



EU DATA COLLECTION FRAMEWORK EXPERIENCE

Estanis Mugerza

emugerza@azti.es

Outline

- EU Data Collection Framework Regulation (EU, 2017)
- DCF Strengths
- Challenges
- Summary

**What do we need to know to
understand fishery pressures and
impacts????**

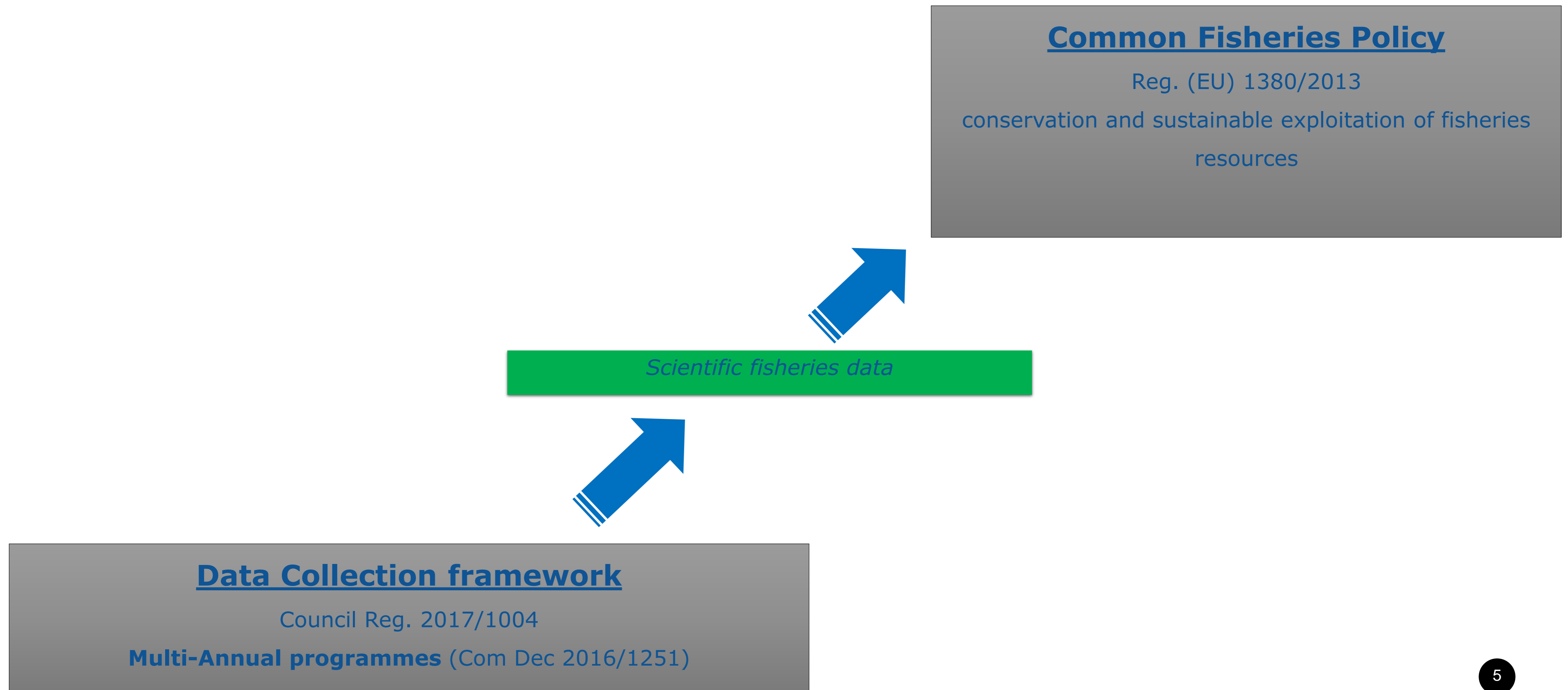
- What fisheries are, and how they operate
- How much fishing take place-When and Where
- How much is caught, landed and discarded
- Structure of the catches-species /age composition

Respond to needs of end users:

-Commission, National Governments, Advisory Councils; ICES EG, RFMOs

Potentially wide scope!

EU fisheries management relies on data collected, managed and supplied by EU countries under the Data Collection Framework





D1 - Biodiversity is maintained



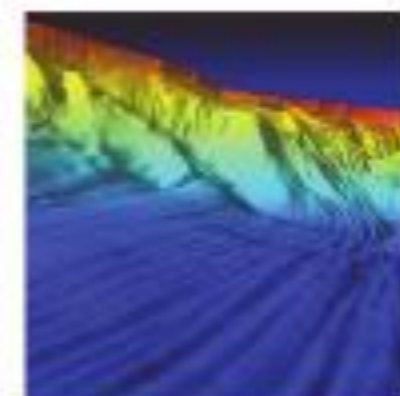
D3 - The population of commercial fish species is healthy



D4 - Elements of food webs ensure long-term abundance and reproduction



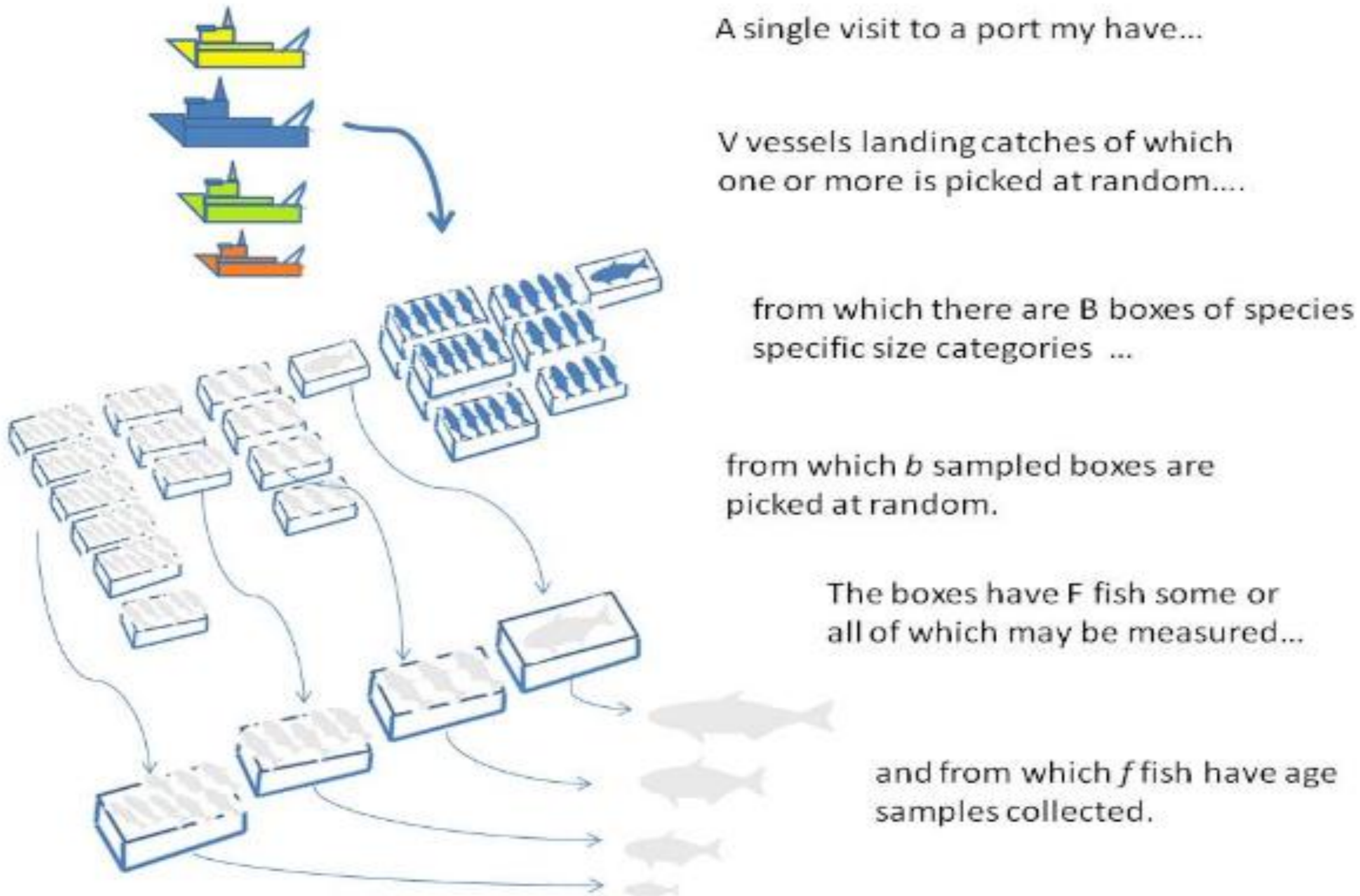
D6 - The sea floor integrity ensures functioning of the ecosystem



Strength of DCF

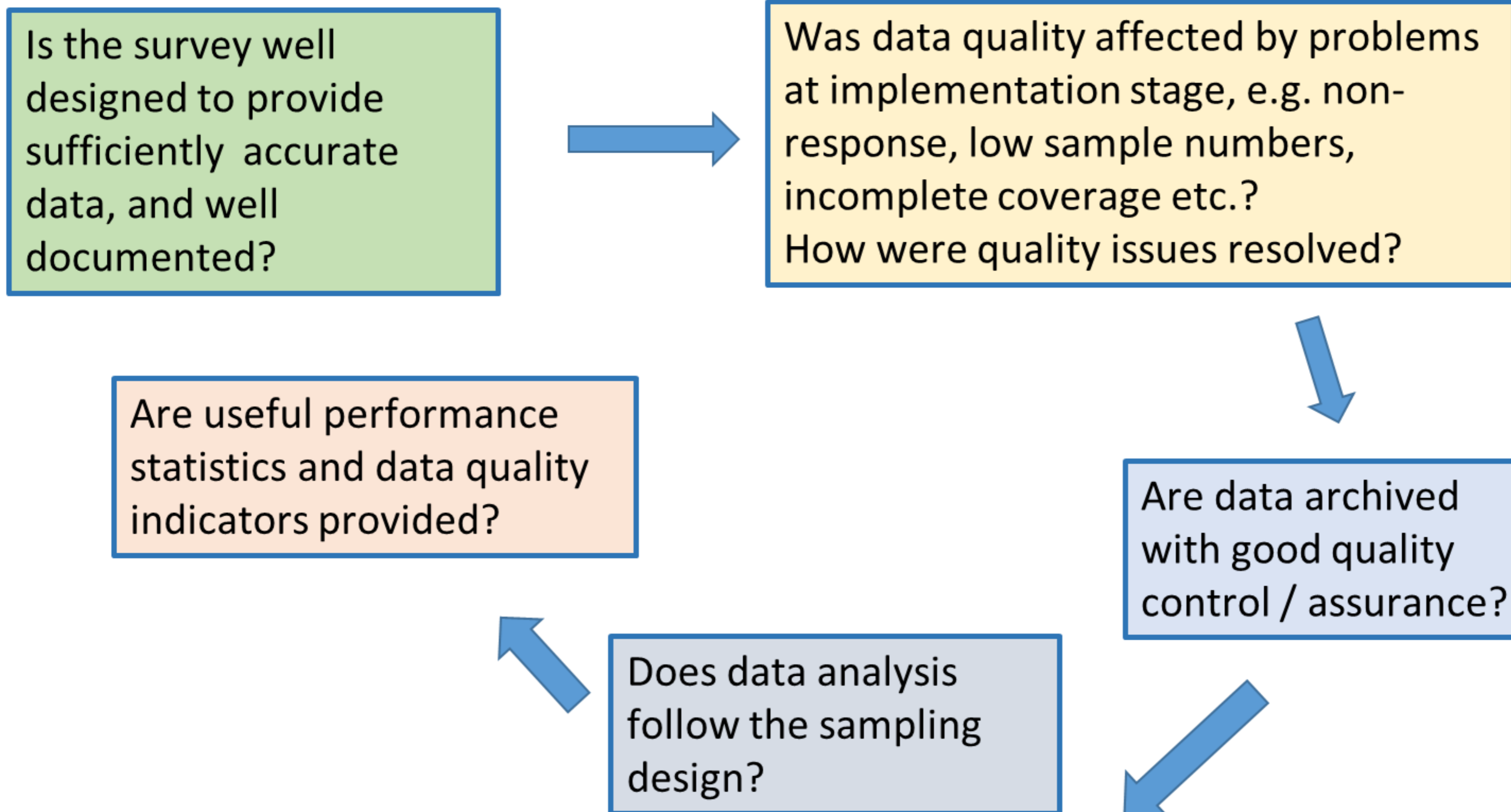
- Established since 2002
- Common Framework
- Harmonisation in data collection
- Co-ordination and co-operation by MS
- Quality control and Transparency
- Regional approach

Port sampling



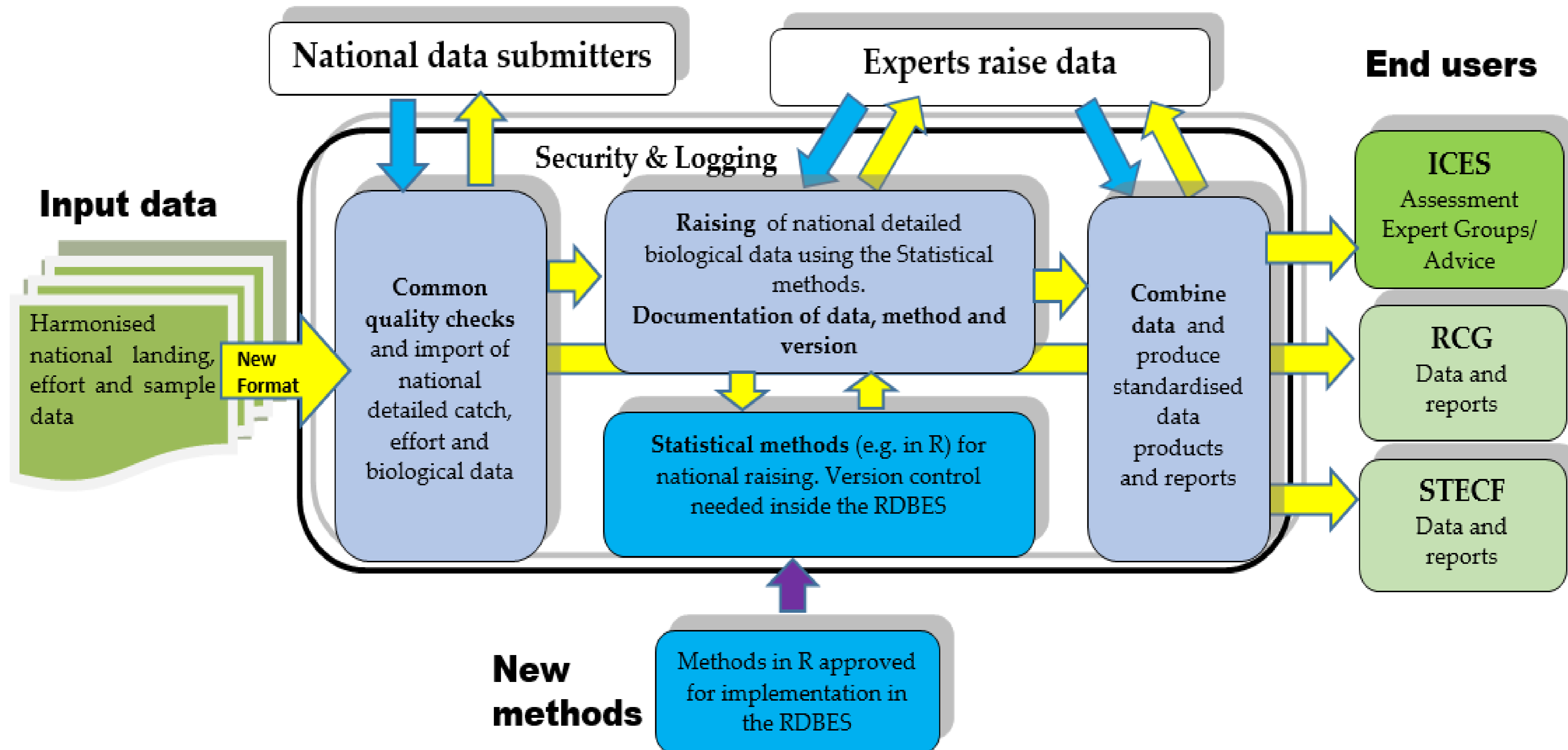
Data Quality and Transparency

How good are our survey data? What information do we give the funders (EU) and end users?



Data Quality and Transparency

Data flow Regional DataBase and Estimation System



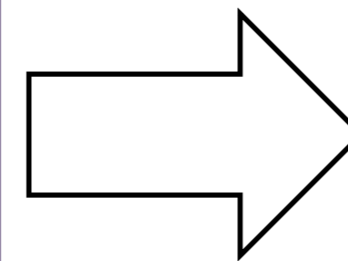
Regionalization

CFP:  **Regional** fisheries management

EU-MAP:  Strengthened **regional** cooperation in data collection

Past:

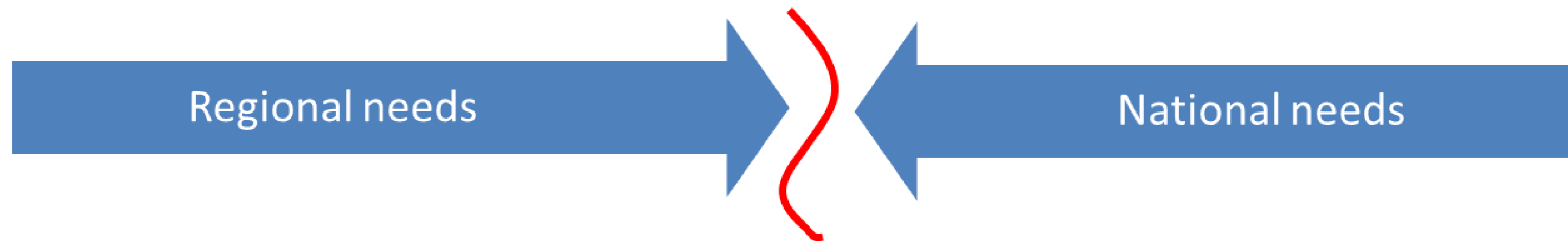
- Data collected at a regional scale are a collection of diverse national sampling schemes.



Future:

- Regional sampling plans are designed to provide data on the activities of national fisheries fishing on shared stocks in regional seas.

Conflicts between National and Regional needs



- ✓ There is a need for a trade-off between regional and national needs
- ✓ There will not be a single optimized regional sampling programme, but a set of scenarios which need to be evaluated
(simulations, management strategy evaluation...)

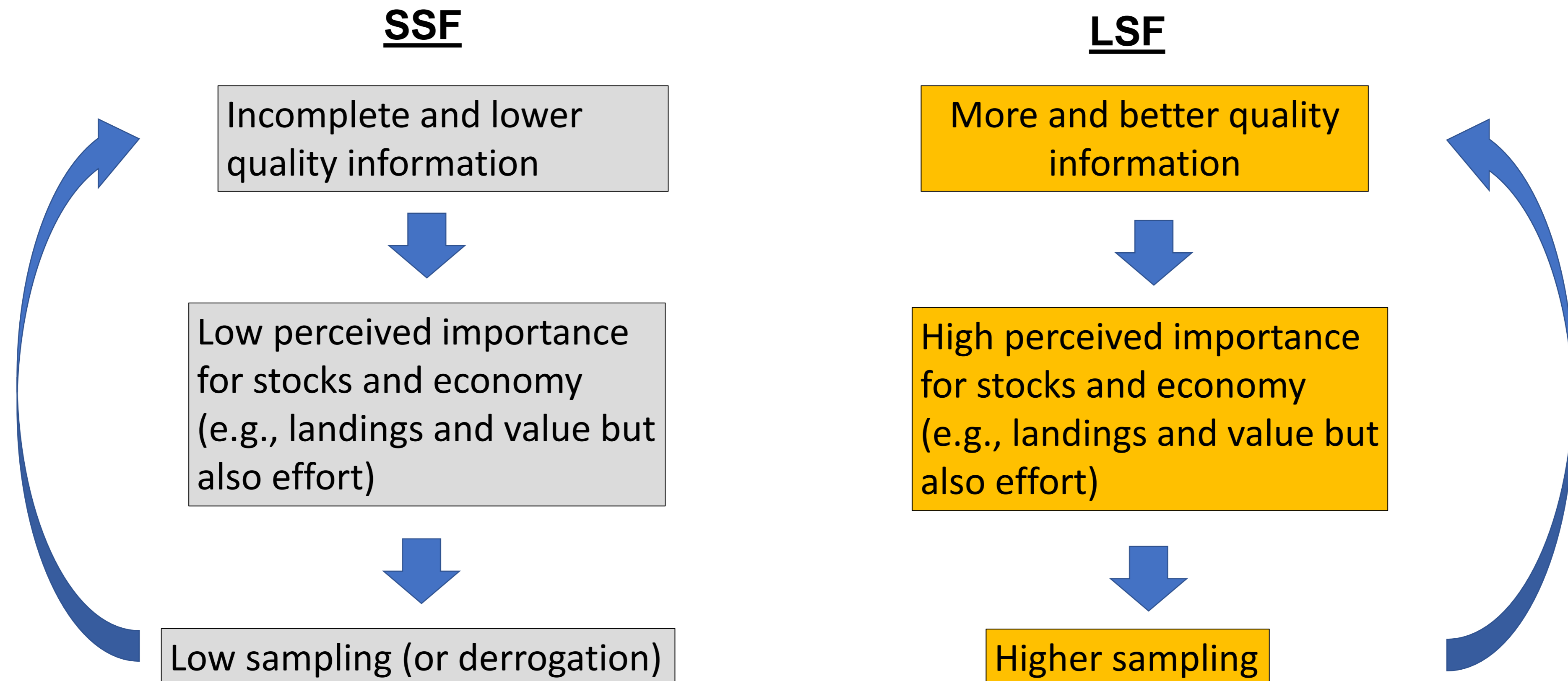


Challenges!!



SSF

Small-scale fleets important in nearly all countries (no particular north/south distinction) **but trapped in a “vicious” cycle**



Small Scale Fisheries (Case studies)

Main Outputs from the case studies:

- The **need** and importance to **calculate good quality estimates** of the **SSF fishing activity variables** (effort, catches etc.)
- **SSF have to be monitored differently** by a census or a sampling approach adapted to their specific features.
- Transversal (logbook, sale notes) data coming from **the current CR is not well adapted or insufficient to the SSF.**
 - Missing catches
 - Low quality effort
 - Low quality on
- Lack or **scarce information of other biological variables data** (length, discards, PETS BYCATCH...)
- **Considerable differences** between official and scientific estimates (i.e. 2-40% catch and effort depending on the species, region...)
- **Difficulties** in the **implementation** of surveys

High Uncertainty!!!

MRF



Platforms

- Shore
- Private boat
- Charter boat

Gears

- Angling
- Gathering
- Spearfishing
- Nets & traps

Target

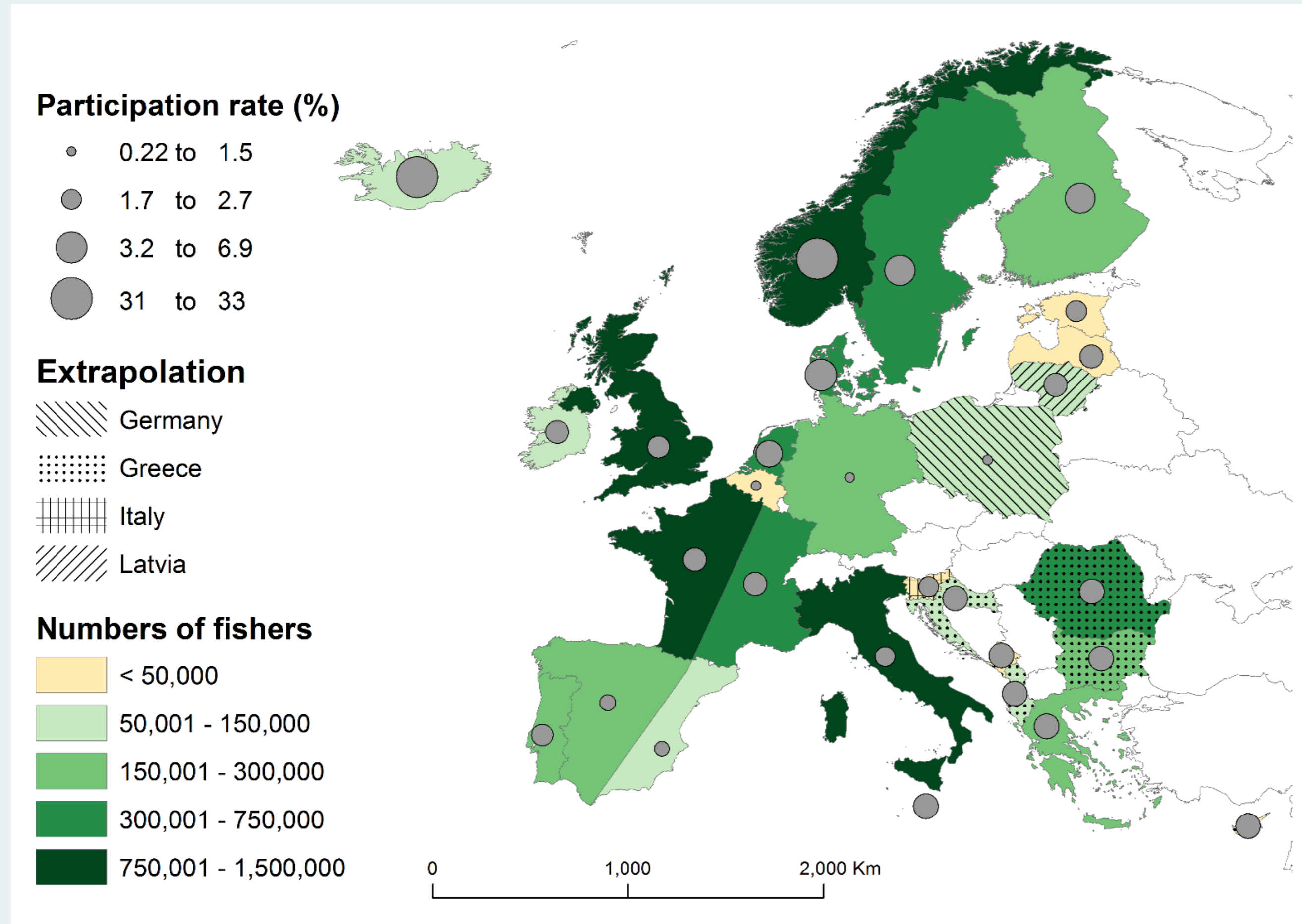
- Fish
- Crustaceans
- Molluscs
- Algae

Participant

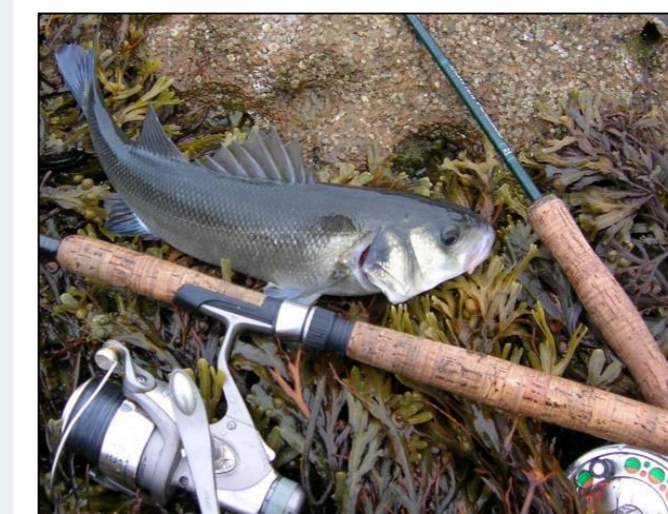
- Activity
- Motivation
- Organisation
- Impact

Difficult to monitor, assess, manage & enforce

Important activity in Europe



Category	Total
Numbers (millions)	8.67
Participation (%)	1.60
Activity (million days)	77.6
Days per angler	9.04
Expenditure (billion €)	5.89
Spend per angler (€)	679
Economic impact (billion €)	10.5
Number of FTEs (thousands)	97.2



Impacts:

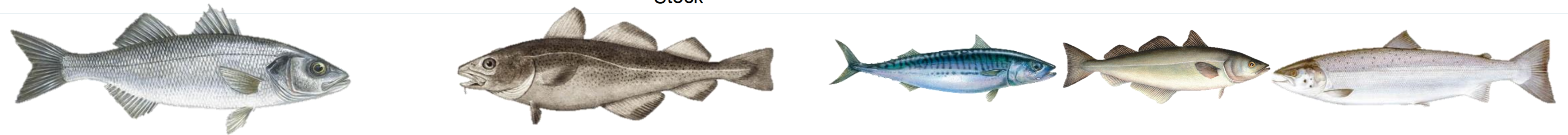
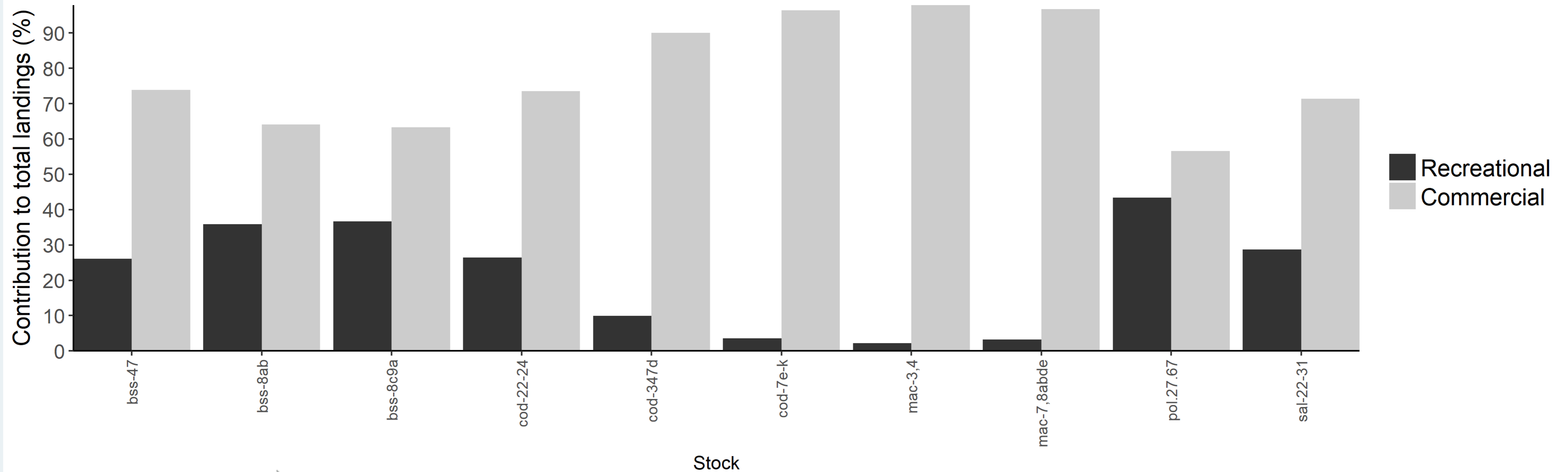
- Stock: 2-43% removals
- Live bait (disease & NNS)
- Lead (sinker loss)

Hyder et al. (2018) Fish & Fisheries 19: 225-243.

Radford et al. (2018) PLOS One 13: e0201666.

Lewin et al. (2019) Reviews in Fisheries Science & Aquaculture 27: 287-330

Recreational vs commercial removals



Recreational removals must be included in assessment

Radford et al. (2018). The impact of marine recreational fishing on key fish stocks in European waters. PLoS ONE

Summarizing

- Importance of a general framework
- Policy makers, managers, fishers and scientist should be involved in setting goals and defining data needs
- Data Quality Framework and Transparency is essential
- Small-Scale and Recreational Fisheries require careful consideration

Obrigado!!
Thank you for your attention!!



AZTI-Tecnalia

Txatxarramendi ugartea z/g.

48395 SUKARRIETA (Spain)