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# Evaluation of the EFSA Framework Partnership Agreement pilot project on **Data Quality: Cyprus feedback**

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# Objectives of the FPA project



The objectives have been achieved :

- **Data Governance and Coordination**
  - National Data Coordinator of the Data Providers
  - Data Stewards (DS) for each of the 4 Domains
  - Standard Operating procedures (SOPs) for the Data Management
- **System Enhancements** by
  - Improving the local LIMS software to provide better electronic communication with EFSA and
  - making more robust the local automatic data management and validation before electronic data transmission to EFSA
- **Data Quality Management** by
  - SOPs by the Data Stewards for their data within the quality system
  - Definition of the Quality Objectives and
  - Measurement of the data quality by Key Performance Indicators



# Activities performed



## Activities on Standard Operating Procedures – SOPs describing :

- Data Governance - describing the data coordination and governance process in Cyprus.
- Management, clarification, update or confirmation of data by DS- response within 10 working days
- Preparation, Validation, Transmission, Data Quality by DS

## • Activities on Quality Objectives - System Enhancements

- The Quality Objectives required to be addressed were listed in the Grant Agreement of the pilot project.
- In order to assist the participant countries, EFSA defined the Data Quality Objectives ( DQO) for each domain and the Key Performance Indicators (KPIs) to measure the achievement of the Objectives.
- The proposed KPIs, their calculation and reference values were discussed and agreed in a series of teleconferences among the Data Stewards of each domain of the 5 countries participating in this pilot project and EFSA.
- The developed “KPI algorithm files” contain the KPI identifier, **the dimension measured**, the KPI formula and calculations, the Reference value and the produced KPI LIMS report.



# Achievements, benefits & cost / benefits analysis



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- ✓ The establishment of data governance in Cyprus with the appointment of a National Coordinator and the written procedures for data access requests and data licencing will **ensure future data management**
- ✓ The definition of related Standard Operating Procedures describing the electronic transmission to EFSA and any clarifications, for update or confirmation requests, fulfil the EFSA's validation rules will **enhancing the automatic data management and electronic data transmission to EFSA**
- ✓ The Data Quality Management developed with **the definition** of the Data Quality Objectives ( **DQO** ) , the **measurements** of data quality by Key Performance Indicators ( **KPIs** ) , the **analysis** of KPIs and their monitoring for **improvement** will **ensure that EFSA will receive good quality data with Quantitative figures**
- ✓ Examples are Lower error rate and time saving : It is estimated that the enhancements developed will result in at least 20% time savings and will improve the error rate as it will definitely be lower than previous years.



# Achievements, benefits & cost / benefits analysis



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- ✓ The Quantification of the cost and the allocated budget is well justified by the outcome and the development of the **Data Quality Dimensions ( Timeliness, Validity, Completeness etc)** for measuring the KPIs, will help to identify the trend in the Data Quality transmitted to EFSA resulting in continuous improvement
- ✓ Major achievement of the pilot project in Cyprus is **the development of the “XML Tool”** software .
- ✓ **The “XML Tool”** was redesigned and improved in order to provide better functionality and facilitate better maintenance now as well as in future with other formats than DBF files.
- ✓ **Cyprus is willing to share the “XML Tool”**, with other countries to be used them, as a validation tool before the submission of their data to EFSA
- ✓ A cost /benefit analysis showed that in order to maintain the established Data Quality System
  - **Prioritization** of the activities on each of the 4 domains domain is needed
  - **More resources where quality is less are needed**



# Challenges

- **Data Quality Objectives( DQO):** The major challenge in this pilot project was the quantification of the **quality objectives** in each domain using Key performance Indicators (KPIs)
- **Residue definitions:** Demanding task was also the **Residue definitions** in the Matrix Tool for the Pesticides domain as well as the development of the enhancements for the validation of the data according to the Business rules for each domain .
- **Timeliness of requirements from EFSA -** As the Business rules and Residue definitions change every year, it is important to receive the relevant documents from EFSA early during the data collection period in order to have the time to import the latest rules into the LIMS.
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# Conclusions



- **Conclusions on the pilot and recommendations on future implementation**

**Apart from :**

- ❖ Good experience and coordination at National Level and
  - ❖ Automatic data management and electronic data transmission to EFSA with all the benefits mentioned earlier
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- Using Data Management Maturity Model, Cyprus increased the maturity level **from level 1** - the ad-hoc process where processes were poorly controlled and reactive, stepped up to level 3 with procedures in place mainly automated and is moving towards **level 4** with KPIs in place so that data quality can be monitored and quantified in the future.
  - However more **prioritization and money allocation** is needed where the maturity is lower such as the Zoonoses domain - therefore more financial resources are welcomed in order to increase the data quality system



# Thank you



- Cyprus was lucky to participate in this pilot project
  
- It gave Cyprus the opportunity to establish an Integrated Data Quality System both for
  - Data Coordination and
  - Data Quality Management
  
- For this I thank EFSA and all of you for your attention