

Cohesion Policy experience and the new Economic Appraisal Vademecum

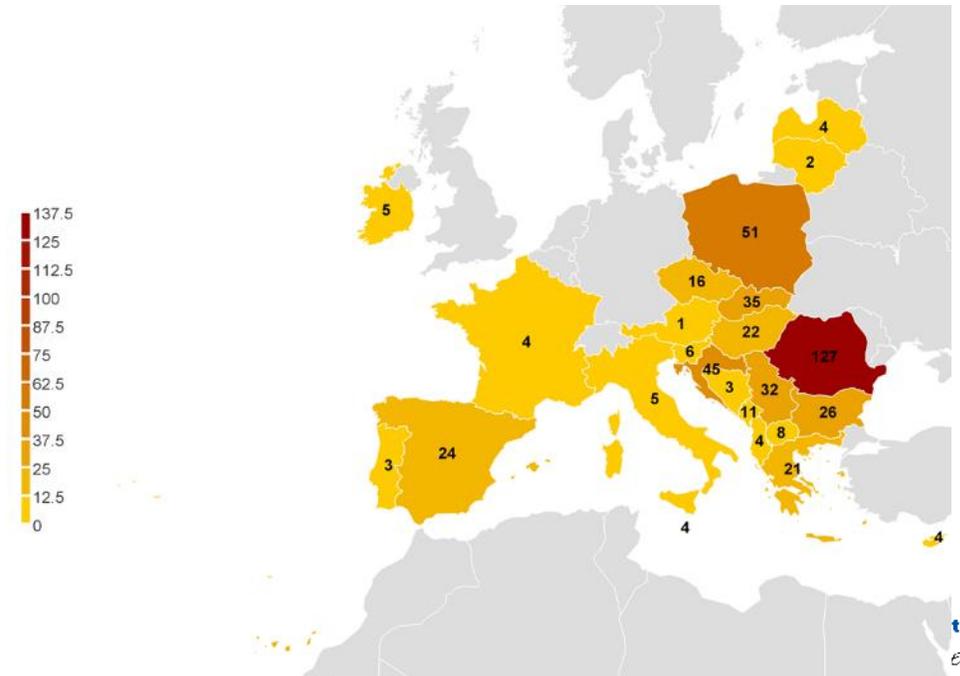
Massimo Marra, Davide Sartori

**JASPERS Networking Platform Webinar on
Economic Appraisal for EU-funded projects in 2021-27**

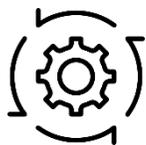
15 December 2021

‘Joint Assistance to Support Projects in European Regions’

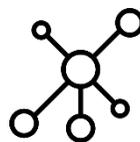
- A partnership between Commission’s [DG Regional and Urban Policy](#), and [EIB](#) active since 2006.
- Provides **independent advice and capacity building** support to [beneficiary countries](#) to help prepare and assess high quality projects to be co-financed by [EU Structural and Cohesion Funds](#) (including JTF), by the [Instrument for Pre-accession Assistance \(IPA\)](#) and by the [Connecting Europe Facility \(CEF\)](#).
- JASPERS assistance is **funded by EC and EIB**
- **Available to EU 27 + IPA region**
- Supports major/strategic investments, innovative/replicable projects, grouping of investments
- Capacity Building, knowledge sharing and public administrations’ strengthening



JASPERS Services



Support for the development of projects – methodological guidance, advise, project appraisal



Advice on horizontal issues



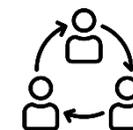
Assistance in **preparation of sector strategies, plans**



Support for the preparation of **programmes and schemes**



Selective **support to project implementation**



Capacity building - networking, training, knowledge transfer and support to institutional strengthening

JASPERS in the project cycle

Support to strategic planning and to address sectoral issues

Project concepts and TORs for project preparation studies

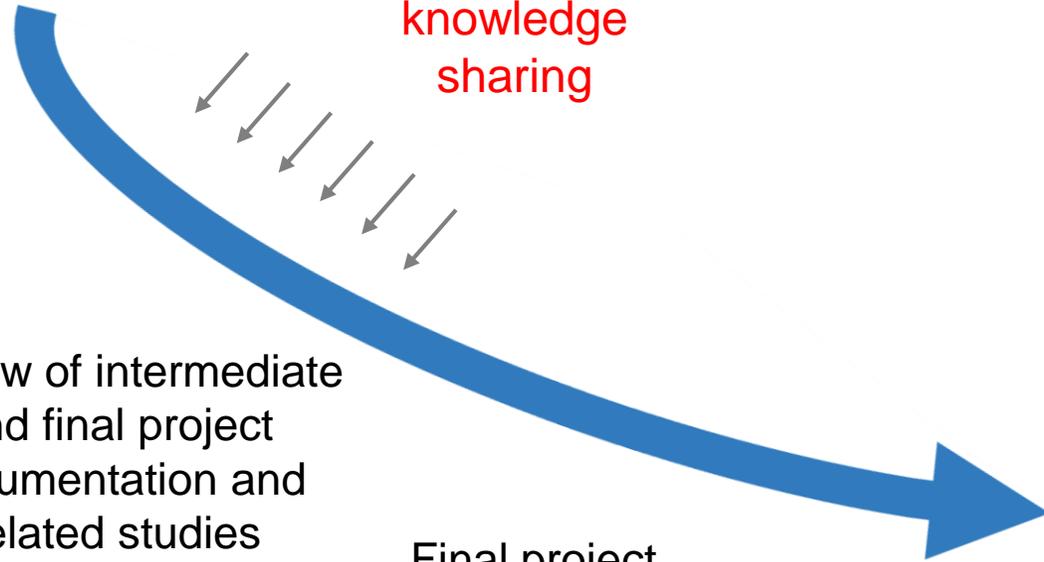
Methodological support to beneficiaries and advice during project preparation

Review of intermediate and final project documentation and related studies (Guidance Notes)

Final project assessment (Completion report)

Project appraisals & Independent Quality Review (function until 2023)

Capacity building and knowledge sharing



Sectors covered



Energy



Public transport, Rail, Air and Maritime



Roads



Urban development, Health and Innovation (including, Broadband, ICT and RDI)



Water, wastewater, flood risk prevention



Waste and Circular Economy

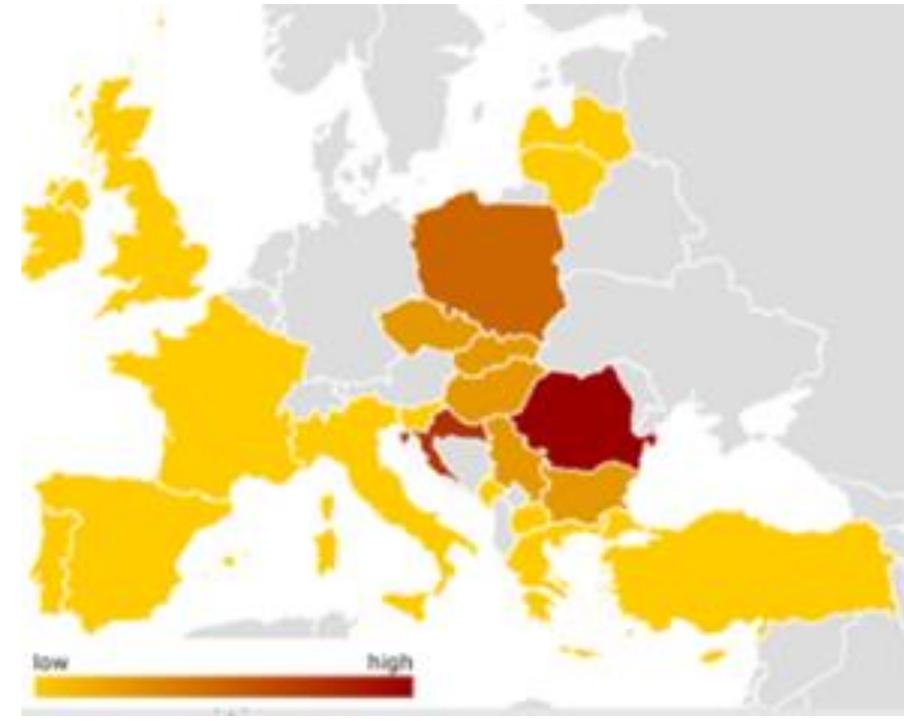
Achievements 2014-2020 period

Over **251**
JASPERS-supported large
investment projects approved
since 2014*

For a total project
cost of over
EUR **80** bn*

Over **920** Assignments completed
in 24 countries across EU & neighborhood

440 Assignments ongoing – Over **230** Assignments in
support of 2021-27 programming period



* Data as per July 2021



Cross-sectoral and Capacity Building support

- ✓ JASPERS Networking Platform programme of **EU-level (multi-country) capacity building, training & knowledge sharing**
- ✓ **In-country technical capacity building** assignments – based on requests by MSs for targeted capacity building and institutional strengthening assignments (including train-the-trainers)
- ✓ Supporting **development of EC technical guidelines**, preparation of JASPERS **technical notes/working papers**, dissemination of good practices
- ✓ **Advisory on horizontal issues relevant to project preparation** - climate change, environmental issues, **economic appraisal**, state aid implications for projects
- ✓ Dedicated **Web portal**: www.jaspersnetwork.org

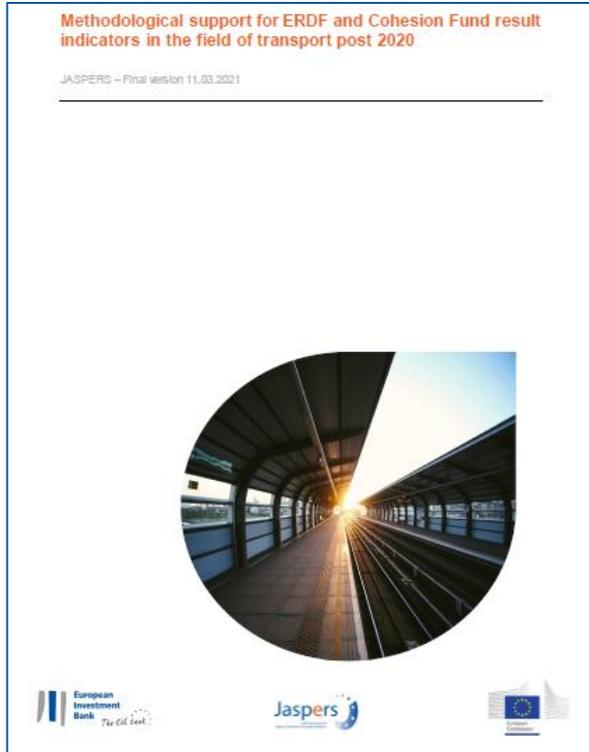


EU-wide NP Capacity Building Programme 2021-22

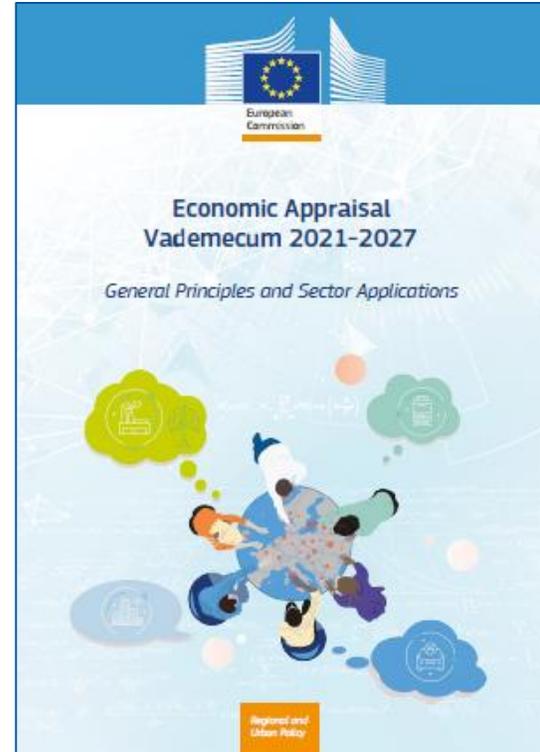
- ✓ Environmental requirements for projects (including **Habitat** and **Water Framework Directive**)
- ✓ Webinars on **urban mobility** (including SUMP and ITS)
- ✓ Digitalisation in the European **water** sector and smart tools
- ✓ **Webinars and workshops on Economic Appraisal of projects in 2021-27**
- ✓ Technical webinars on **Data Management in Transport**
- ✓ Webinars on **climate adaptation in Transport**
- ✓ Good practices for preparation of **digital education** projects in 2021-27
- ✓ Workshops on good practices and lessons learned for projects under the **Just Transition Fund**
- ✓ Technical workshops on preparation of **Circular Economy** projects
- ✓ Technical webinars on **sustainable underground** infrastructures



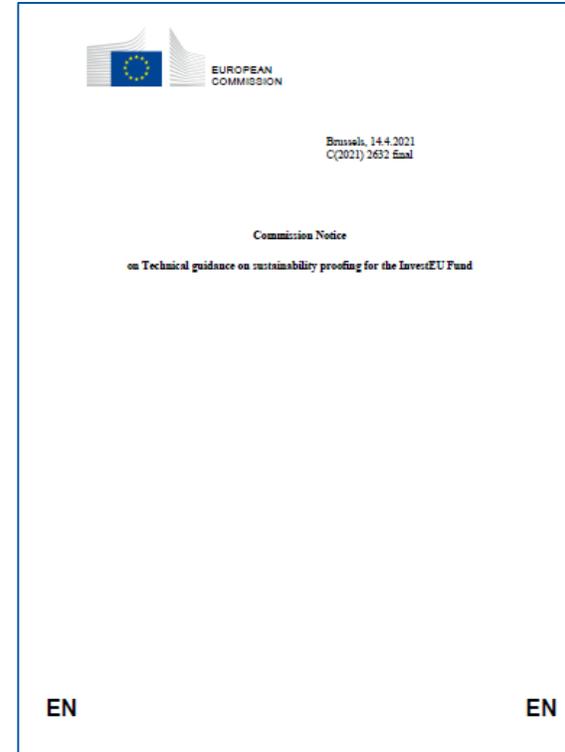
Support to develop EC guidelines – highlights 2021



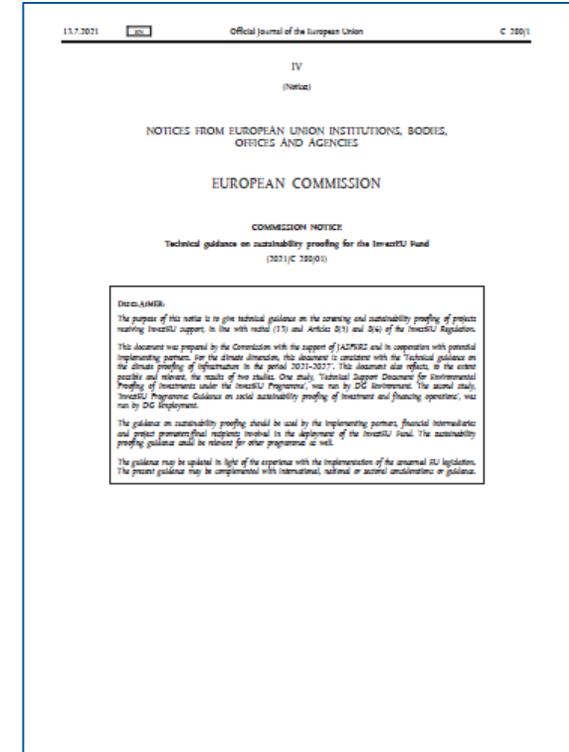
Result indicators in transport



Economic Appraisal Vademecum



InvestEU Sustainability Proofing

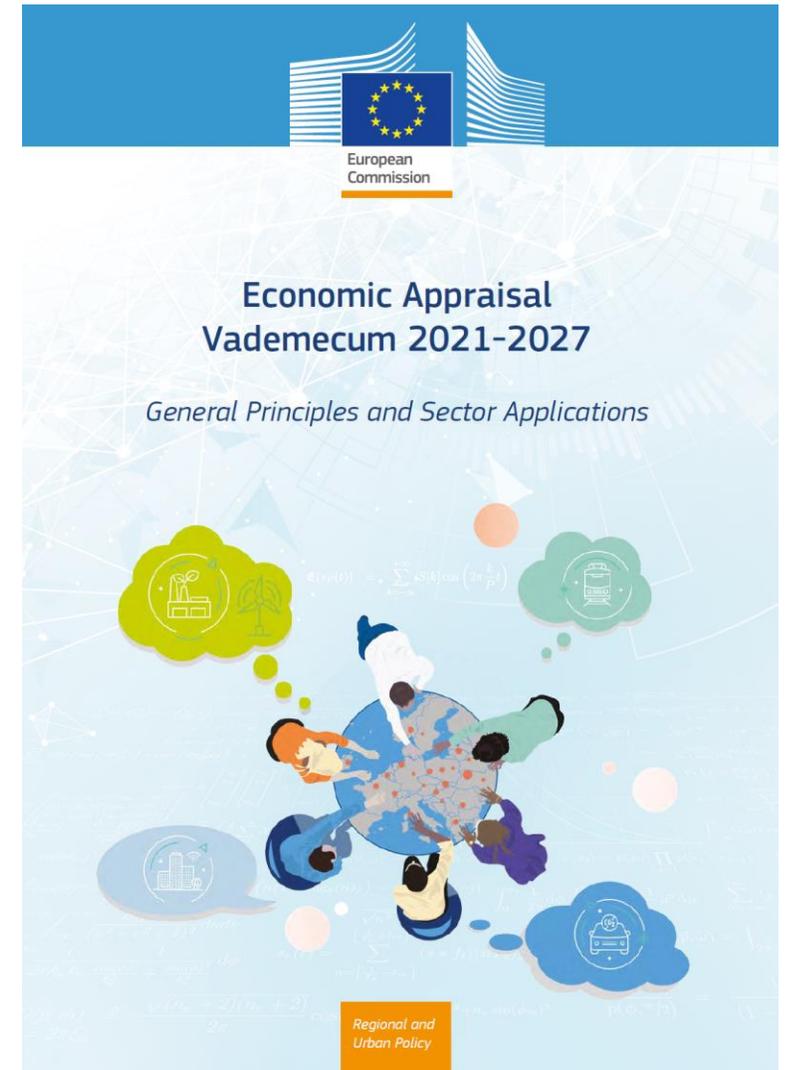


Climate Proofing of Infrastructure



CBA & EA - experience from 2014-20

- Through major projects in the 2007-13 and 2014–2020 periods, **Member States gained a lot of experience in using CBA** as a tool to support decision-making on EU-funded investments.
- In many Member States the use of CBA in project appraisal extended **beyond EU major projects**, with a view to ensure an optimal allocation of available funding.
- Several **National EA/CBA guidelines were developed**, also with JASPERS support.
- However, the use of CBA methods in certain sectors and for some type/size of projects was found overly complex and time-consuming, **calling for simpler methods that could offer similar explanatory value for decision-makers**.
- Based on the experience developed over the last 2 programming periods, DG REGIO and JASPERS have prepared a compilation of good practices - **Economic Appraisal Vademecum** (EAV) for a wide use across Europe, in particular (but not only) to support the early screening of investments.



Economic Appraisal Vademecum

The EAV does not replace, but **complements** the EC's Guide to Cost Benefit Analysis of Investment Projects 2014-2020 – both documents will be **voluntary in Cohesion Policy 2021-27**.

It's a toolkit based on internationally recognised practices, not a set of instructions – it should be applied in a proportionate manner using common sense (e.g. thresholds and sector/project types specificities).

How des EAV complement the CBA Guide?

- ✓ Introduces the concept of **proportionality**: CBA remains the recommended appraisal tool, but a simpler form of CBA or other EA tools are suggested in specific circumstances, based on **project's type and scale**.
- ✓ **New sectors** are discussed: healthcare, e-services, RES and urban development
- ✓ **Good practices** are presented for the sectors already covered by 2014 CBA Guide.
- ✓ The EAV is not prescriptive and it is not intended as providing instructions - Member States can use it to set up a **framework for both project appraisal and selection** that is in line with international good practices.

The EAV is not linked exclusively to Cohesion Policy (e.g InvestEU, CEF).

Project selection in Cohesion Policy 2021-27

- **All projects** will be selected by Managing authorities (or on their behalf)
- MAs shall establish methodology and criteria used for the selection of operations – to be approved by Monitoring Committee (EC review 15 days before – see art 40 CPR)
- Selected operations have to satisfy all criteria specified in the CPR (*Article 73 Selection of operations by the managing authority*) including:
 - ✓ (c) ensure that selected operations present **the best relationship between the amount of support, the activities undertaken and the achievement of objectives**;
 - ✓ (d) verify that **the beneficiary has the necessary financial resources and mechanisms to cover operation and maintenance costs** for operations comprising investment in infrastructure or productive investment, so as to ensure **their financial sustainability**;
- **Project selection methodologies and project selection criteria could be modulated depending on type and size of operations**
- **Final decisions taken by the Monitoring Committees and the MAs reflecting their individual judgement**

Approaches to EA for cohesion policy-funded investments

– differences between 2014–2020 and 2021–2027

Topic	2014–2020	2021–2027
	Major projects	Projects
Legal basis for EA	According to Article 101(e) of Regulation No 1303/2013, a CBA – including an economic and a financial analysis, and a risk assessment – is mandatory in order to get approval for the co-financing of major projects	The use of EA will be left to the discretion of the managing authority and of the monitoring committee that will set up a framework for project appraisal and selection that is compliant with the requirements of Article 73 of the CPR. EA tools can be used and adapted to the size and complexity of EU-funded projects
EA tool	CBA is mandatory for major projects in any sector	A more flexible and proportional framework will be implemented; other tools such as CEA and MCA – in addition to CBA – are proposed for voluntary use, based on sector and/or project type and scale
Results of EA	As set out in Article 101 of Regulation No 1303/2013, an economic analysis must be included in the CBA to compute the project's economic performance. The calculation of economic net present value and ERR indicators is requested to verify that the project is worth co-financing	It is good practice to use the results of EA as one of the criteria in assessing and selecting project proposals in order to verify that the selected project is good value for money (as requested by Article 73(c) of the CPR)
Option analysis	According to Annex III to Regulation No 2015/207, for major projects, the option analysis should be carried out in two steps. The first step looks at basic strategic options and is based on MCA. Once the strategic option is identified, the second step consists of a comparison of the specific technological solutions based on quantitative methods (simplified CBA or CEA). A fully fledged CBA is then carried out on the selected technical option	A simplified EA (CBA, CEA or MCA) is an established good practice for screening and ranking options. When the project is limited in size, this is normally sufficient to identify a preferred option and justify approval for its co-financing. When the project is large/strategic, or when the results of the simplified EA are inconclusive, a fully fledged EA should be carried out at subsequent stages of development of the proposal
Analysis of financial performance	As set out in Article 101 of Regulation No 1303/2013, a financial analysis must be included in the CBA to compute the project's financial profitability. The calculation of financial rate of return of the investment and financial rate of return of national capital indicators is requested (by Annex III to Regulation 2015/207) to verify that the project is in need of co-financing	No provisions are made in the CPR to assess the project's financial performance. Member States are free to set up their methods and criteria to verify that the project is in need of co-financing. For most cases, State aid rules will apply

Approaches to EA for cohesion policy-funded investments

– differences between 2014–2020 and 2021–2027

Topic	2014–2020	2021–2027
	Major projects	Projects
Analysis of financial sustainability	Annex III to Regulation No 2015/207 requires an analysis of financial sustainability based on undiscounted cash flow	Article 73(d) of the CPR gives a requirement to ‘verify that the beneficiary has the necessary financial resources and mechanisms to cover operation and maintenance costs for operations comprising investment in infrastructure or productive investment, so as to ensure their financial sustainability’
Financial discount rate	According to Article 19 of Regulation No 480/2014, a 4 % discount rate will be used as the single reference parameter for all sectors in all Member States, except for projects falling under State aid rules	If a financial analysis with a calculation of performance indicators is carried out, Member States are free to assess their own country- and/or sector-specific financial discount rate(s). In the absence of national guidelines, adherence to State aid rules is recommended
Determination of the appropriate EU support	In accordance with Article 61 of Regulation No 1303/2013, Annex V to Regulation No 1303/2013 and Section III of Regulation No 480/2014, the outcomes of the financial analysis in the CBA are used to calculate the funding gap rate and, in turn, the intensity/level of EU support (unless State aid rules prevail)	According to Article 73(c) of the CPR, the managing authority need to ‘ensure that selected operations present the best relationship between the amount of support, the activities undertaken and the achievement of objectives’. This implies, amongst other, that self-financing and/or the bankability potential of an operation should be taken into account where relevant
Reference period of the analysis	Annex I to Regulation No 480/2014 provides a list of mandatory reference periods to be used per sector	There will be no mandatory fixed parameters. An indication of typical reference periods per sector is provided as indicative guidance, but project promoters/managing authorities can adjust them in accordance with the project’s economically useful life
Social discount rate	According to Annex III to Regulation No 2015/207, a social discount rate of 5 % will be used for major projects in cohesion countries and 3 % for the other Member States	Member States are free to establish and use their own country-specific social discount rate; 3 % can be used in the absence of a national approach
Type of benefits	Annex III to Regulation No 2015/207 provides a list of the minimum main economic benefits per sector to be considered in the economic analysis	There will be no mandatory list of benefits. Recommendations for typical benefits per sector are provided as indicative based on good practices
Compliance-driven projects	In a major project, CBA is mandatory	CEA is deemed to be sufficient to assess the economic viability of the project, regardless of its scale
National methodological frameworks	Member States are encouraged to establish their own national methodological frameworks for EA	Member States are encouraged to follow or establish their own national methodological frameworks for EA. As a complementary instrument to the EAV (whose use is voluntary), a spreadsheet template has been made available to the Member States. The template provides project promoters with practical guidance on the format of the content of CBA (or other EA tools). At the same time, it can be used by evaluators to assess projects

EAV structure

The EAV is structured in two parts:

- **Part I – General Principles.** It discusses the general analytical framework for using Economic Appraisal (EA) during the MFF 2021-27.
- **Part II – Sector Applications.** The main focus is on topics where the state-of-the-art (in terms of data sets or guidance) has developed since the 2014 CBA Guide, or where lessons have been learned from the 2014-2020 period.
- The sector chapters develop around: an introduction presenting the policy context, **a discussion of what EA tool and what simplifications should be applied during the project cycle**, and guidance on the key aspects featuring EA for the specific sector.

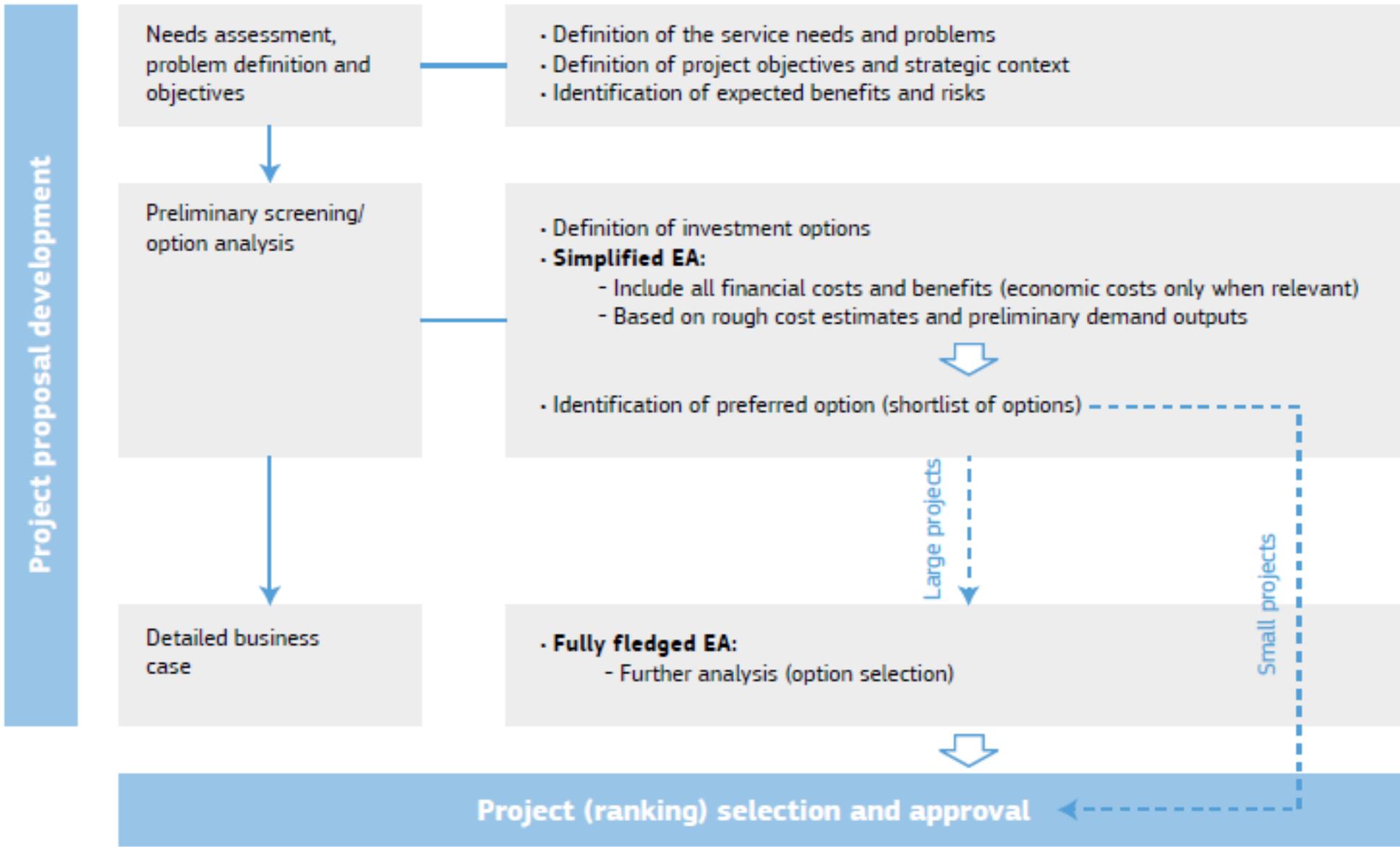
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Role of EA in project development

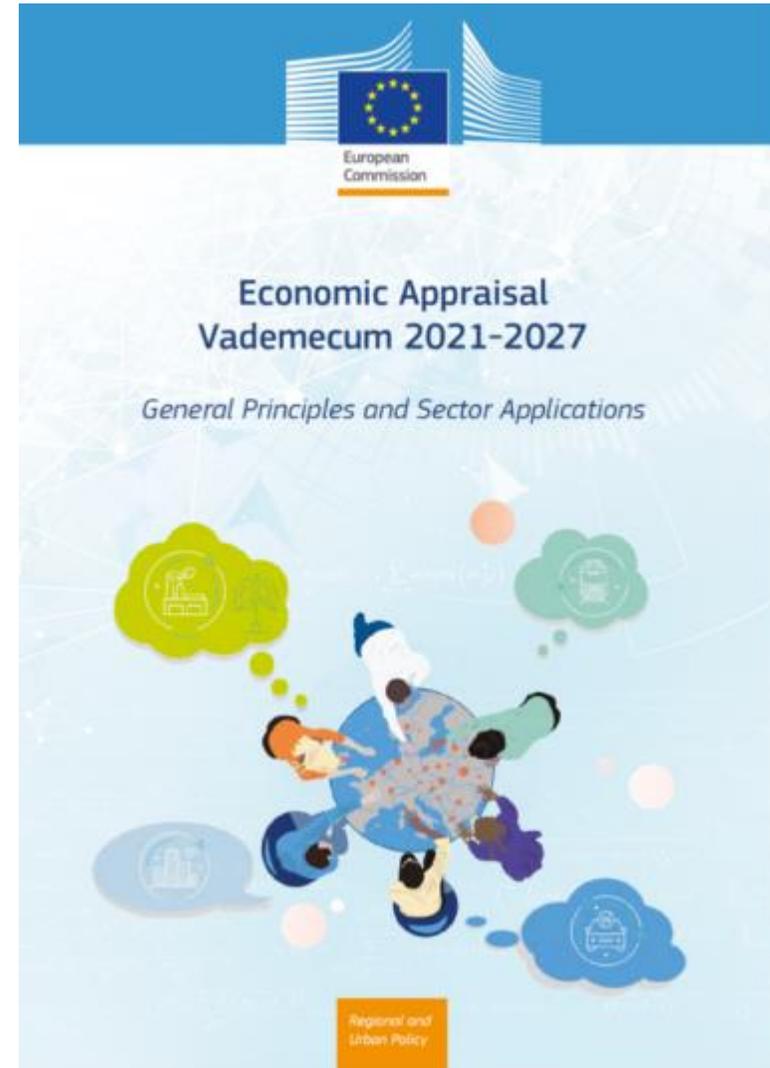
- Economic appraisal is one key component in **project development** to support the economic case for EU funding and project approval.
- Economic appraisal should be intended as an **iterative process** throughout the whole life of a project.
- It has greater added value if implemented at the **early stage of the project cycle to compare options**.
- Different EA tools - including **cost-benefit, cost-effectiveness, least cost, and multi-criteria analysis**- are used in the practice to check the economic viability of a project.
- The results of economic appraisal **should not be the only factor** taken into account when making an investment decision or when prioritising projects in contexts of budgetary constraints.

Role of EA in project development



Alternative EA methods

- Simplified cost-benefit analysis (CBA)
- Cost Effectiveness Analysis (CEA)
- Least Cost Analysis (LCA)
- Multi-Criteria Analysis (MCA)



Simplified Cost Benefit Analysis

A **simplified** CBA:

- Is based on **rough, indicative, estimates** of costs and benefits.
- Uses financial costs (based on market prices) instead of the economic costs (based on shadow prices) for the project's inputs. As the calculation of economic costs can be resource-intensive, **conversion of market prices is usually not necessary** in a simplified CBA.
- **Can avoid the monetary evaluation of the externalities**, when these are expected to be similar across options (in a justified manner).
- The simplified CBA should be applied to **small projects** (where full-fledged CBA is not needed/disproportionate) - or at the early stage of the development cycle of a large project to screen options.
- Still, the simplified CBA assesses the economic viability of the project in terms of ENPV and ERR.

Cost Effectiveness and Least cost Analysis

- CEA is used to assess the project's economic viability in relation to its **effectiveness and (life-cycle) costs in accomplishing a policy-specific objective**.
- It differs from CBA because it **does not** evaluate the benefits in monetary terms. This is based on the assumption that the project **is de facto economically viable** so it is just a matter of checking that it does it efficiently.
- The results are **expressed as a ratio**: e.g. cost per patient, cost per student, cost per km, etc. This ratio should be always assessed against **sector benchmarks** to verify the economic viability of the project.
- In case more options are compared, cost-effectiveness ratios allow appraisers **to rank the options and select the optimal one**.
- Typical (but not exclusive) sectors of application are **water, waste, education, healthcare**.
- If the project options achieve the same output with the same intensity/volume, they differ **only in costs**. In this case, the CEA can be simplified to a least-cost analysis (LCA) where options are just **compared based on the present value of their life-cycle costs**.

Multi Criteria Analysis

- MCA is an EA tool informing decision makers on the extent to which the project, or its options **are relevant against the overarching policy framework** and contribute to the policy objectives.
- It entails defining objectives criteria, assigning weights to them and appraising the project qualitatively against these criteria with scores (**e.g. to what extent from 1 to 5 the project achieves the several institutional, social, environmental, economic, etc. objectives**).
- The result is a percentage, e.g. the project (or the option) is relevant up X% of the policy objectives.
- At project level, it is usually adopted **to complement the CBA, CEA and LCA** during the option analysis by providing additional qualitative information on the project's relevance.
- At programme level, it can be directly used to assess multi-sectoral territorial programmes (such as regional transition and urban development programmes) and chose the optimal investment scenario.

The choice of the tool

		Number of output variables	
		High	Low
Extent to which project outputs can be monetised	High	CBA	CBA
	Low	MCA	LCA/CEA

These alternative tools are not necessarily substitutes for each other and **may be used as a complement** to CBA, particularly when economic viability is one of the factors against other policy considerations.

The choice of the tool

Area	Investment area	Project type	
		Small projects	Large/strategic projects
Water and wastewater	Water and wastewater infrastructure (efficiency driven) ⁽²³⁾	LCA/CEA	CBA
	Water and wastewater infrastructure (exclusively compliance driven)	LCA/CEA	LCA/CEA
	Flood prevention	Simplified CBA	CBA
Transport	Transport infrastructure (all modes)	(Simplified) CBA	CBA
	Transport infrastructure: compliance-driven project (all modes)	CEA/MCA	CEA/MCA
	New technology in transport	CEA/MCA	CBA/CEA/MCA
Healthcare	Disease prevention / treatment programmes / new technology	CEA	CEA
	Healthcare infrastructure	Simplified CBA	CBA
Research, development and innovation	Research infrastructure	Simplified CBA	CBA
	Innovative manufacturing	Simplified CBA/CEA	CBA
	Tertiary education	Simplified CBA	CBA
Renewable energy	Electricity generation	CEA with integration of externalities	CBA
	Heat generation	CEA with integration of externalities	CBA
Energy efficiency	Energy efficiency in buildings and plants	CEA with integration of externalities	CBA
	District heating	CEA with integration of externalities	CBA
Digital economy	Broadband infrastructure	Simplified CBA	CBA
	ICT services (data centres, e-services, etc.)	CEA	Depending on the area of application
Municipal waste management	Collection, transport, recovery, recycling, treatment and disposal of solid waste	CEA	CBA
Sustainable urban development	Integrated territorial investment schemes or community-led local development schemes, programmes in cluster development and urban regeneration programmes	MCA (including simplified CBA/CEA for individual large projects in given sectors)	MCA (including detailed CBA/CEA for individual large projects in given sectors)

More details in the sector annexes...



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