ERA-LEARN 2020 Guide for impact assessment of P2Ps

https://www.era-learn.eu/monitoring-and-assessment/Monitoring-and-impact-assessment-of-networks

Effie Amanatidou, University of Manchester

The ERA-LEARN 2020 Guide for P2P IA

- Step 1: Defining the intervention logic of the P2P
- Step 2: Linking the challenges and objectives
- Step 3: What are the inputs and activities that will achieve the objectives
- Step 4: What are the outputs of the programme and project activities?
- Step 5: What are intermediate and global impacts?
- Step 6: Setting up a monitoring system of inputs, outputs and outcomes
- Step 7: Defining output, outcome and impact indicators
- Step 8: Data collection and analysis methods
- Step 9: From planning to actually conducting a P2P evaluation

But before we start…

The clearer the intended purposes of an evaluation are outlined in advance, the more useful an evaluation can be.

1. ***Who is performing*** *the evaluation (i.e. external evaluators, managing authorities, or funding agencies) and how will transparency be ensured?*
2. *What are the* ***objectives*** *of the evaluation?*
3. ***At what times*** *must different evaluation outputs be finalized (reports, meetings, etc.)?*
4. *What will be* ***the results/outputs*** *of the evaluation?*
5. *How will the evaluation outputs be* ***used, published and communicated*** *to decision-makers?*

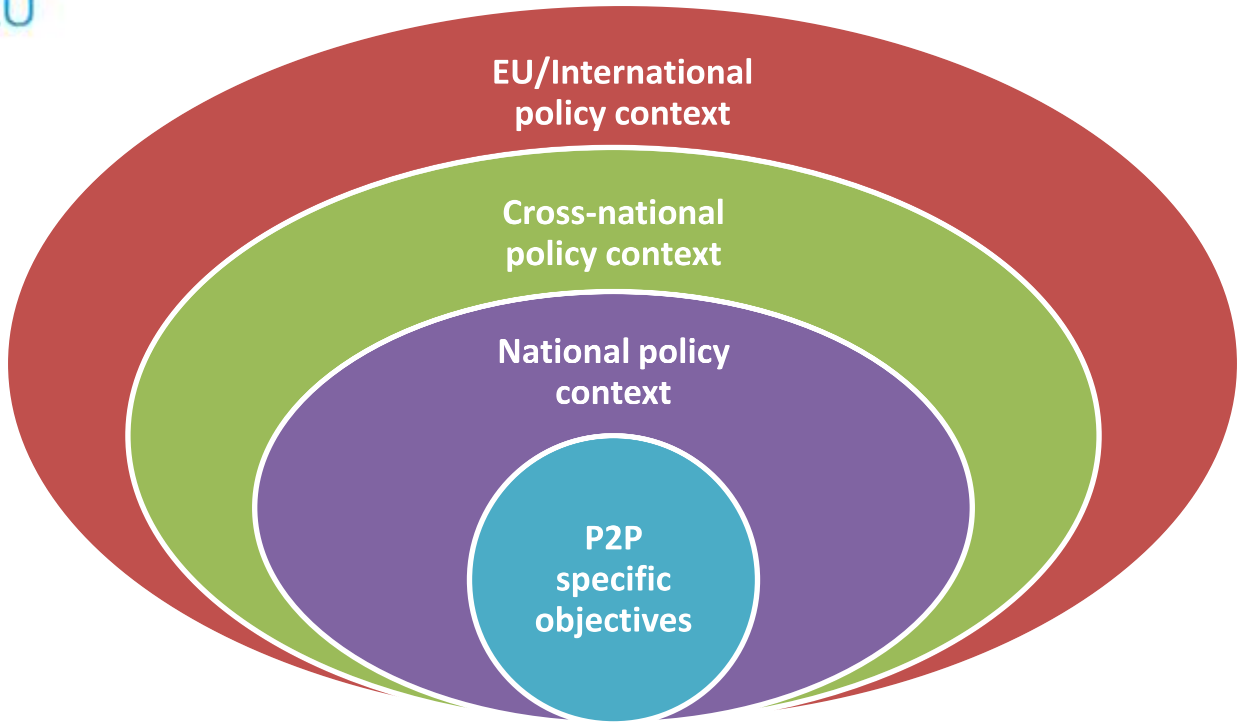
But before we start…

- *The **more stakeholders are involved** in the evaluation, the mor**e useful evaluations** are and vice versa;*
- ***Dissemination** of the results **widens the usefulness** of an evaluation - utilisation and dissemination plans should be part of the evaluation design;*
- *We need to **understand how decisions and activities occur** in a diffused decision-making model such as a P2P network;*
- *We need to recognise that networks evolve through stages of development and that their **shape and structure are important** influences on their development as well as delivery of impacts;*
- *We need to acknowledge that **it takes time** to organize networks effectively and show results - however, it is possible to see progress*

Step 1: Defining the intervention logic

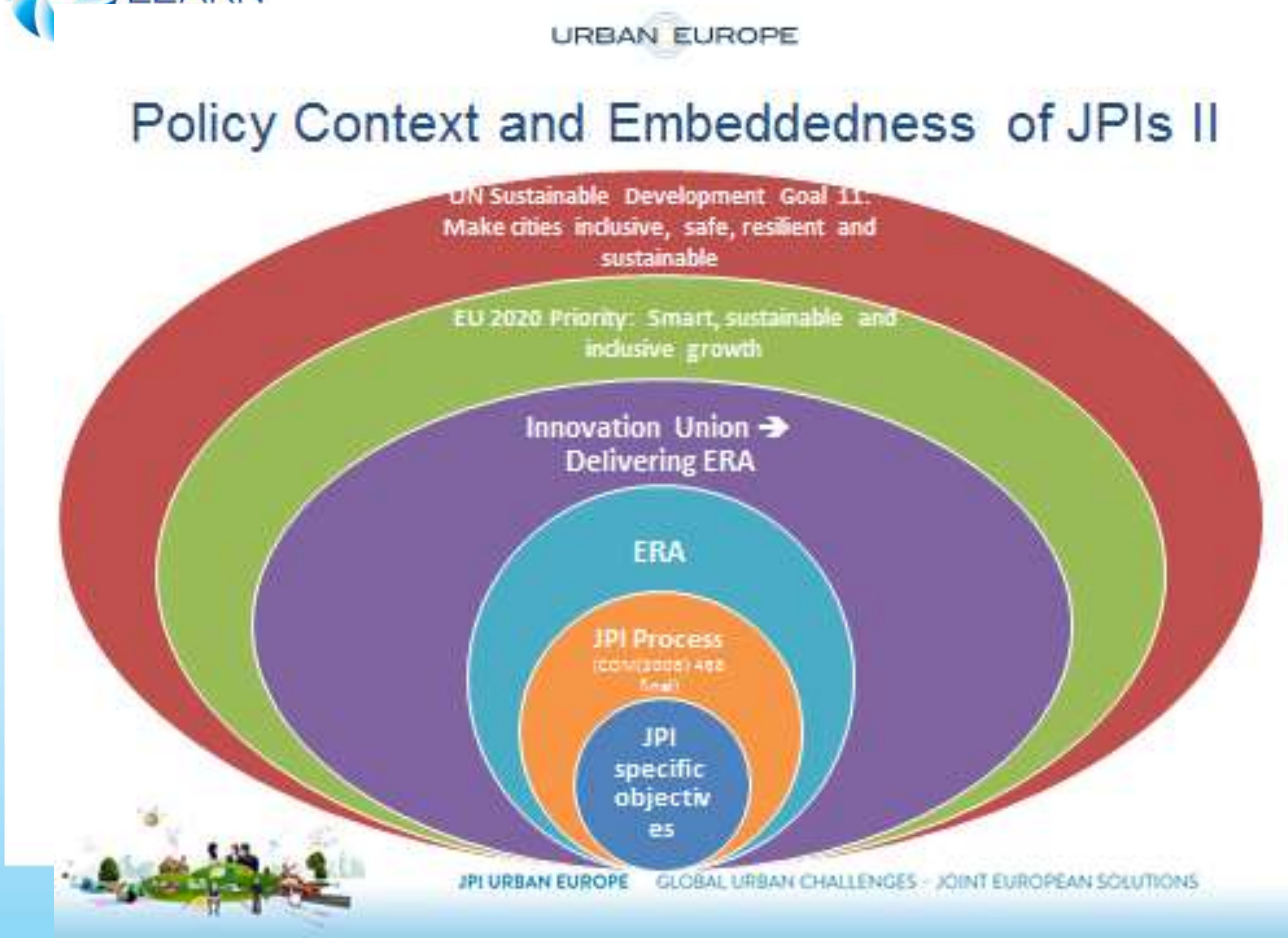
- *The **clearer and more verifiable the objectives** of a programme, the more useful its evaluation;*
- *We need to consider that networks have a "**chain of impact**" that includes*
  - *the network's impact on its members (network level)*
  - *the members' impacts on their local environments, (national level)*
  - *the members' combined impact on their broader environment (trans-national)*
- *Evaluations designed to examine impact must **understand the relationship** between these three levels and be clear about where their focus lies.*

Step 2: Linking the challenges and objectives



- ***Why*** *was the P2P established? Which challenge, problem, or situation does it aim to address?*
- *What are the main* ***assumptions*** *about the way the specific challenge, problem, or situation should be addressed?*
- *What are the short-term, operational* ***objectives****, the medium-term, intermediate objectives and longer-term, global objectives of the specific P2P?*

Step 2: Example



Step 2: Example

Figure 1: Objectives Hierarchy of MNT ERA-NET (http://www.mnt-era.net/MNT/)

•Smart, sustainable, inclusive growth •Effective national research systems; Optimal TN co-operation &competition; Open labour market for researchers; Gender equality &mainstr.; Dig. ERA	Global objectives (Europe 2020 & ERA related)
•excellent science, industrial leadership and tackling societal challenges •support the coordination of non-Community research programmes	Intermediate Objectives (ERA-NET Scheme; H2020)
•Best possible integration of regional and national MNT strategies with European needs and visions, •ensure complementarities with other funding instruments	Specific objectives (Specific network - here MNT ERA-NET)
•support collaborative research projects in micro and nanotechnologies encouraging especially the participation of SMEs and newcomers in small consortia	Operational objectives (calls' objectives)

Step 2: Linking the challenges and objectives

Objectives need to be SMART:

- Specific: should be precise and concrete enough to avoid being open to varying interpretation.
- Measurable: Objectives should refer to a desired future state (as compared to the baseline situation) so that it is possible at some later date to see whether the objective has been achieved or not.
- Accepted: If objectives and target levels are intended to influence behaviour, they must be accepted, understood and interpreted similarly by all of those who are expected to take responsibility for achieving them.
- Realistic: Objectives and target levels should be ambitious but they should also be potentially achievable so that those responsible see them as meaningful.
- Time-dependent: Objectives and target levels remain vague if they are not related to a fixed date or time period.

Step 3: What are the inputs and activities that will achieve the objectives

Inputs

- Financial, human resources, skills, infrastructures, costs of beneficiaries and end-users, but also
- network structures and processes

Activities

- Implementing transnational calls; additional joint calls
- Dissemination / Up-Take of research results
- Foresight and common vision building
- Strategic Research Agenda / Implementation Plan
- Mapping national/trans-national activities
- Knowledge sharing amongst researchers, Mobility and training
- Research infrastructures; Widening participation; Internationalisation
- Monitoring and evaluation/assessment activities

Step 3: What are the inputs and activities that will achieve the objectives

- *Which **activities** are expected to help achieve the objectives set (research collaboration, dissemination of results, training, mobility, sharing of infrastructure, network expansion, strategy building, monitoring and evaluation of the P2P, etc.)?*
- *What are the **key inputs** that these activities require (in terms of money, time, human resources, and capacities)?*
- *What are the **governance and management structures** and processes that will govern the implementation of these activities (decision making processes, management processes, internal/external reporting processes, etc.)?*

Step 4 & 5: What are the output, intermediate and global impacts?

Outputs *are items directly produced by certain activities (e.g. workshop reports, Strategic Research and Innovation Agendas, databases of programmes, etc.) and are typically produced within the short-term.*

Outcomes *can be defined as the likely or achieved short-term and medium-term effects of an intervention's outputs.*

Impacts *can be defined as positive and negative, primary and secondary long-term effects produced by an intervention, directly or indirectly, intended or unintended.*

Outputs

- SR(I)As
- Training
- Databases
- Etc.

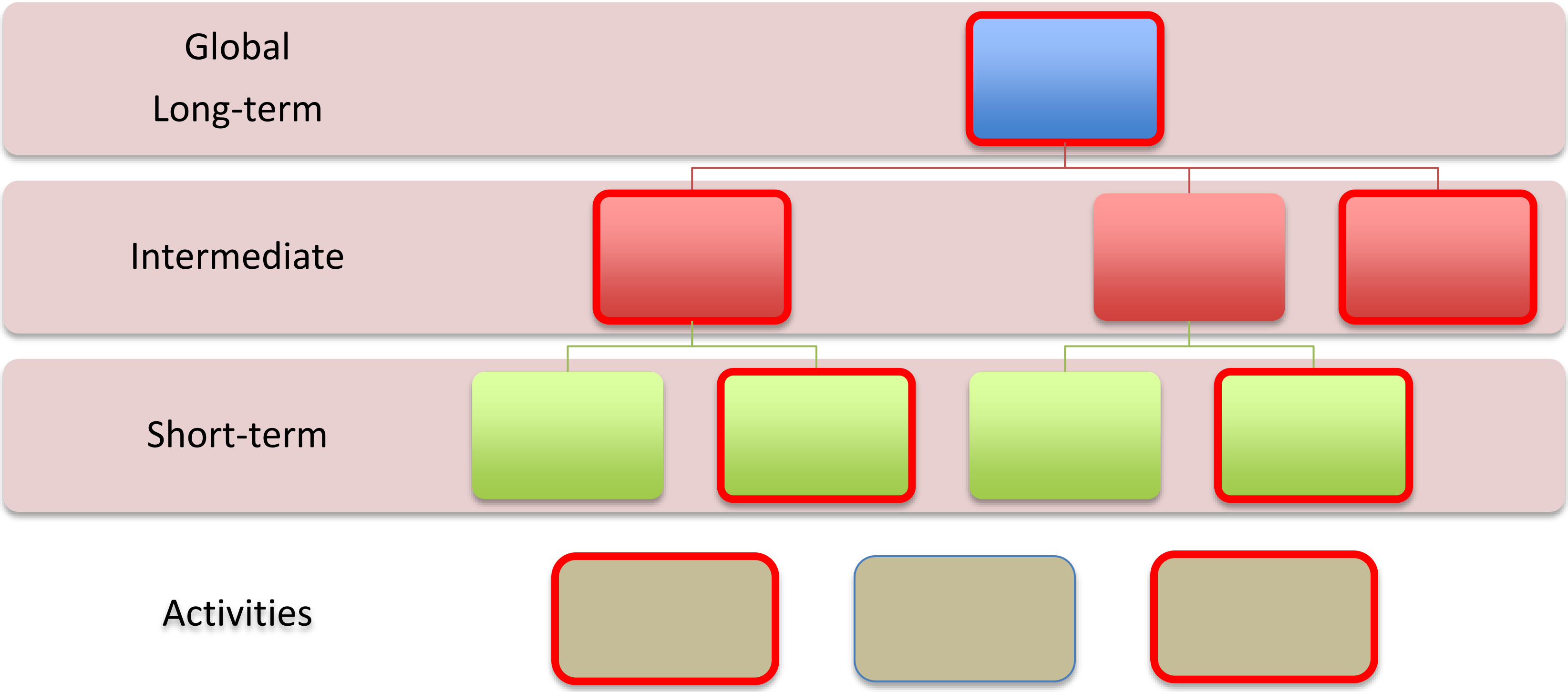
Outcomes (intermediate impacts)

- S&T impacts
- Organisational
- Capacity building
- Structural impacts
- Economic impacts
- Symbolic
- Etc.

Impacts (global, long-term)

- Economic impacts
- Societal impacts
- Innovation impacts
- Policy/conceptual impacts
- Organisational
- Etc.

Objectives' / Impacts' Hierarchy



Types and timing of impacts

	Short-term	Intermediate	Long-term
Societal	Researchers' posts created	Change of consumer practices	Solutions for specific challenge
Economic	More national resources in as area	A national programme	Increased R&D spending in area
R&I	New knowledge Patents, prototypes	Commercialisation of invention	Innovation upscaling
Policy	More attention to the field addressed	A national strategy in the field	Influence of EU/world strategies
Structural	Inter-ministerial bodies for coord	More coordinated national p-making	Creation of inter' al structure
Behavioural	Change of user behaviour	More org. collaborations	International coop. strategies
Symbolic	Improved reputation	Increased track record in projects	Increased international collab

Step 4 & 5: What are the output, intermediate and global impacts?

- *What are the **key outputs** of the activity examined? How are the outputs likely to **influence direct beneficiaries** in the **short-term** time? How are they to **affect indirect beneficiaries**? How are they to affect a **broader set of stakeholders** in the medium to long-term?*
- *How are the various **outcomes** of the P2P likely to **affect the wider environment** in which the P2P is situated, particularly in the **long-term**? (consider all levels: national, cross-national and European/international).*
- *What is the **correspondence** between outputs, intermediate and global impacts with the Objectives' Hierarchy?*

Step 6: Setting up a monitoring system of inputs, outputs and outcomes

- Monitoring is a **continuous and systematic process** of data collection about an intervention.
- Ensure that the monitoring system works **from the outset** and that data will be **collected reliably and smoothly** from the appropriate sources.
- Many monitoring indicators can only be created and developed when the activity is implemented, because you need the **cooperation and agreement of stakeholders** in developing them and in collecting the relevant information.
- Consider carefully and **provide for the cost** of setting up and maintaining a monitoring system over the time life of an intervention. This cost may not be negligible; either to the administrators who need to collect the required information and data or to those expected to deliver it.

Step 6: Setting up a monitoring system of inputs, outputs and outcomes

- *How much will the setting up of the monitoring system* ***cost and what kind of resources*** *will be needed to run it? Are these resources (human, financial, time)* ***in place*** *and can they be ensured?*
- ***What*** *data needs to be collected and how is it to be used (for inputs, outputs as well as outcomes)?*
- ***When*** *should the relevant data be collected (during the monitoring phase, ex-post, how often, etc.)?*
- ***By whom*** *should the required data be collected (e.g. P2P management team, project team, a centralised P2P systems)? Is the required capacity both in time and skills resources available?*
- *Can the* ***process be aligned*** *with the monitoring/reviewing process of the P2P partners? Can the process be aligned with the reporting schedule for the evaluation/impact assessment?*

Step 6: Setting up a monitoring system of inputs, outputs and outcomes

- ***How** will required data be gathered and stored? **Where** will the data be stored? Can this be aligned with other monitoring systems?*
- *What are the necessary **data protection protocols** to ensure the system will meet security and data sharing requirements?*
- *How and by whom will the data be **verified** to ensure it is accurate and consistent with the relevant requirements? Are the required skills and resources available for this task?*
- *What are **suitable methods and instruments** for collecting, storing and processing follow-up data?*

Step 7: Defining output, outcome and impact indicators

- Before proposing **new data requirements**, you should carefully assess to what extent the **existing data reflect the objectives set** and whether the missing key data can be collected via **existing monitoring structures**.
- It is essential to understand that **indicators** are subject to a number of **limitations**. They cannot measure all aspects of the reality while indicators that are defined ex-ante can only capture intended impacts. Societal impacts appear especially difficult to measure but **don't fall into the trap that 'Impact is only what we can measure'!**
- It may be the case that the most accurate indicators are extremely **resource intensive** to collect; thus a balance will have to be struck between indicator suitability and ease of collection.
- **Qualitative indicators** can be highly illustrative of the outputs and impacts of activities but are more difficult to aggregate and to subject to quantitative analyses.
- The **appropriateness** of indicators is **case and context dependent**.

Step 7: Defining output, outcome and impact indicators

All indicators should be '**RACER**', i.e.:

- Relevant to the objectives and should measure the right thing;
- Accepted (e.g. by staff, stakeholders who hold responsibility)
- Credible for non-experts, unambiguous and easy to interpret.
- Easy to monitor (e.g. data collection should be possible at low cost).
- Robust against manipulation (e.g. If the target is to reduce administrative burdens to businesses, the burdens might not be reduced, but just shifted from businesses to public administration).

- Examples of indicators from several JPIs (JPICH, FACCE-JPI, MYBL, JPND)
- Examples of indicators at project and network level in the Guide

https://www.era-learn.eu/monitoring-and-assessment/Monitoring-and-impact-assessment-of-networks

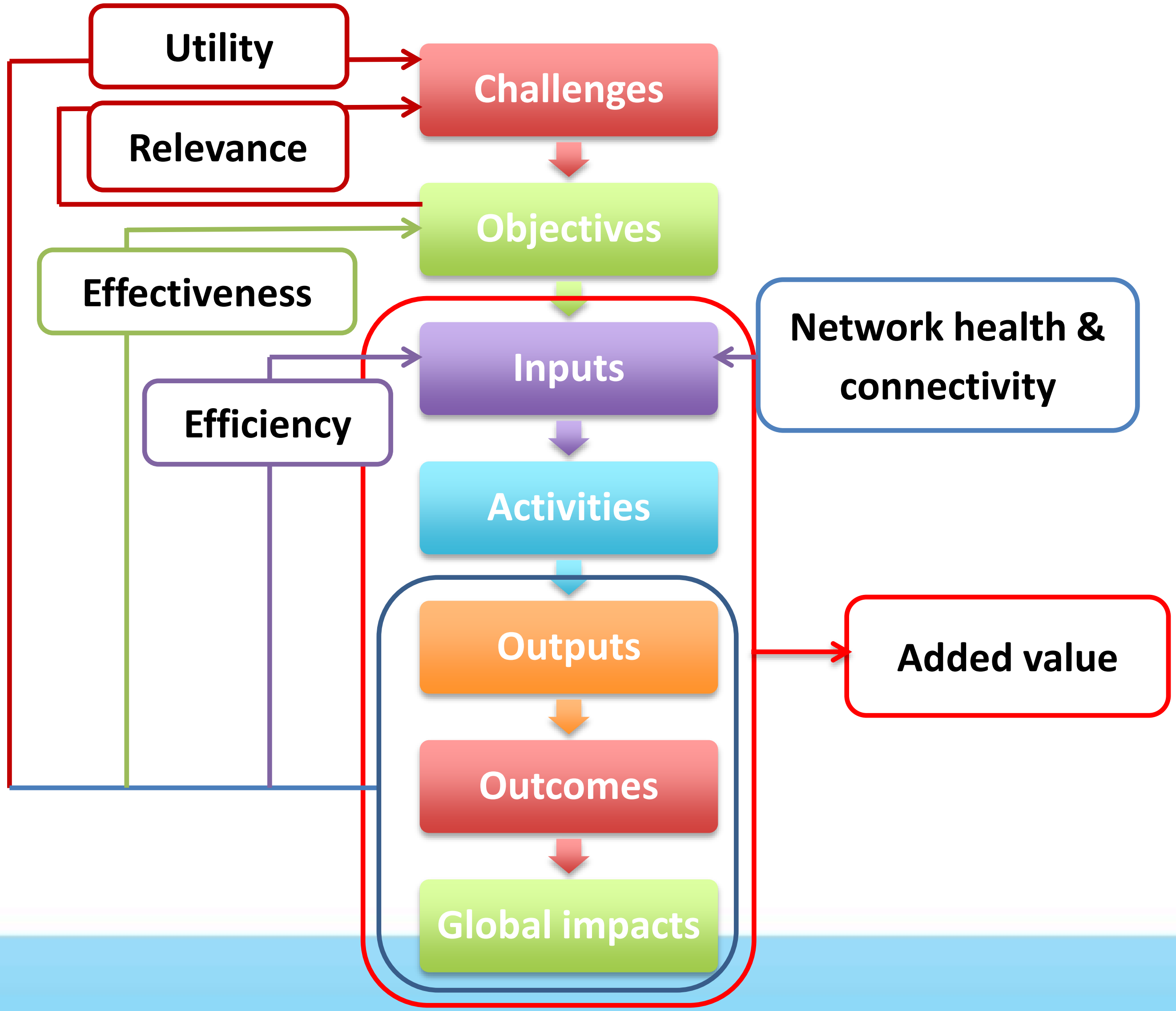
Step 7: Defining output, outcome and impact indicators

- *Which are the **key outputs, outcomes and impacts** of an activity?*
- *For each one of these, **how** can they best be **measured/captured**?*
- *Is there a **quantitative or qualitative way** (or both) that they can be measured / captured?*
- *What is the **added value** of applying a quantifiable or a qualitative measurement or a combined approach in measurement?*
- *Is the **cost** of gathering data for the indicators set affordable? Are the necessary **skills** available?*
- *Are any relevant **indicators already being estimated** at Member State or EC level? Can access and compatibility be ensured?*

Step 8: Data collection and analysis methods

- *What are the **evaluation issues** and associated evaluation questions that we need to examine?*
- *What are the **key activities and associated outputs, outcomes and impacts** that can contribute to answering the respective evaluation issues and questions?*
- *Which of the relevant output, outcome and impact indicators we shall examine?*
- *How can the **data** for the selected indicators **best be captured** (through monitoring data already available, through new data; quantitatively, qualitatively, both)?*
- *Based on the above what are the **suitable methods** to apply? (consider also time, and resources limitations).*

Evaluation issues



Step 9: From planning to actually conducting a P2P evaluation

- *Decision Task 1. Defining the audience for the evaluation*
- *Decision Task 2. Selecting the evaluation issues and associated questions*
- *Decision Task 3. Identifying the data requirements*
- *Decision Task 4. Conducting the evaluation*
- *Decision Task 5. Using and disseminating the evaluation findings*

Thank you for your attention!

Effie.Amanatidou@manchester.ac.uk

The P2P Logical Framework

Objectives' Hierarchy	Inputs	Activities	Outputs	Intermediate impacts	Global impacts
Global Objectives: H2020/ERA	Financial resources	Joint calls	applications/ projects	scientific / technologica l	policy/ conceptual
Specific P2P objectives	Capacities internal to P2P	Mapping	Databases	economy-related	society-related
Operational objectives	Human resources	Foresight/ Vision	Strategy Reports	health/ environment	health/ environment
	Governance structures	SRA developmen t	SRA document	organisation al	enduring connectivity
	Governance processes	Knowledge sharing	Disseminatio n events	symbolic	scientific / technologica l
		Mobility/ training	Mobility schemes, training events	training/ capacity building	organisation al
		Monitoring / evaluation	Monitoring/ Eveluation reports	structural	
		etc.	etc.		

Main assumptions, i.e. the intervention logic

Assumptions in relation to

- **inputs**

(enough skills, resources)

- **activities and outputs**

(proper activities to lead to envisaged outputs; adequate interest)

- **activities and outputs vis-à-vis impacts**

(high quality outputs, M&E, adequate research capacities, national interest)

- **impacts vis-à-vis objectives**

(favourable wider conditions, impacts not contradicting each other)