Addressing the Transboundary Dimensions of the 2030 Agenda through Regional Economic Cooperation and Integration in Asia and the Pacific

Webinar «E-Resilience for Pandemic Recovery: Intercountry Consultations in Preparations to CICTSTI», 3 July 2020

COVID -19 Pandemic and E-resilience: enhancing digital, transport and energy infrastructure connectivity and inclusion in East and North and Central Asia: Single information platform, simulation models for development of smart corridors by sharing ICT infrastructure with transport and energy infrastructure

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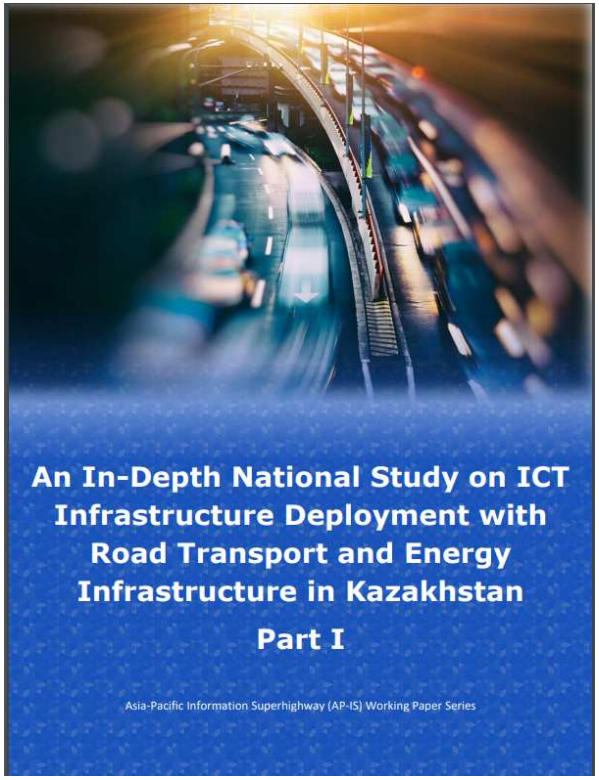
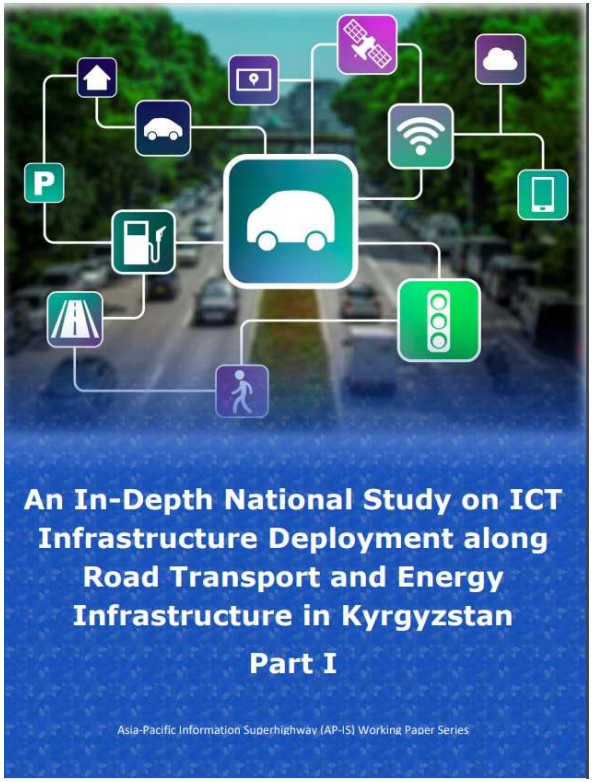
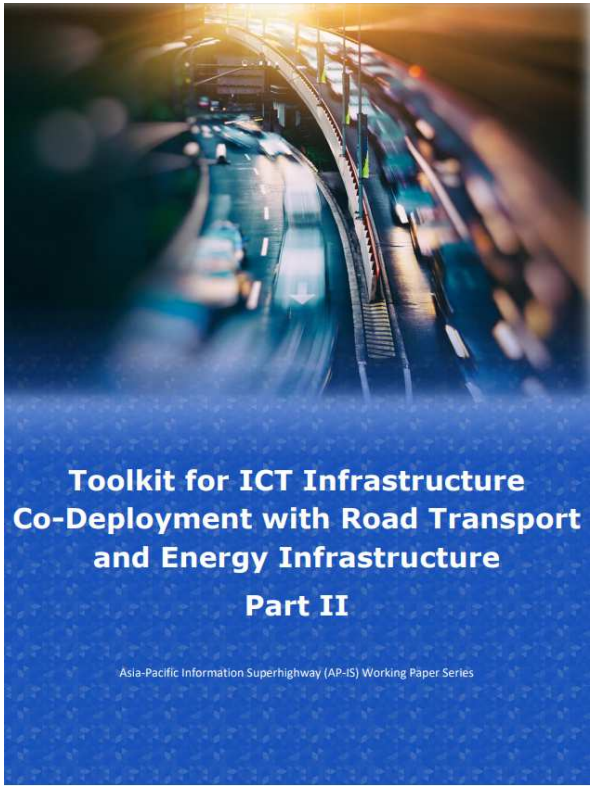
AN IN-DEPTH NATIONAL STUDY ON ICT INFRASTRUCTURE DEPLOYMENT ALONG ROAD TRANSPORT AND ENERGY INFRASTRUCTURE IN KAZAKHSTAN AND KYRGYZSTAN







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General Recommendations:

- Create a database or a single information portal with information on existing and planned infrastructure projects to facilitate coordination and cooperation for infrastructure co-deployment and sharing, and improve transparency

- Strengthen coordination and cooperation between departments of government agencies and private companies for ICT infrastructure co-deployment with road transport and energy infrastructure

- The single information portal could either be part of the government investment and construction portals, or created outside of the government framework

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Tools Developed:

- Methodology for determining the compatibility potential of ICT infrastructure co-deployment with road transport and energy infrastructure

- Methodology for assessing the economic efficiency of ICT infrastructure co-deployment with road transport and energy infrastructure. This methodology is based on the principle of comparing an indicator of the speed of a specific increment in value for cases of co-deployment and separate deployment of the corresponding infrastructures

- Methodology for identifying road transport and energy infrastructure projects that could include ICT infrastructure co-deployment

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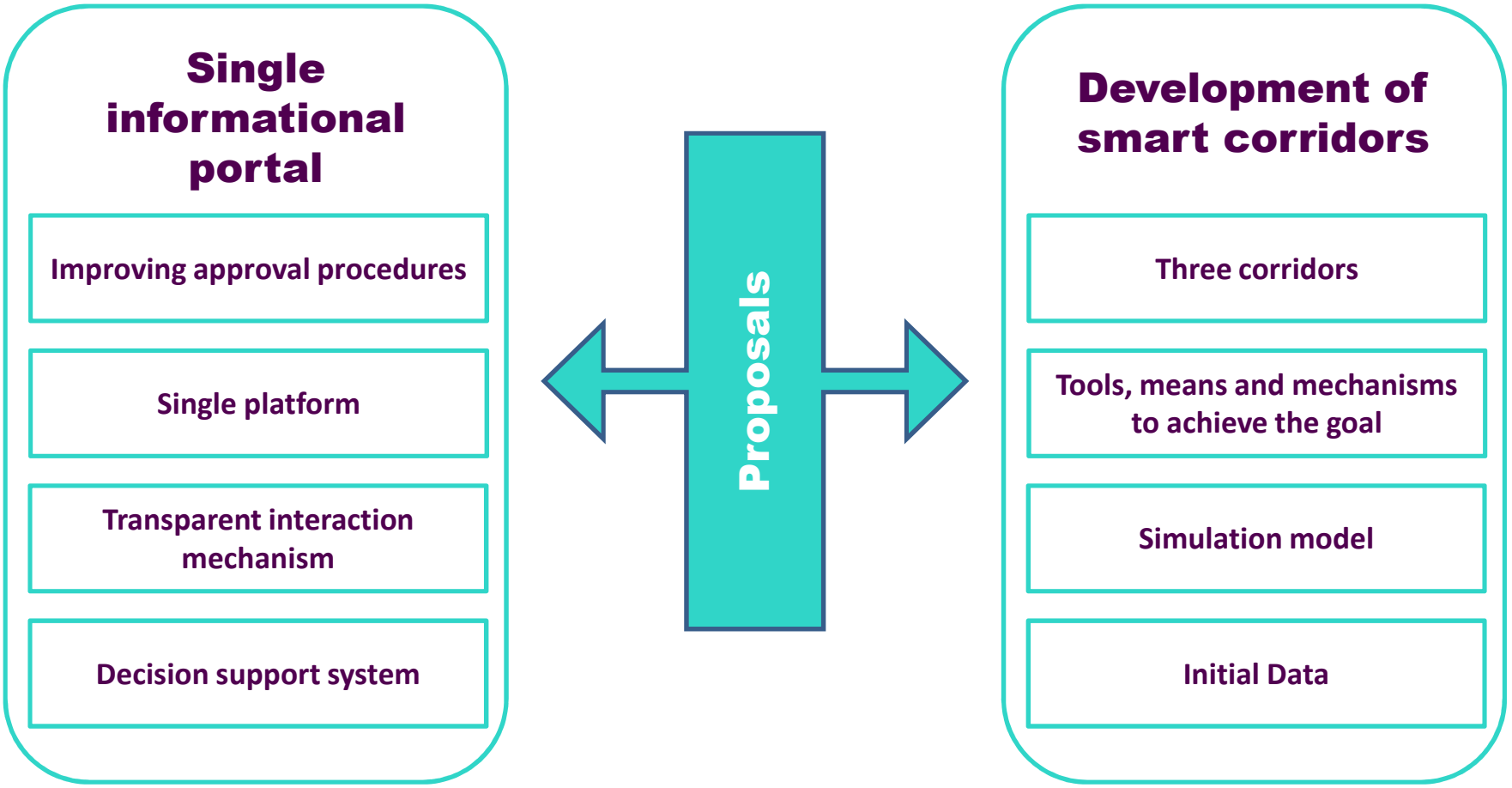
PROPOSALS FOR THE FUTURE STUDY



Single informational portal

SUGGESTIONS FOR IMPROVING HARMONIZATION PROCEDURES

Informational Portal

when planning the construction of new infrastructure networks, coordinate the new plan with ICT infrastructure

Informational Portal

during the construction and expansion of other infrastructure networks, representatives of ICT infrastructure can make their proposals for the construction of telecommunication networks

Government

mechanism for supporting telecommunication companies and enterprises of other infrastructure networks in the development and implementation of co-deployment plans

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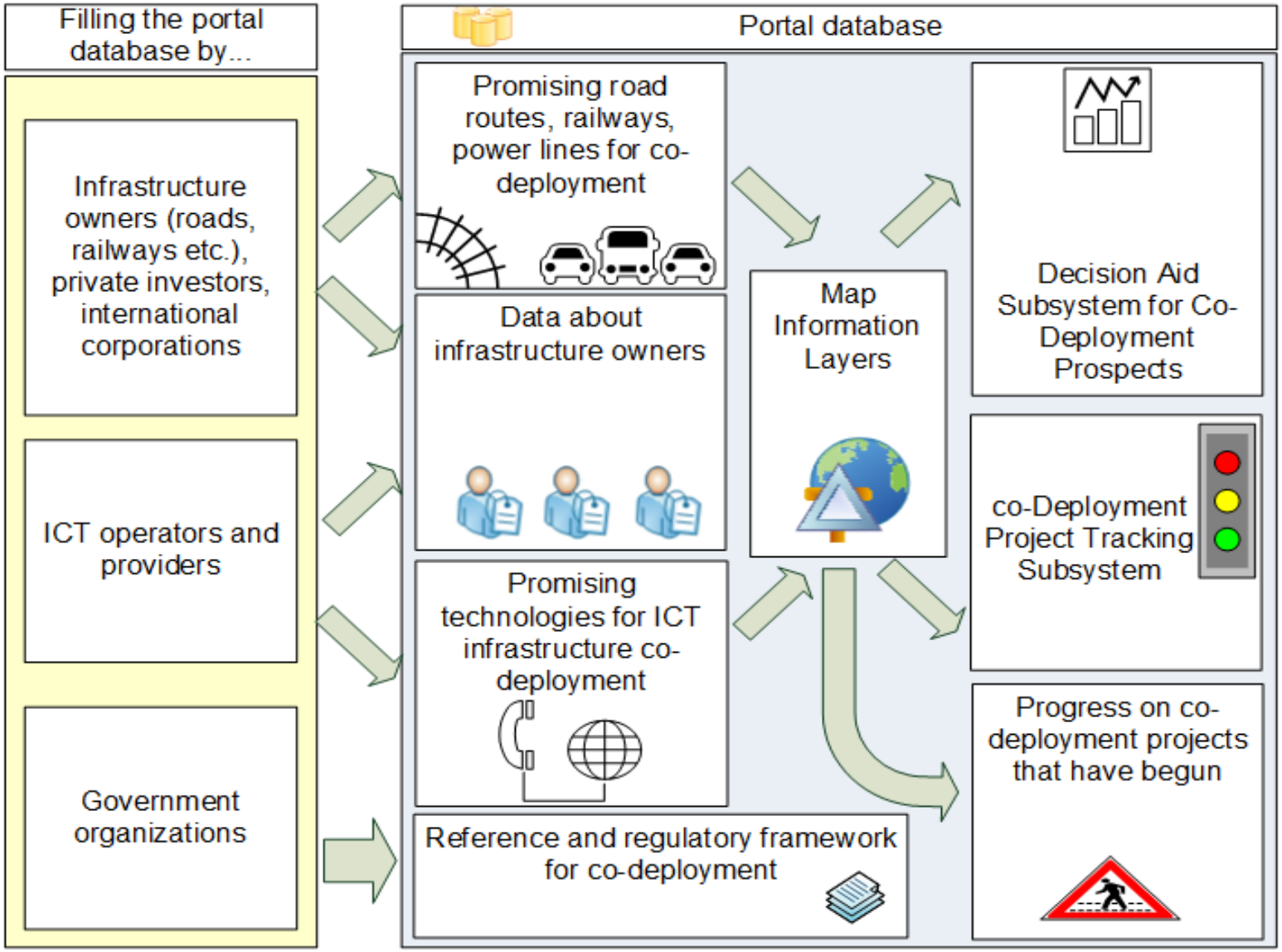
Generalized portal structure



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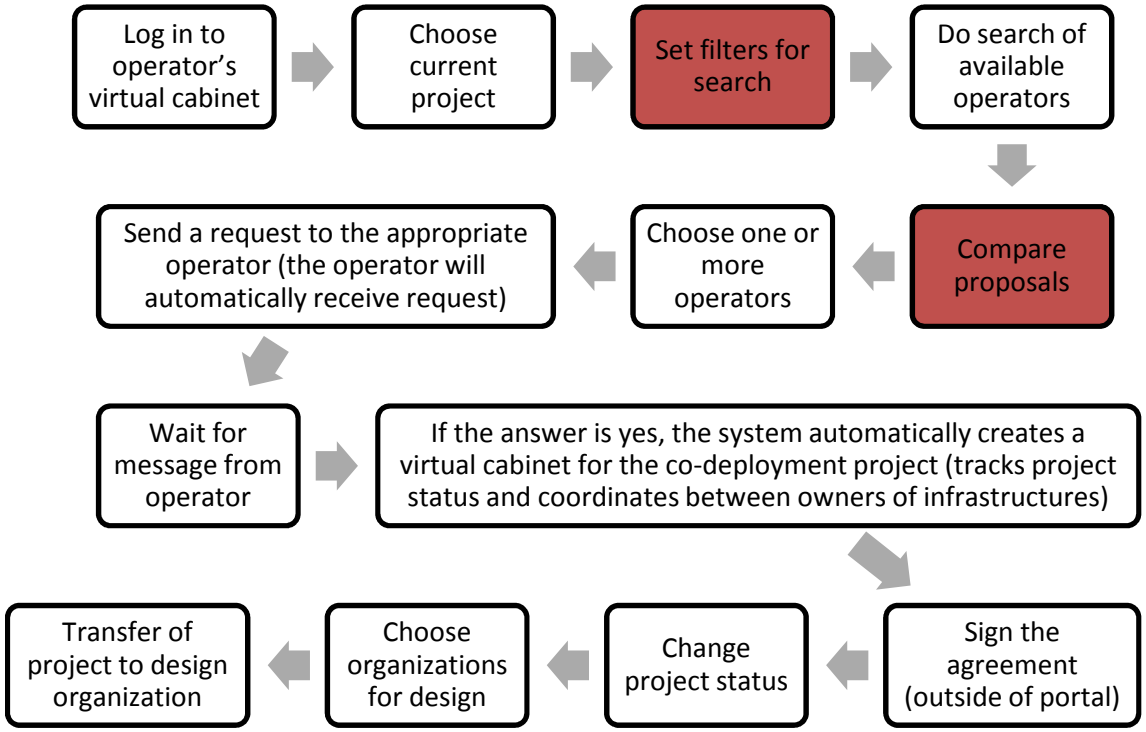
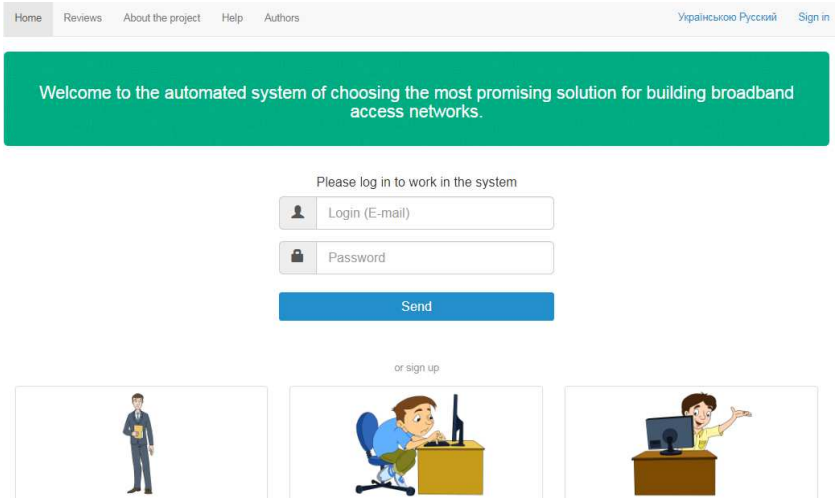
A generalized algorithm of actions for interacting with a single information portal



Single informational portal: Examples of Similar Systems

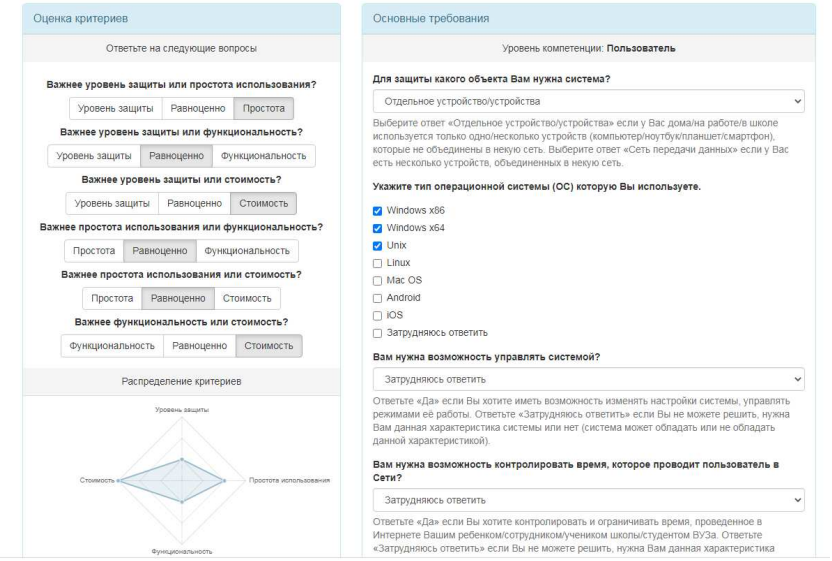


Automated system of choosing the most promising solution for building broadband access networks

[Broadbandcalculator.Online]

Automated system for choosing the best solution for a specific organization in the field of child online protection

[Contentfiltering.info]



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Single informational portal: key stages

1

- Development of a detailed portal structure
- Screen prototyping and detailed specification development
- Automation and verification of key procedures for all methodologies planned for use within the portal

2

- Software implementation of content management system
- Design, layout and creation of multimedia content (if necessary)

3

- Portal Beta version presentation
- Portal testing by all interested parties
- Implementation and popularization of the portal

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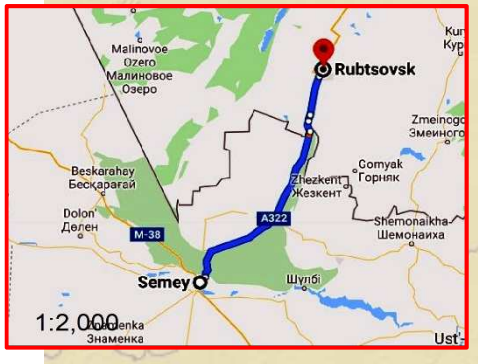
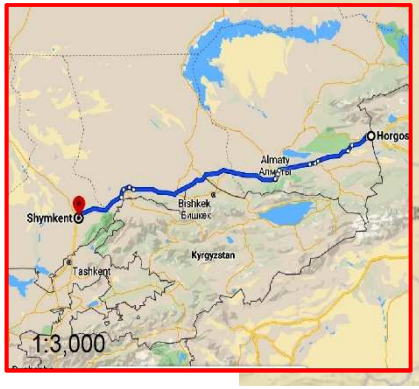
Development of smart corridors

Smart corridors Kyrgyzstan-Kazakhstan-Mongolia

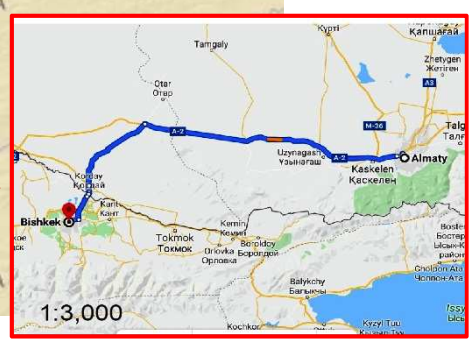
SEMEY-RUBTSOVSK





ALMATY-CHOLPON ATA

URZHAR-TACHENG



BISHKEK-ALMATY

Development of a calculation procedure and a simulation model to determine the development scenario of smart transport corridors

Tools	Means	Mechanisms
investment fund	tax benefits	BOT (Build, Operate, Transfer)
special economic zones	development budgets	BOOT (Build, Own, Operate, Transfer)
concessions	interest subsidies on loans	BTO (Build, Transfer, Operate)
venture capital funds	venture capital funds	BOO (Build, Own, Operate)
venture capital companies	crowdfunding platforms	BOMT (Build, Operate, Maintain, Transfer)
technology parks		DBOOT (Design, Build, Own, Operate, Transfer)
federal targeted investment programs		DBFO (Design, Build, Finance, Operate)
closed real estate mutual investment funds		

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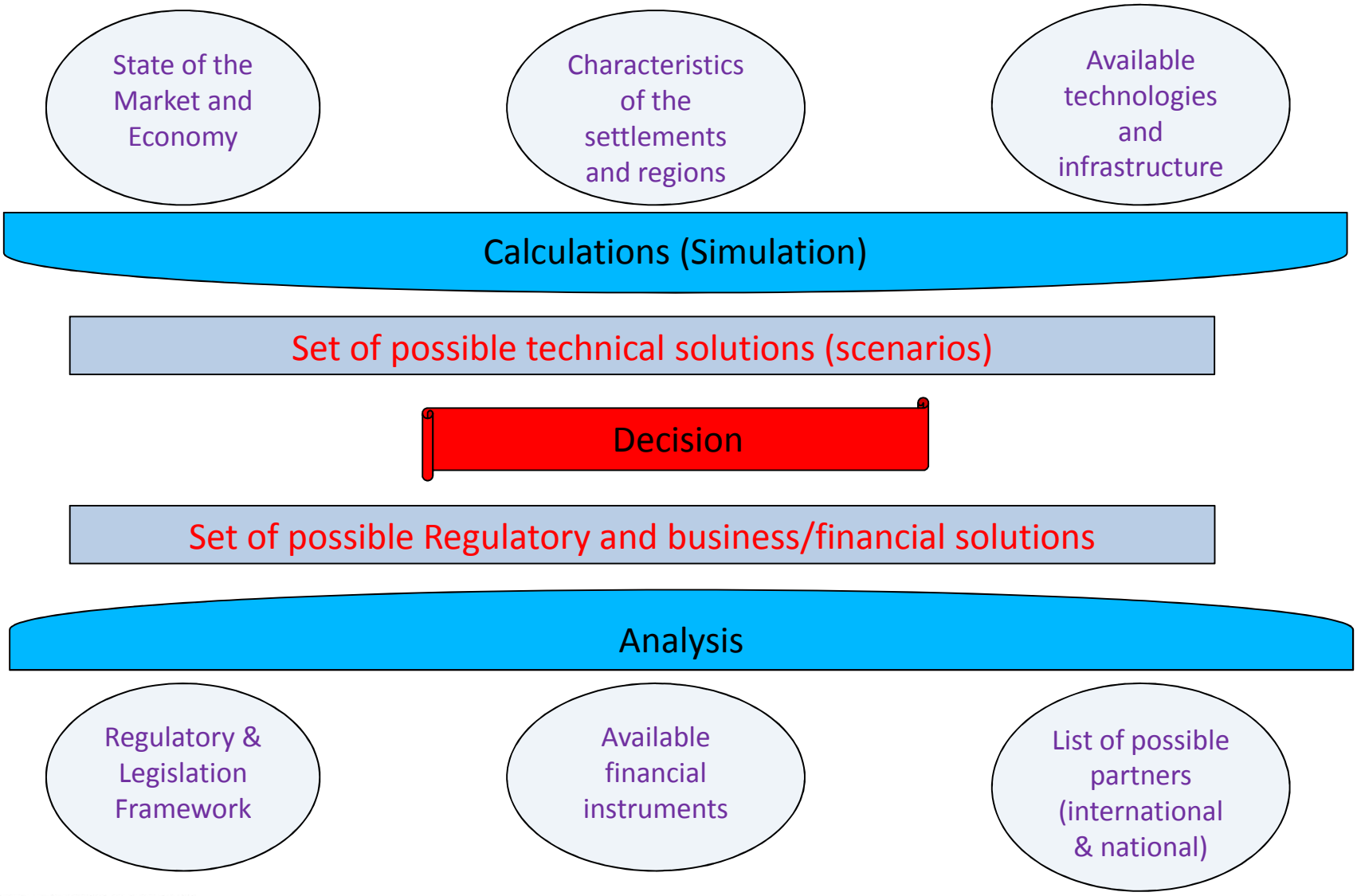
Development of a calculation procedure and a simulation model to determine the development scenario of smart transport corridors



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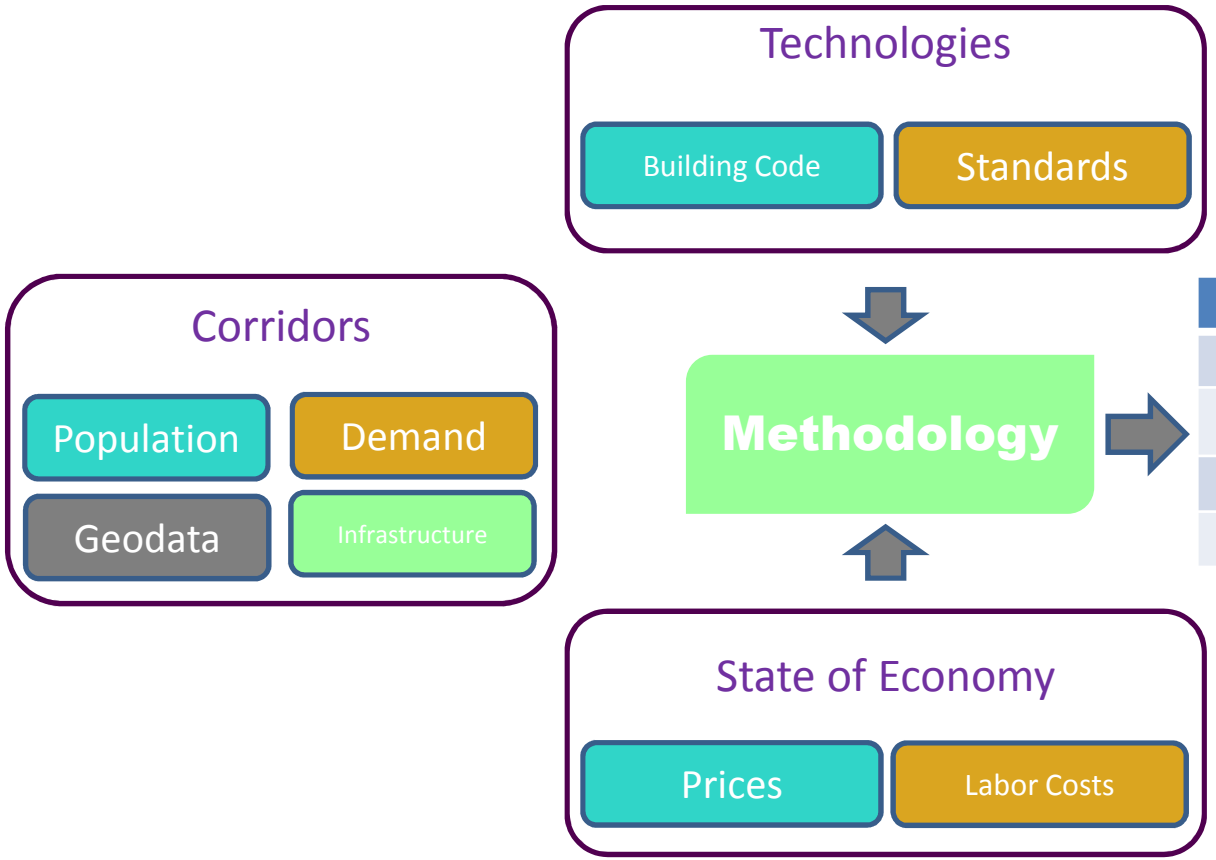

Scenarios	CAPEX	OPEX	NPV
Scenario 1	…	…	…
Scenario 2	…	…	…
…	…	…	…
Scenario N	…	…	…

Smart corridors Kyrgyzstan-Kazakhstan-Mongolia: key stages

1

- Analysis of selected prospective transport corridors, including previous studies
- Identification of factors influencing the corridor development scenario. Development of a universal parametric model of the corridor
- Development of a methodology for determining the most promising scenario for the development of the transport corridor

- Automation of the methodology for determining the most promising scenario for the development of the transport corridor
- Data collection (from open sources) and justification of variables for calculations

2

3

- Calculations for promising transport corridors, including identification of potential stakeholders, as well as their interests and a promising partnership scenario
- Visualization of results, preparation of conclusions and recommendations

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QUESTIONS?