



Farm level indicators for new topics in policy evaluation

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WAGENINGEN UR
For quality of life



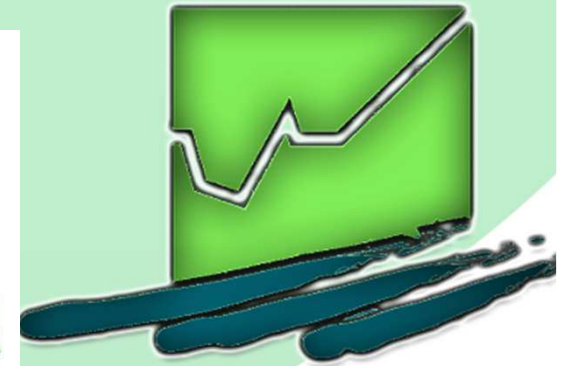
Background

- Challenges facing agriculture changing
- “Sustainable intensification”
- Emphasis on climate change
- In response - CAP has evolved
 - Income stability still important but also greening
- When policy changes – information needs change – data must keep up

Objective

- To establish a tested data infrastructure with up to date farm level indicators for the monitoring and evaluation of CAP and to contribute to a better targeting of CAP and other policy measures
- Use FADN to develop indicators that capture the multidimensional nature of the sustainability concept
 - Economic, social, environmental (innovation)

FLINT Project Partners



Advisory board



FLINT: SUSTAINABILITY CONCEPTS

Economic

Production of goods and services

Income Support
Market Stabilisation
Innovation

Environmental

Environmental management

Climate
Soil
Water
Biodiversity
Energy
Resource efficiency

Social

Contribution to rural dynamics

Decision making
Health and well-being
Social engagement
Education

Indicator frameworks

- A lot done – more to do
- A wide range of indicator frameworks exist:
 - Millennium development goals
 - FAO, OECD and Eurostat indicators of sustainable development
 - IRENA project interactions between agriculture and environment
 - AE footprint effectiveness of environmental schemes
- National initiatives
- To date no EU-wide harmonised farm-level indicators
- No agreement on (harmonised) data collection



Why FADN ?

- Interest is at the farm-level
- Need a data source – economic, social, environmental
- Indicators must be credible
 - Objective, verifiable and empirical data
- BUT where possible link to existing data

Where are we now ?

- Review of policy evaluation needs completed
- Review of pre-existing indicators completed
- “Wish-list” of indicators
 - Initially 587 – reduced to 214 – now 33 topics
- Stakeholder consultation conducted
- Full operationalization of indicators (data elements) finalised
- Preparation of data collection - FLINT Pilot network 2015 accounting year - 1000 farms in total. Piloting (the pilot).
Preparation of IT infrastructure



Environmental Sustainability Indicators

E1: Greening: Permanent grassland

E2: Greening: Existing/created areas of EFA

E3: Semi-natural farmland areas

E4: Pesticide usage (Pesticide risk score)

E5: Nutrient balance (N, P) (farm-gate balance)

E6: Soil organic matter in arable land

E7: Indirect energy usage

E8: Direct energy usage

E9: On-farm RE production

E10: Farm management to reduce nitrate leaching

E11: Farm management to reduce soil erosion

E12: Use of Legumes

E13: GHG emissions per product

E14: GHG emissions per ha

E15: Carbon sequestration in FADN

E 16: Water usage and storage

E 17: Irrigation practices

ECONOMIC/INNOVATIVE

El 1: Innovation (CIS)

El 2: Producing under a label or brand

El 3: Types of market outlet

El 4: Past/Future duration in farming (Survival propensity)

El 5: Efficiency field parcel (LPIS)

El 6: Modernisation of the farm Investment

El 7: Insurance (events outside control of farm) - also to include personal (disability) & farm (building structure) insurance

El 8: Share of output under contract with fixed price delivery contracts

El 9: Risk exposure (non-agricultural activities)

Social Sustainability

S1: Advisory services provided to the farm

S2: Education and training

S3: Ownership/management

S4: Social engagement/participation

S5: Employment and working conditions

S6: Quality of life/Decision Making

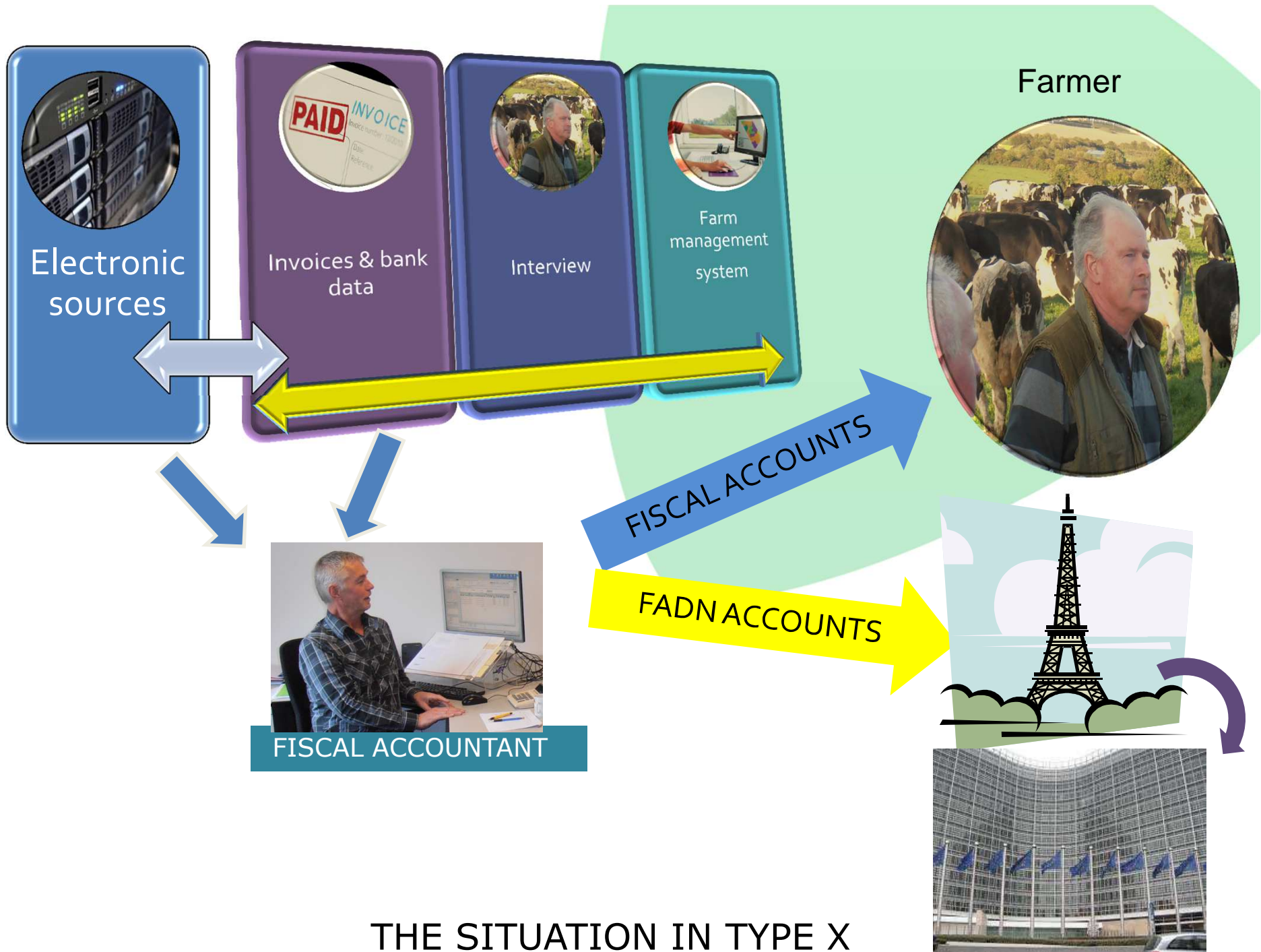
S7: Social diversification: improving the image of farmers/agriculture in local communities

Challenges for EU Sustainability Indicator Development

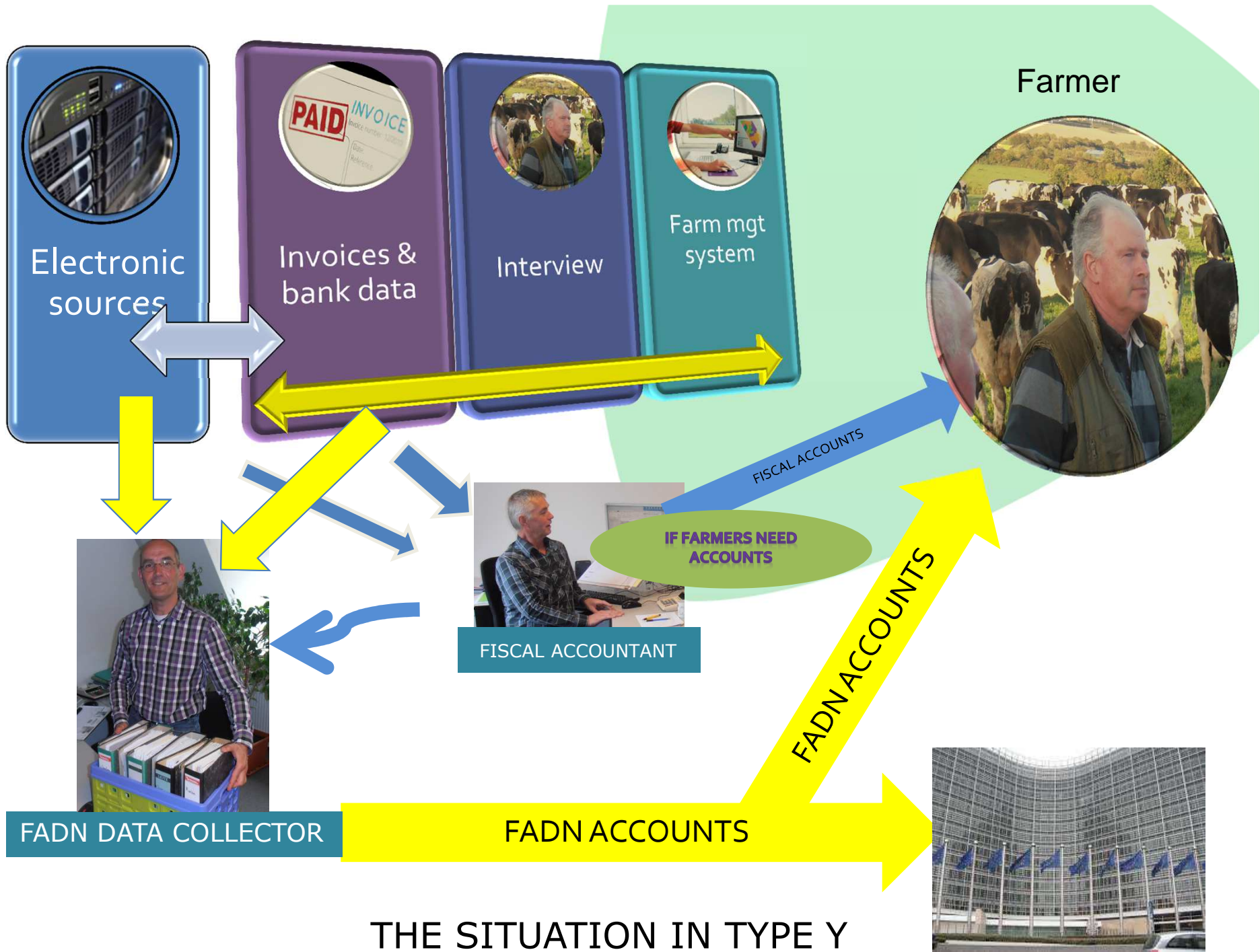
- Heterogeneity - existing data, farm systems, cultural differences
- “Tricky indicators” - largely environmental
- 2021: concentrate on measures where impact can be readily assessed
 - targeting of future funding for max impact
 - soil = critical measure (EU commission)
- Composite Indicators???? - complexity
- Linking with other datasets
 - LPIS / marketing and quality labelling info
- FLINT Pilot network
 - 2015 accounting year - 65 Irish farms in total: 40 Dairy + 25 Beef
 - Pilot (the pilot) in `May 2015: 2-3 farms from each partner country

Data collection - Different types of FADN

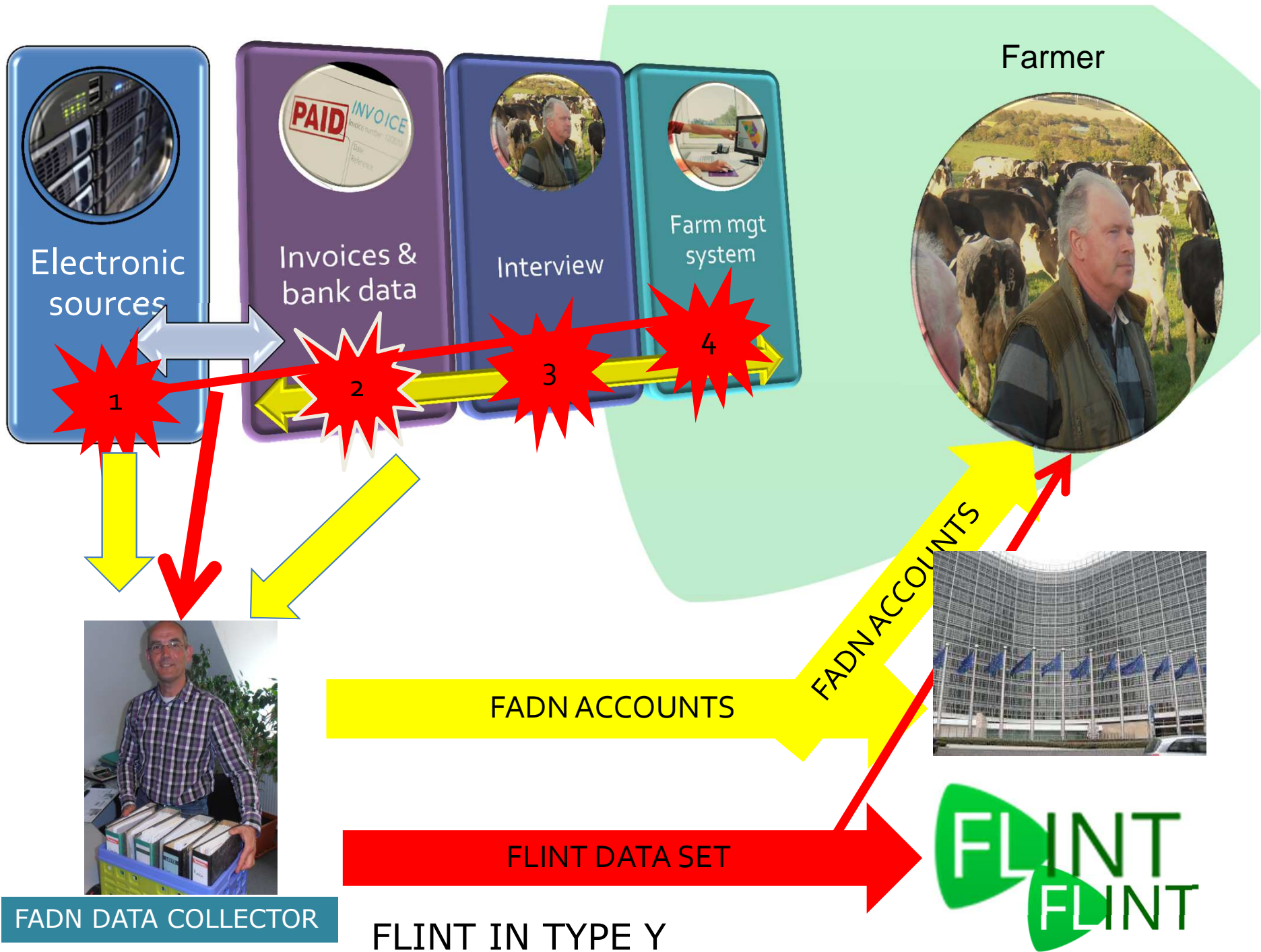
- No standardised approach
- Countries with Type X
 - Data provided by (fiscal) accountants
 - Re-use of accounting data for FADN purposes
 - Relatively cheap
 - More difficult to make changes
- Countries with Type Y
 - FADN Data collection by FADN liaison agency (or delegated to other)
 - Dedicated FADN data collection
 - Relatively expensive way to collect FADN data
 - More flexible to make changes in data collection



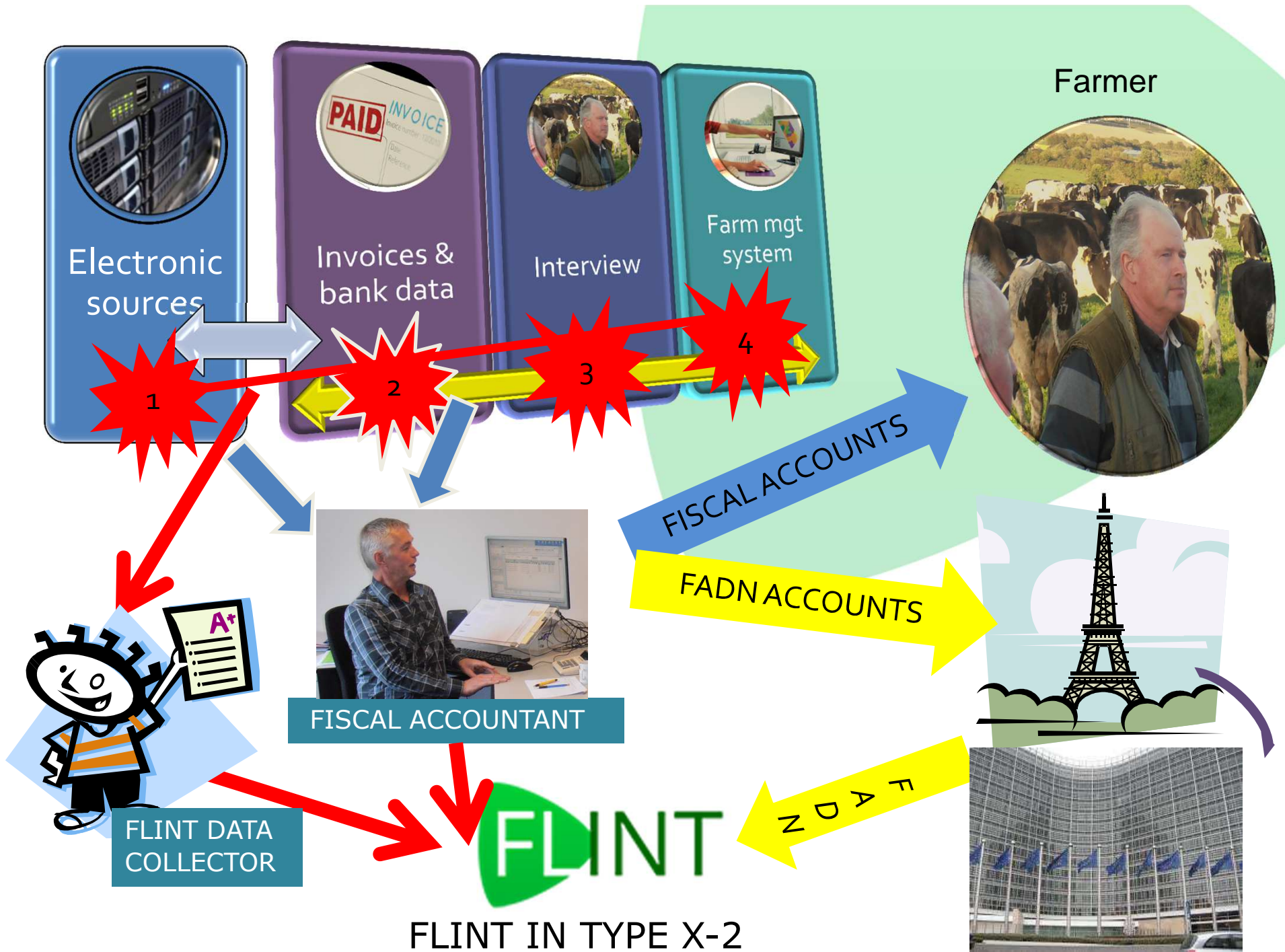
THE SITUATION IN TYPE X



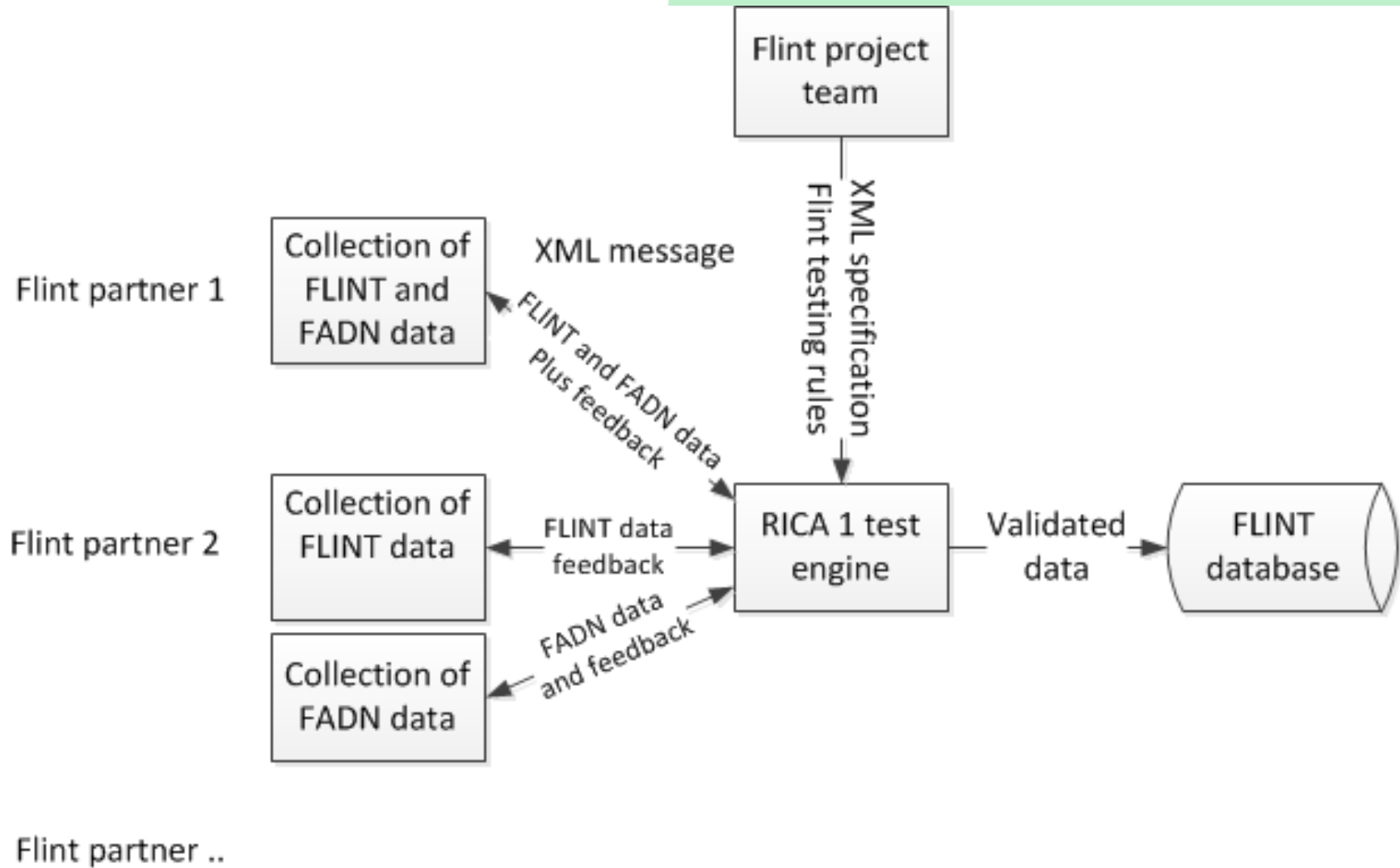
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Data flows Partners – EU level



Planning next steps

- Finish farm recruitment
- Finalisation preparation data collection
- Data collection in connection to bookkeeping year 2015 (for most project partners)
- Preparation of data analysis to show added value of extended FLINT / FADN dataset for policy analysis

Questions for you

- Your experience with collecting FLINT indicators
- Methods and sources



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