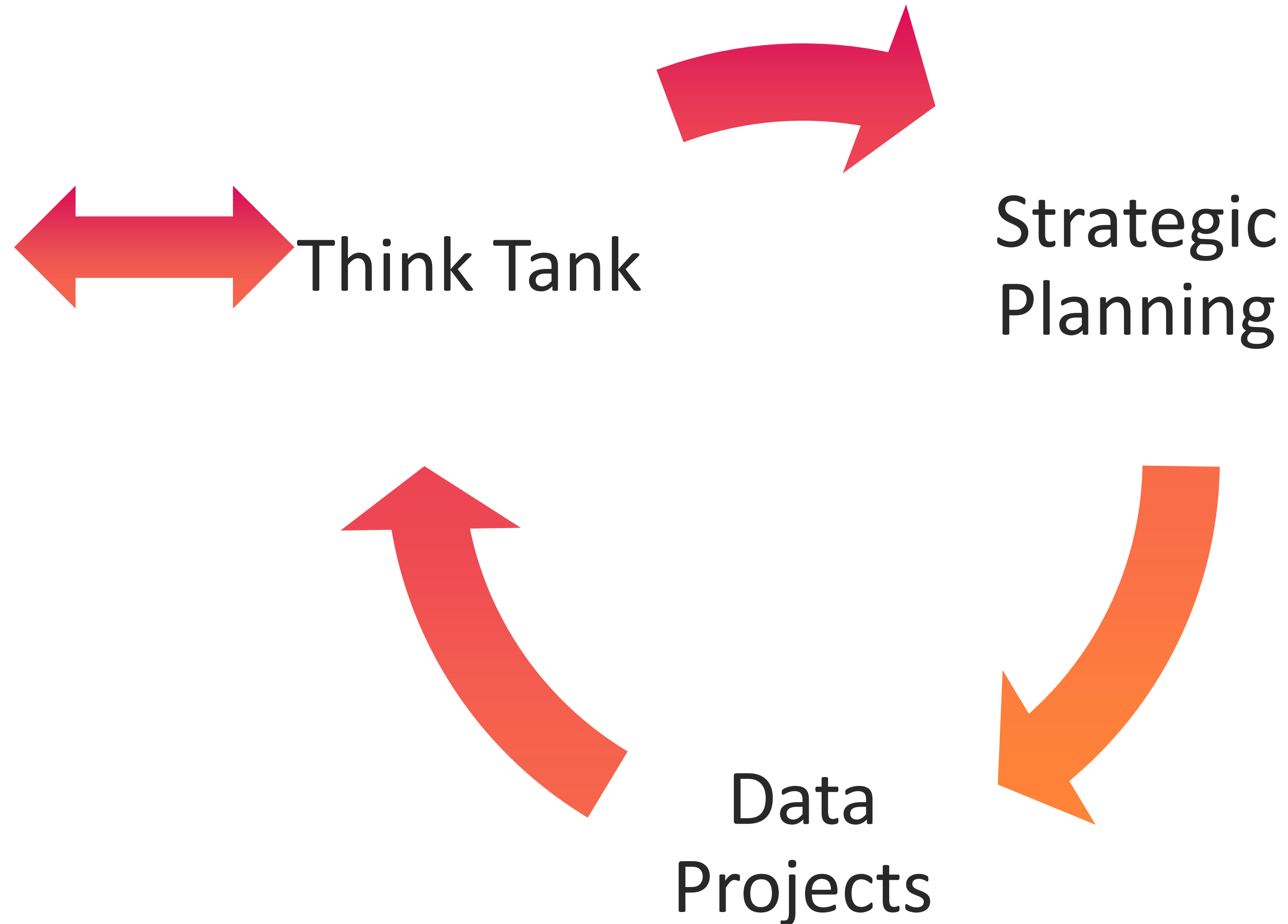
THINK TANK & KNOWLEDGE HUB

- Presenting MS data related good practices, solutions to food systems challenges

- Presenting MS draft project ideas

  - which later could be channelled into the work programme

- Bringing in novel ideas, approaches and solutions used or developed in other domains

- Learning from the results/outcomes of the projects

  - follow-up assessment of the projects after their implementation

- Formulating new recommendations beyond the original Task Force recommendations

- Synthesising and sharing knowledge related to data solutions

  - through the annual reports and a knowledge sharing platform

EXPECTED DELIVERABLES

- Progress updates at Advisory Forum meetings

- Multi-country projects agreed, launched, and implemented

- Input to EFSA on strategic prioritisation processes concerning data

- Group's activities report: publication on the EFSA website

- **Definition of a dedicated knowledge sharing platform**

  - To share information on data related knowledge, project initiatives, results, etc.

  - This initiative shall be discussed along other, similar initiatives

  - Future role of the Focal Point network shall be considered

WAY OF WORKING

Think Tank

Strategic Planning

Data Projects

AGENDA FOR 2021-2022

DEC 2021

- Finalise the workplan for 2022
- Discussion on the creation of a knowledge sharing platform
- Get aligned on the project calls
- EFSA colleagues to share insights on the AI Hackathon

Q1 2022

- TF recommendations: review
- Discussion on EU strategies
- Discussion on sharing data models and possible data model interactions (action item from 81st AF)
- Discussion on new project proposals
- Discussion on MS initiatives, good practices, and solutions
- Discussion on novel approaches

Q2 2022

- Discussion on DG SANTE data strategy and IMSOC
- Discussion on draft Annual Report
- Discussion on project ideas (draft calls) and alignment with EFSA annual work programme
- Discussion on MS initiatives, good practices, and solutions
- Discussion on novel approaches
- Knowledge synthesis, communication

Q3 2022

- Discussion on EC and other EU Agencies data strategies
- Finalisation of the Annual Report
- Discussion on project ideas (draft calls)
- Discussion on MS initiatives, good practices, and solutions
- Discussion on novel approaches
- Knowledge synthesis, communication

Q4 2022

- Review of ongoing data related projects
- TF recommendations: review and new recommendations
- Adjustment of the way of working of the Group
- Discussion on new project proposals
- Discussion on MS initiatives, good practices, and solutions
- Discussion on novel approaches
- Knowledge synthesis, communication

4TH MEETING OF THE ADVISORY GROUP ON DATA
FOCAL POINTS WORKING PACKAGE IN THE DATA AREA

NEXT STEPS

NEXT STEPS

- Next meetings: last meeting on 13rd December (online) plus a physical meeting planned in Q1 (end of January / beginning of February 2022)

- Until next meeting:

  - Finalising the draft project grant calls to be launched in Q1 2022

  - Finalising the Group agenda for 2022

  - Preparing discussion documents for the meeting

  - Decision on setting up a knowledge sharing platform

THANK YOU FOR YOUR ATTENTION

Ákos Józwiak
Jozwiak.Akos@univet.hu