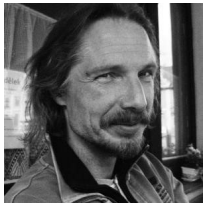
Investments & … climate resilience

12 September 2022 | Online, Zoom

Welcome!


Bernhard


Grzegorz


Przemysław

European Regional Development Fund

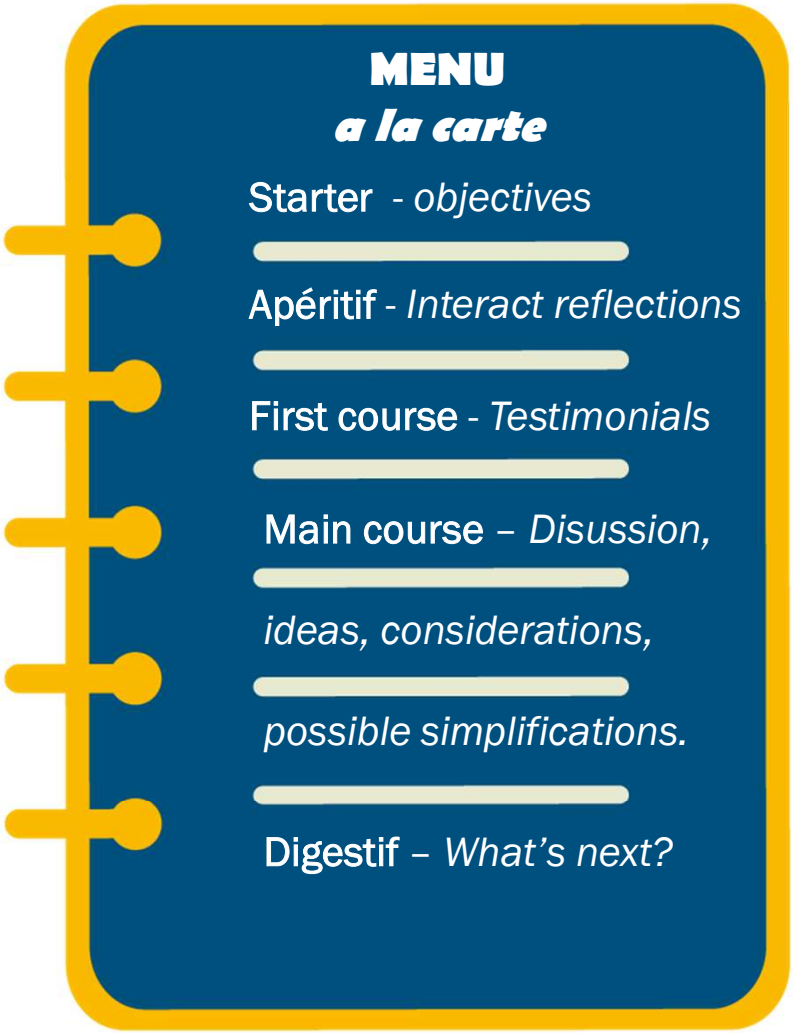
Why are we here?

Objectives

- Brainstorming with all interested programmes searching for a pragmatic approach avoiding disproportionate requirements for applicants / beneficiaries;
- Listening to approaches by frontrunners;
- Sharing reflections on options.

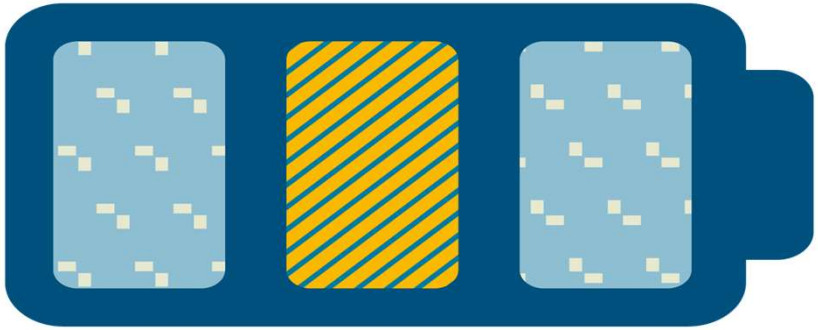
Format

- 12 September, 10.00 – 12.15 CET;
- N° participants <-> interactivity.


MENU
a la carte
Starter - objectives
Apéritif - Interact reflections
First course - Testimonials
Main course – Disussion,
ideas, considerations,
possible simplifications.
Digestif – What's next?

Setting the scene

Checking infrastructure for climate resilience



Infrastructure in Interreg projects....

Relatively small in comparison to ERDF mainstream projects, yet ....

- diverse –small scale investments (small projects), pilot activities, cycle paths (5MEUR), rehabilitation of road bridges across border rivers (15MEUR), up to a hospital for cross-border use (40MEUR);
- innovative;
- demanding localizations (mountainous, maritime, along riverbed, marshlands, etc.);
- exposed to natural hazards;
- sometimes infrastructure related to protected heritage;
- In case of genuine cross-border infrastructure (bridge, tram across border, border crossing) two legal systems meet and hence more time for clarification of standards and legal provisions is required.

Today in the room...

Small scale investments, pilot investments (part of innovative projects), small tourism infrastructure, revitalization, restoration of culture heritage objects.

Roads, rail transport, cycle paths, renewable energy.

Natural hazards protection and prevention infrastructure.

Roof adaptations, monitoring infrastructure, adaptation of urban spaces.

Other (education, health sector).

The biggest challenges...

Understanding of requirements, lack of knowledge & expertise

Process design and performance (including assessment criteria setting)

Equal approach in MSs & other partner countries

Dimensions…

Processes

- What is needed to collect, when to collect & check, what to assess?

Types of projects, types of infrastructure

- (ceilings, fast tracks, other simplifications…)

Partners' obligations

- (self-declarations, justifications, documentations and analysis, feasibility studies, permits…)

Simple and clear communication to applicants….

Ideas, examples…

Assessment process

- (Internal, external, how detailed, separate, broader context?),

Clarification of the legal requirement

Novelty in article 22 Interreg Regulation on selection of projects [Art 22(4)(j)]:

In selecting operations, the monitoring committee or, where applicable, the steering committee shall:

- *ensure that, for investments in infrastructure with an expected lifespan of at least five years, an assessment of expected impacts of climate change is carried out.*

The meaning has been clarified with DG Regio (Unit G1 on Sustainable Growth):

This assessment only addresses the climate adaptation (resilience) of infrastructure investments.

Horizontal principles & issues – 1/2

- EU charter of fundamental rights
- Equality between men and women, Gender mainstreaming
- Non-discirmination including accessibility
- Sustainable development

Article 9 CPR:
throughout the preparation, implementation, monitoring, reporting and evaluation

Article 22.2, Interreg:
Taken into account when selecting …

DNSH

EGESIF explanatory note; guidance for RRF:
In programming assessment for types of action; standard clause in programme; assessment for projects only if programme is not sufficiently detailed

EIA / screening

Article 22.4e), Interreg: EIA for projects in Annexes I & II

Climate resilience of infrastructure projects

Article 22.4j), Interreg: Assessment on climate resilience to be carried out…

- Climate target tracking
- Biodiversity tracking

Calculation based on pre-fixed co-efficients at level of intervention fields

Horizontal principles & issues – 2/2

E cohesion	Electronic exchange with COM: Is a system in place? Is it operational and complies with requirements ….
Public procurement	Encouragement for the strategic use of public procurement (green, innovative, e-systems etc.) – letter to CBC programmes
The New European Bauhaus	Search for Interreg examples: Sustainable, beautiful & inclusive projects, ideally in public space and co-created … Downstream proceedings not yet clear ….
Durability of results	Major concerns coming from business support … for Interreg ECA-Report

Infrastructure?

The Guidance* includes a rather broad definition …

- **buildings**, from private homes to schools or industrial facilities, which are the most common type of infrastructure and the basis for human settlement;
- **nature-based infrastructures** such as green roofs, walls, spaces, and drainage systems;
- **network infrastructure** (e.g. grids, power stations, pipelines), transport, information and communication technologies (e.g. mobile phone networks, data cables, data centers), and water (e.g. water supply pipelines, reservoirs, waste water treatment facilities);
- **Waste management systems** (collecting points, sorting and recycling facilities, incinerators and landfills);
- **other physical assets in a wider range of policy areas**, including communications, emergency services, energy, finance, food, government, health, education and training, research, civil protection, transport, and waste or water;

** Technical guidance on the climate proofing of infrastructure in the period 2021-2027 C(2021) 5430 final*

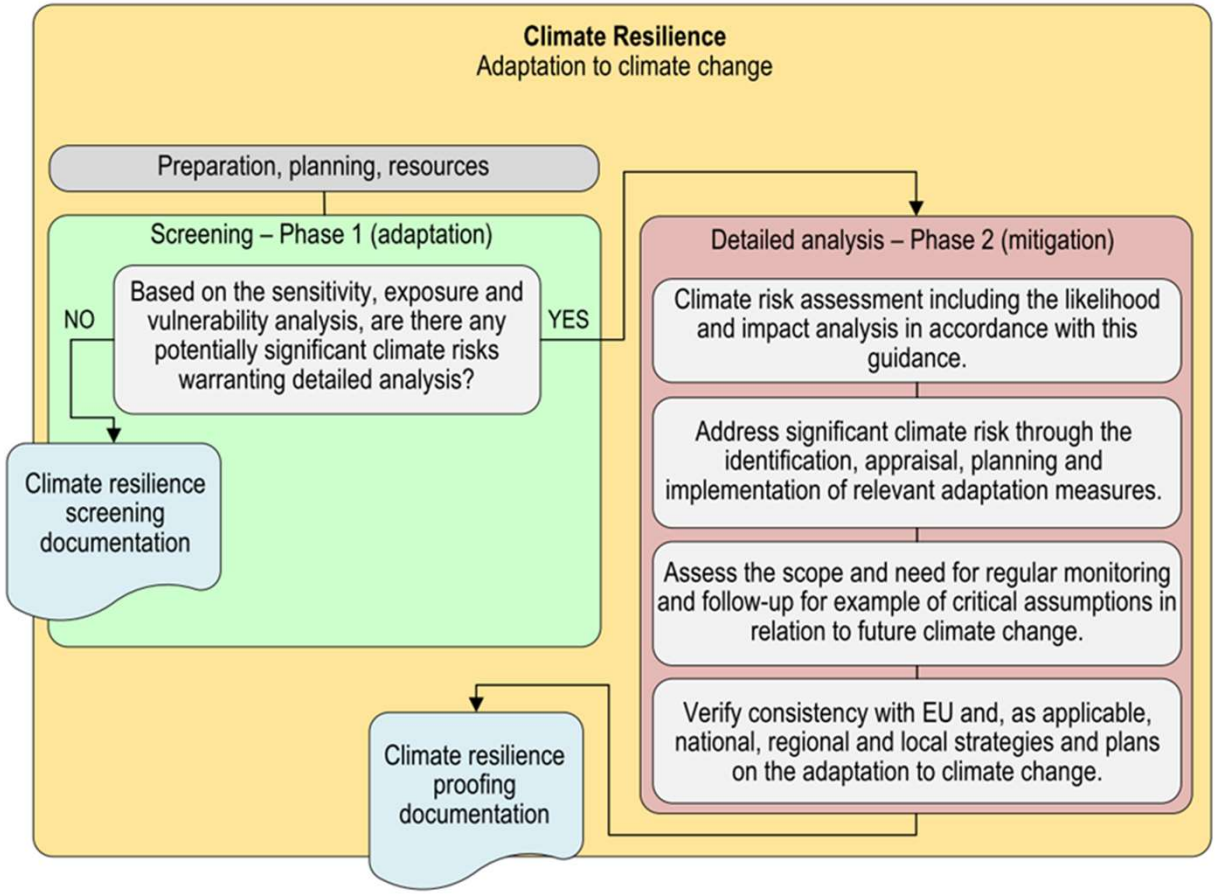
Reflections on why & how?

Some hints on strategies … Hoover institution @ Stanford University (US)

1. **Make better decisions in the face of uncertainty** – many assumptions in construction no longer hold …
2. **View infrastructure systemically** – it is interconnected and complex!
3. **Take an iterative, multi-hazard approach** - stressors rarely occur alone or lead to single impacts, a multi-hazard approach can allow designers to consider interactions among risks and domino effects that may follow.
4. **Improve and inform cost-benefit analysis (CBA)** - when CBA only accounts for the upfront capital costs of infrastructure it may lead to less resilient infrastructure.
5. **Mainstream nature-based infrastructure** - The use of nature-based, or green, solutions as either alternatives or complements to conventional, or gray, infrastructure can help reduce risks, enhance resilience, and support i.a. environmental objectives.
6. **Plan now to build back better** – enormous annual disaster losses could be avoided if rebuilding were to be improved after each disaster over the next twenty years.

Hill, Alice C., Douglas Mason, Joanne R. Potter, Molly Hellmuth, Bilal M. Ayyub, and Jack W. Baker. Ready for Tomorrow: Seven Strategies for Climate-Resilient Infrastructure. Hoover Institution, 2019.

Checking climate resilience



Sketch of the (ideal) procedure including the essential question on significant risks ….

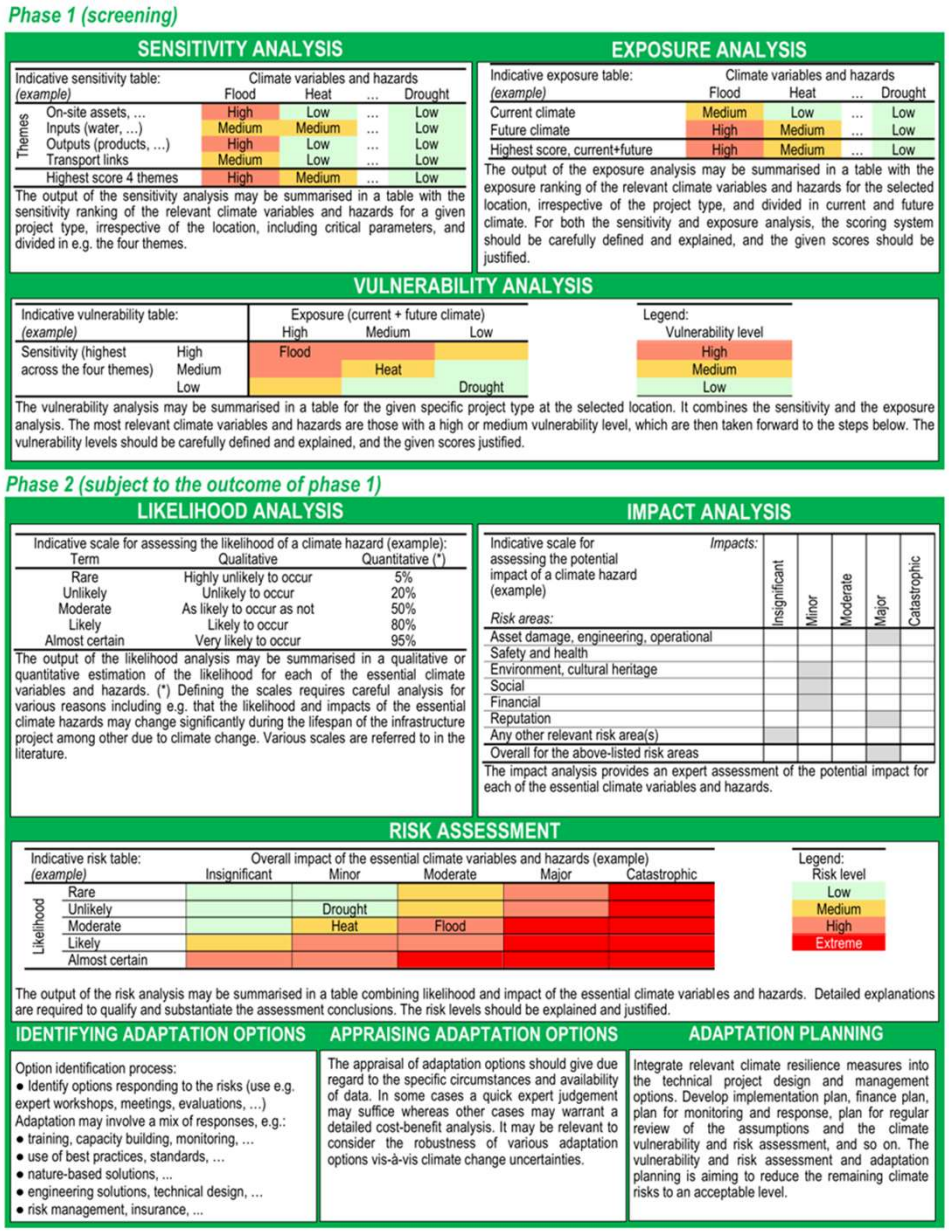
But full application seems not really proportionate for the usual infrastructure in Interreg …

Source of figure:

Commission Notice

Technical guidance on the climate proofing of infrastructure in the period 2021-2027

C(2021) 5430 final



Phase 1 (screening)

SENSITIVITY ANALYSIS

Indicative sensitivity table: *(example)*

Themes	Climate variables and hazards: Flood	Heat	...	Drought
On-site assets, ...	High	Low	...	Low
Inputs (water, ...)	Medium	Medium	...	Low
Outputs (products, ...)	High	Low	...	Low
Transport links	Medium	Low	...	Low
Highest score 4 themes	High	Medium	...	Low

The output of the sensitivity analysis may be summarised in a table with the sensitivity ranking of the relevant climate variables and hazards for a given project type, irrespective of the location, including critical parameters, and divided in e.g. the four themes.

EXPOSURE ANALYSIS

Indicative exposure table: *(example)*

Climate variables and hazards: Flood	Heat	...	Drought
Current climate	Medium	Low	...	Low
Future climate	High	Medium	...	Low
Highest score, current+future	High	Medium	...	Low

The output of the exposure analysis may be summarised in a table with the exposure ranking of the relevant climate variables and hazards for the selected location, irrespective of the project type, and divided in current and future climate. For both the sensitivity and exposure analysis, the scoring system should be carefully defined and explained, and the given scores should be justified.

VULNERABILITY ANALYSIS

Indicative vulnerability table: *(example)*

Sensitivity (highest across the four themes)	Exposure (current + future climate): High	Medium	Low
High	Flood		
Medium		Heat	
Low			Drought

Legend: Vulnerability level — High / Medium / Low

The vulnerability analysis may be summarised in a table for the given specific project type at the selected location. It combines the sensitivity and the exposure analysis. The most relevant climate variables and hazards are those with a high or medium vulnerability level, which are then taken forward to the steps below. The vulnerability levels should be carefully defined and explained, and the given scores justified.

Phase 2 (subject to the outcome of phase 1)

LIKELIHOOD ANALYSIS

Indicative scale for assessing the likelihood of a climate hazard (example):

Term	Qualitative	Quantitative (*)
Rare	Highly unlikely to occur	5%
Unlikely	Unlikely to occur	20%
Moderate	As likely to occur as not	50%
Likely	Likely to occur	80%
Almost certain	Very likely to occur	95%

The output of the likelihood analysis may be summarised in a qualitative or quantitative estimation of the likelihood for each of the essential climate variables and hazards. (*) Defining the scales requires careful analysis for various reasons including e.g. that the likelihood and impacts of the essential climate hazards may change significantly during the lifespan of the infrastructure project among other due to climate change. Various scales are referred to in the literature.

IMPACT ANALYSIS

Indicative scale for assessing the potential impact of a climate hazard (example)

Risk areas: / *Impacts:*	Insignificant	Minor	Moderate	Major	Catastrophic
Asset damage, engineering, operational					
Safety and health					
Environment, cultural heritage					
Social					
Financial					
Reputation					
Any other relevant risk area(s)					
Overall for the above-listed risk areas					

The impact analysis provides an expert assessment of the potential impact for each of the essential climate variables and hazards.

RISK ASSESSMENT

Indicative risk table: *(example)*

Likelihood	Overall impact of the essential climate variables and hazards (example): Insignificant	Minor	Moderate	Major	Catastrophic
Rare					
Unlikely		Drought			
Moderate		Heat	Flood		
Likely					
Almost certain					

Legend: Risk level — Low / Medium / High / Extreme

The output of the risk analysis may be summarised in a table combining likelihood and impact of the essential climate variables and hazards. Detailed explanations are required to qualify and substantiate the assessment conclusions. The risk levels should be explained and justified.

IDENTIFYING ADAPTATION OPTIONS

Option identification process:
- Identify options responding to the risks (use e.g. expert workshops, meetings, evaluations, ...)

Adaptation may involve a mix of responses, e.g.:
- training, capacity building, monitoring, ...
- use of best practices, standards, ...
- nature-based solutions, ...
- engineering solutions, technical design, ...
- risk management, insurance, ...

APPRAISING ADAPTATION OPTIONS

The appraisal of adaptation options should give due regard to the specific circumstances and availability of data. In some cases a quick expert judgement may suffice whereas other cases may warrant a detailed cost-benefit analysis. It may be relevant to consider the robustness of various adaptation options vis-à-vis climate change uncertainties.

ADAPTATION PLANNING

Integrate relevant climate resilience measures into the technical project design and management options. Develop implementation plan, finance plan, plan for monitoring and response, plan for regular review of the assumptions and the climate vulnerability and risk assessment, and so on. The vulnerability and risk assessment and adaptation planning is aiming to reduce the remaining climate risks to an acceptable level.

Methodological pillars

The guidance helps to understand the main perspectives and the cornerstones of the method. It might be useful to structure questions in assessment or for self-declarations.

We have to bear in mind that still many things build in Interreg will / should last for the next couple of decades ...

Reflections and options

Expertise

- Support from external experts; or eventually relevant authority (represented in the MC) might step in?

Checking national legislation on climate change and climate resilience

- Questionable, if our risk perceptions should go significantly beyond legal requirements?

Risk scenarios at programme level

- It might be interesting to establish a broad-brush impact scenario for the programme area highlighting major risks thus contributing to aspects of exposure, vulnerability, likelihood and impact …

Self-declarations of the applicant

- In particular for public investment this might be an option.

Thresholds for application of an assessment

- Particularly small infrastructure might be taken out of any additional considerations (but in turn there should be provisions on insurance or maintenance in the contract).

Example: AT

Checking national / regional legislation on climate change and climate resilience

Spatial planning – result of debate in an AT expert panel:

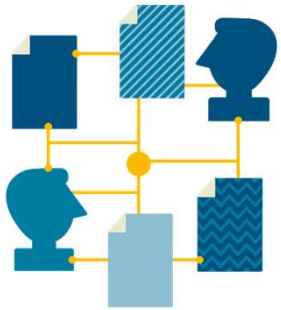
- Partial progress of anchoring climate change and inherent risks in spatial planning laws – but often the local level will follow more concrete interests in case of conflicting interests;
- Risk zones (flooding, land slides etc.) are in theory considered in zoning and building plans but quite often local level (as authority in charge) does not prevent building in risk zones;
- Also difficult to keep areas for green & blue infrastructure;
- Wise & economic use of soil not consistently anchored in all laws of all regions;
- Option: SEA should be used for climate proofing in spatial planning;
- Major progress in anchoring flooding in regional development plans.

Source: 2nd progress report for the National Adaptation Strategy for Austria (2021); sections on construction and housing & spatial planning

Reflections

Let’s learn from each other!

Programmes
sharing reflections and where they are standing



1. Krzysztof Kaczmarek (PL-SK)
2. Austria Bavaria
3. Maciej Molak (CZ-PL)

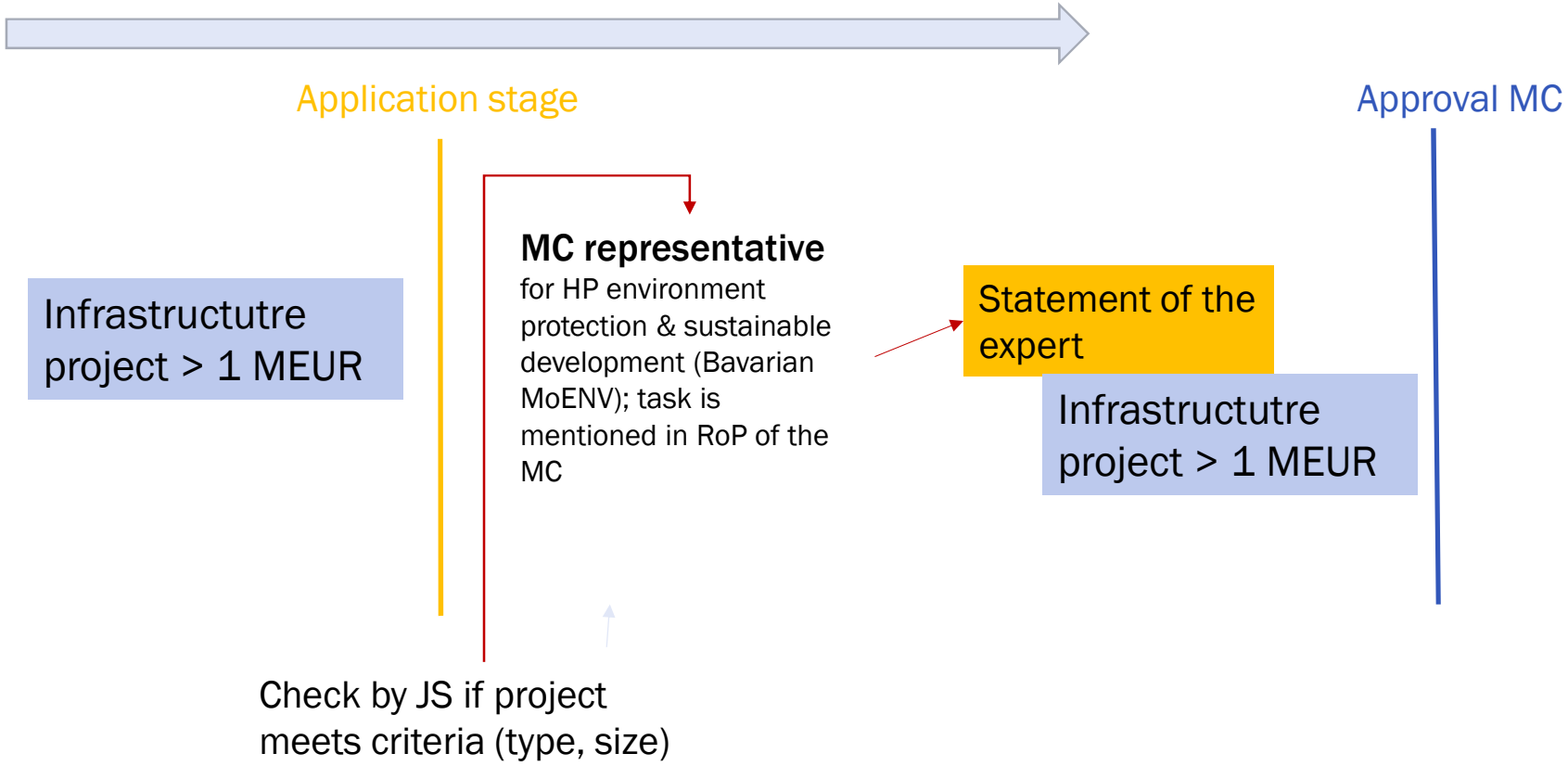
slido

#RESILIENCE

Questions - indicate name of a speaker to whom question is addressed

Austria – Bavaria - 1/2

Procedure is anchored in RoP; HP representative has mandate to ask for further information from applicant; low number of cases expected (3 to 5)



Austria-Bavaria – 2/2

Wording in the criteria for project selection ....

Climate resilience of infrastructure*

Projects with infrastructure investments with an expectable lifespan of at least five years and a planned investment volume of at least 1 MEUR total cost – or an expectably low resilience to climate change - have to be checked on the expectable impact of climate change.

The check of such projects, safeguarding climate resilience, will be done by

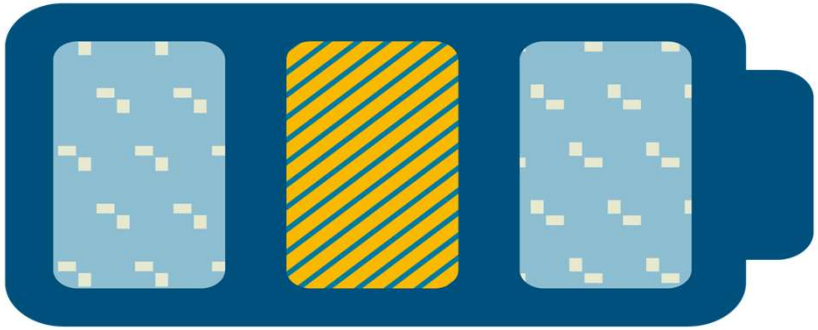
- *the regional coordination units and JS as part of the assessment at the application stage and*
- *the representative of an authority in charge of environment protection and climate providing expertise on it.*

Intended investments not ranked as sustainable infrastructure require a dedicated approval of the MC.

*Interreg Austria – Bavaria, Criteria for project selection, March 2022, p.9

Discussing options

What can we do at programme level?



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Simple and clear communication to applicants….

Ideas, examples…

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Takeaways .....

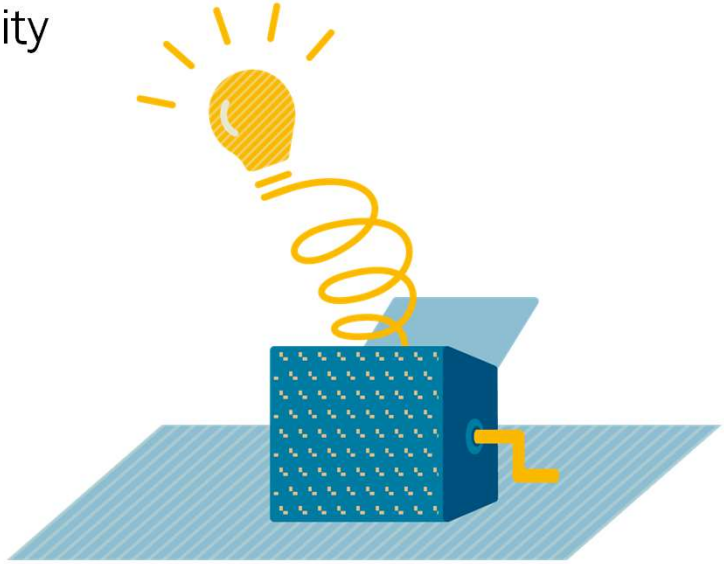
- Need for a pragmatic and proportionate approach tailored to programme specificities (e.g. expected types of infrastructure);
- Cutting red tape and unnecessary requirements for applicants by performing relevant environmental analysis at programme level and development of systemic approach toward expectable project types;
- Eliminating duplicities (check regarding coverage of climate resilience in relevant national laws on building, spatial planning, environment protection etc., i.e. integration of major aspects in the planning and design phase);
- Timeline of verification adjusted to the programme approach (if introduced as requirement at the application stage and a potentially high likelihood of non-approval it puts additional burden on too many applicants and slows down the assessment process, whereas if done too late it might lead to significant changes in the project and its budget and hence might in worst case necessitate changes to MC decisions;
- Introduction of financial or technical thresholds (financial, but not only – see examples from Austria - Bavaria and Czechia - Poland), could be a potential streamlining option.

Wrap-up and Closure

What's coming?

Resilience next steps

Separate thread and wiki in Investments in Interreg Community



What should we discuss next?
Menu:

1. Types of investments in Interreg – generic (definition, study);
2. Pre assessment and assessment phase;
3. State aid and investments;
4. Implementation phase;
5. Management verification;
6. Sustainability;
7. Other… - survey among the community members about further needs – September 2022.

Stay in touch!

Please fill in our evaluation survey – link in chat!

Thank you in advance for taking the time!

Join our e-Interreg Investments community

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Przemyslaw.Kniaziuk@interact-eu.net

Cooperation works

All materials will be available on:

www.interact-eu.net

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