Horizon 2020 Policy Support Facility

POLICY RECOMMENDATIONS

EXCHANGE OF PRACTICE

ON-DEMAND SUPPORT

PEER LEARNING

MLE on 'National Strategies and Roadmaps for Intl. Coop. in R&I'

Assessing Progress

Country Visit France
Paris, 2019-06-03

Purpose

- Check how the internationalisation of the R&I system develops
- Assess how international activity contributes to the overall internationalisation objectives
- Evaluation to assess
  - status quo of the internationalisation of the system (ex-ante [e.g. before the strategy] and ex-post [after the termination of the strategy])
  - embedding of the internationalisation strategy in the overall national R&I strategy (continuous)
  - Evaluating the adequacy, relevance, outputs, outcomes (results) and impacts of the internationalisation measures (and how they contribute to the internationalisation objectives)

Attribution Challenge

- There are many R&I internationalisation indicators, but do they indicate properties and the ToC of the R&I internationalisation strategy?
    - Examples:
    - International co-publications – 'natural' growth, also depending on the openness of partners
    - Export quotas of the economy – depending on a country's market size and the competitiveness of companies (often not targeted by int. R&I strategies)

- Differentiate between R&I internationalisation strategy and R&I internationalisation programmes/instruments/measures

Indicator issues

- No one-size-fits all indicators (e.g. need of different indicators for different considerations)

- Quantitative and qualitative assessments – we need both (+ relational assessment – e.g. related to number of R&D personnel)

- Metrics need to be universal, precise, unambiguous and relevant

- Limited scope of Frascati and Oslo Manual

- Benchmarks are unknown (who is the best in the class? Relational benchmarking recommended)

Data issues

- Uneven data and limited comparability (e.g. depending on availability of RIS; non-harmonised intellectual capital sheets of R&D organisations)

- Often surveys due to lacking secondary data (could be within R&D surveys of national statistics office)

- European pilot surveys should be encouraged

- Dependency from commercial providers (Scopus etc.)

- Internat. unique identifiers improving (e.g. ORCID)

- Repeated statistical surveys for monitoring needed

Indicators related to embedding of the R&I internationalisation strategy

- How many of the national programmes/ instruments/tools have an R&I internationalisation component (or are fit and open for it in general) (<u>mainstreaming</u>)?

- How much budget is allocated for R&I internationalisation in these programmes …?

- What is the scope and size of <u>targeted</u> (uni-, bi- and multi-lateral) R&I internationalisation measures?

- Number of participation, volume and share in int. R&I schemes (JPIs, int. ERA-NETs, RIs ….)

Indicators at system's level

- Embedding indicators (and those related to main programmes etc.)(see slide before)

- Financial indicators (R&D budget inflow/outflow; share of high-tech exports)

- Int. representation related indicators (R&D offices abroad; staff in intern. R&I organisations; participation in regulatory or standards setting)

- Scientometrics (differentiated by themes, countries, regions; EPO and USTPO patents)

- Mobility patterns (share of foreign academic staff; share of intern. Graduates)

- Project related indicators (juste retour from FPs)

Indicators at the level of organisations

- Financial indicators (e.g. export quota; share of foreign owners; int. licensing)
- Scientometrics (co-publications & impacts; patents)
- International rankings
- PR related indicators (google hits)
- Personnel related indicators (int. appointments; share of foreign personnel)
- Mobility indicators (guest professors; foreign students)
- Offshoring and int. joint ventures
- Project related indicators (participations, coordinations, raised int. third party financing)

Indicators at the level of individuals

- Publication related indicators (quantity and quality)
- Patent related indicators
- Scientific and non-scientific speeches (e.g. active conference attendance)
- Participation in international bodies (e.g. advisory groups of the EC; editorial boards …)
- Mobility related indicators (e.g. intern. research stays; intern. appointments)
- Degrees obtained abroad
- Number of cotutelle de thése
- Project related indicators (e.g. participation in FPs; coordination of FP projects; raised intern. funding)

Open reflection and discussion

Inspiring examples and lessons learnt from the participating countries

Which indicators are used and how are benchmarks set?

Examples of monitoring practices