



*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

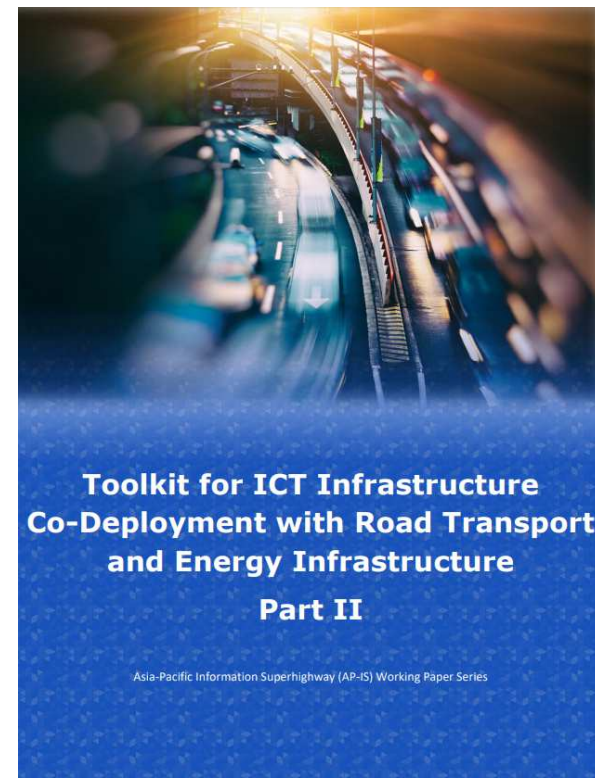
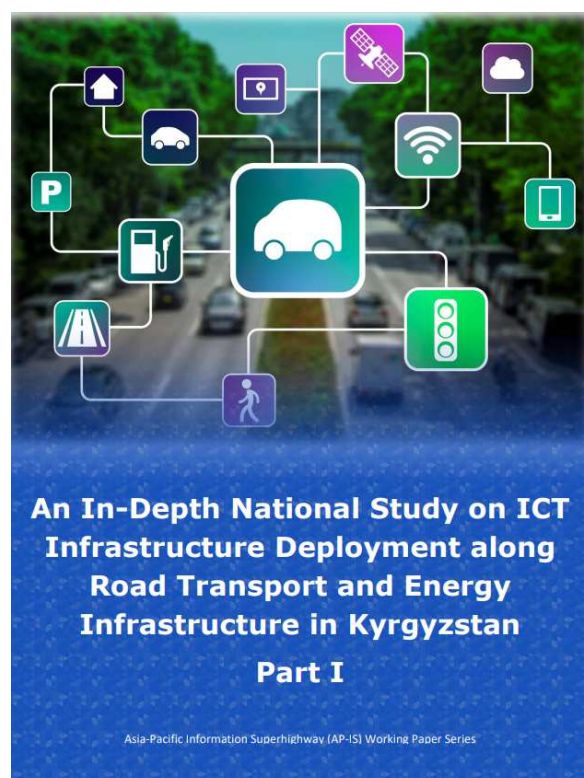
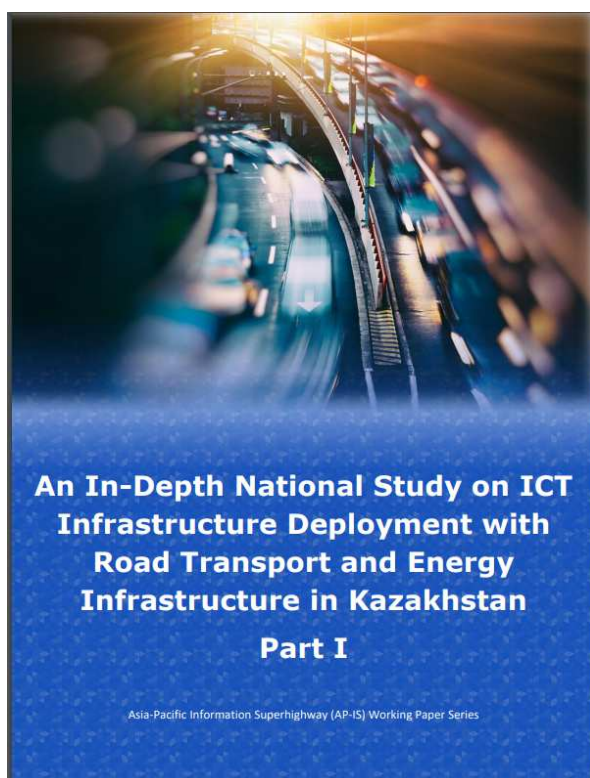
Rapporteur: **Vadym Kaptur**

Ph.D., Senior Researcher

Vice-Rector on Scientific work O.S. Popov ONAT

Vice-Chairman ITU-D Study Group 1

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



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

General Recommendations:

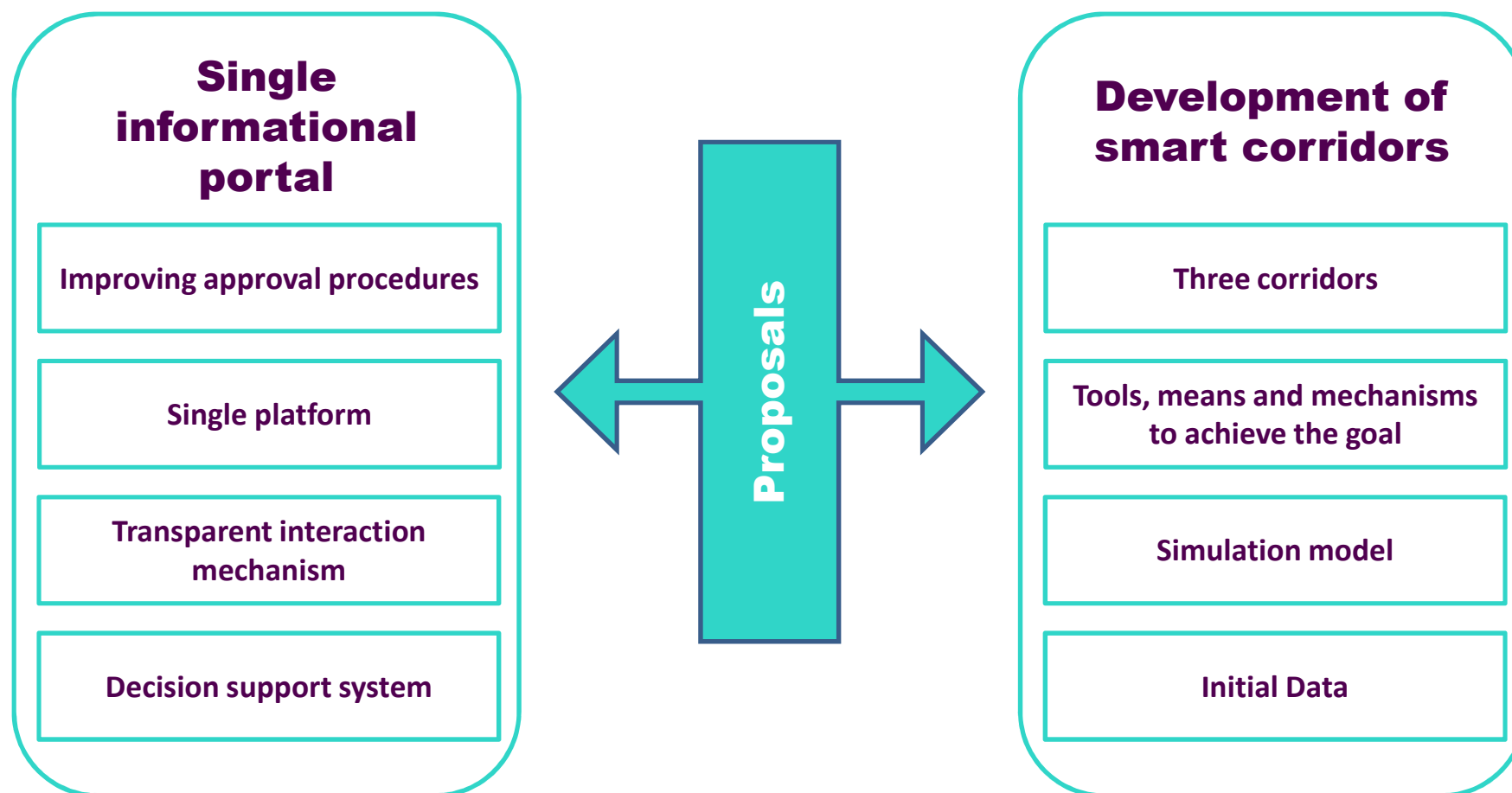
- Create a database or a single information portal with information on existing and planned infrastructure projects to facilitate coordination and cooperation for infrastructure co-deployment and sharing, and improve transparency
- Strengthen coordination and cooperation between departments of government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

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

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

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

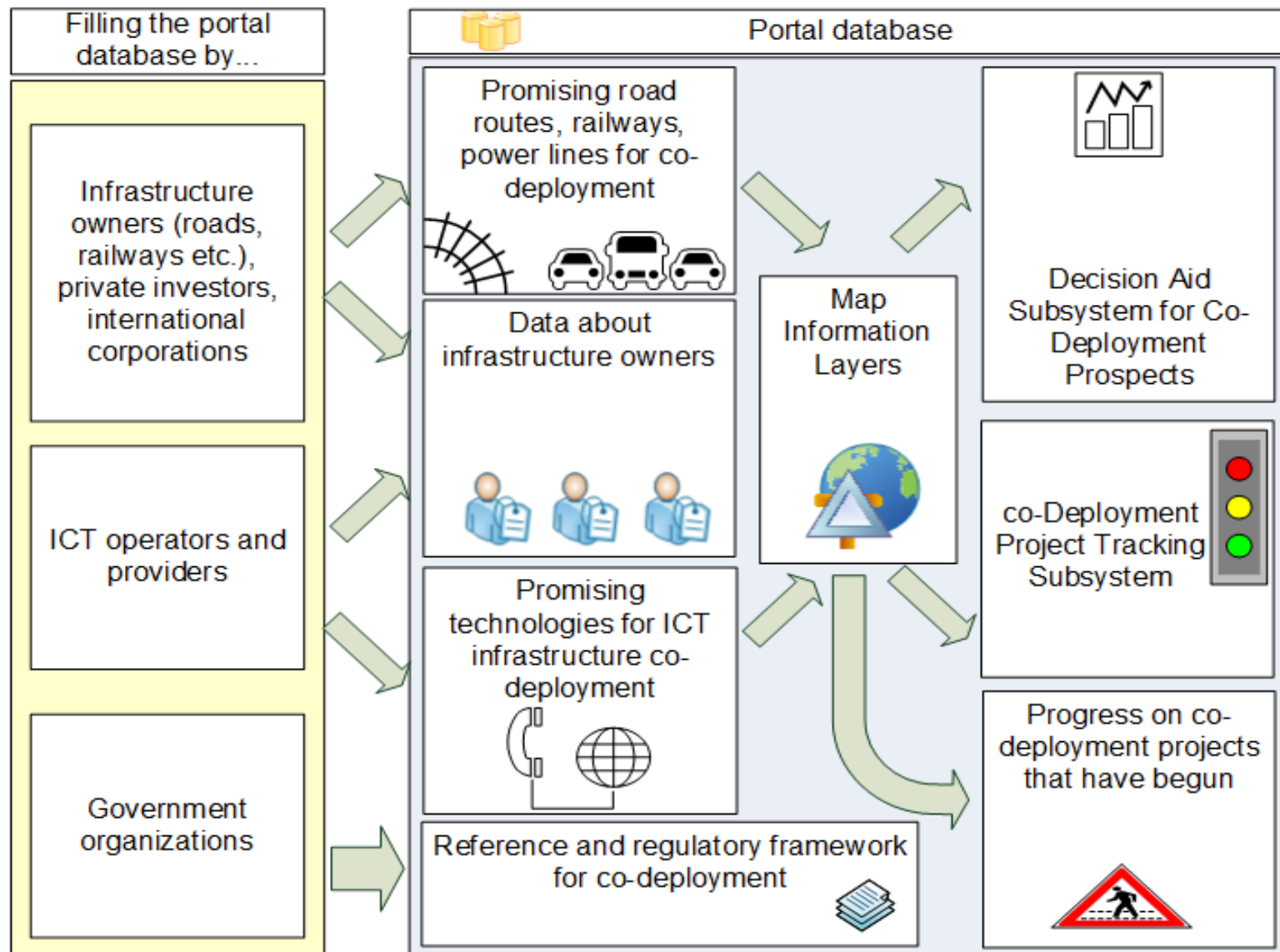
during the construction and expansion of other infrastructure networks, representatives of ICT infrastructure can make their proposals for the construction of telecommunication networks

Government

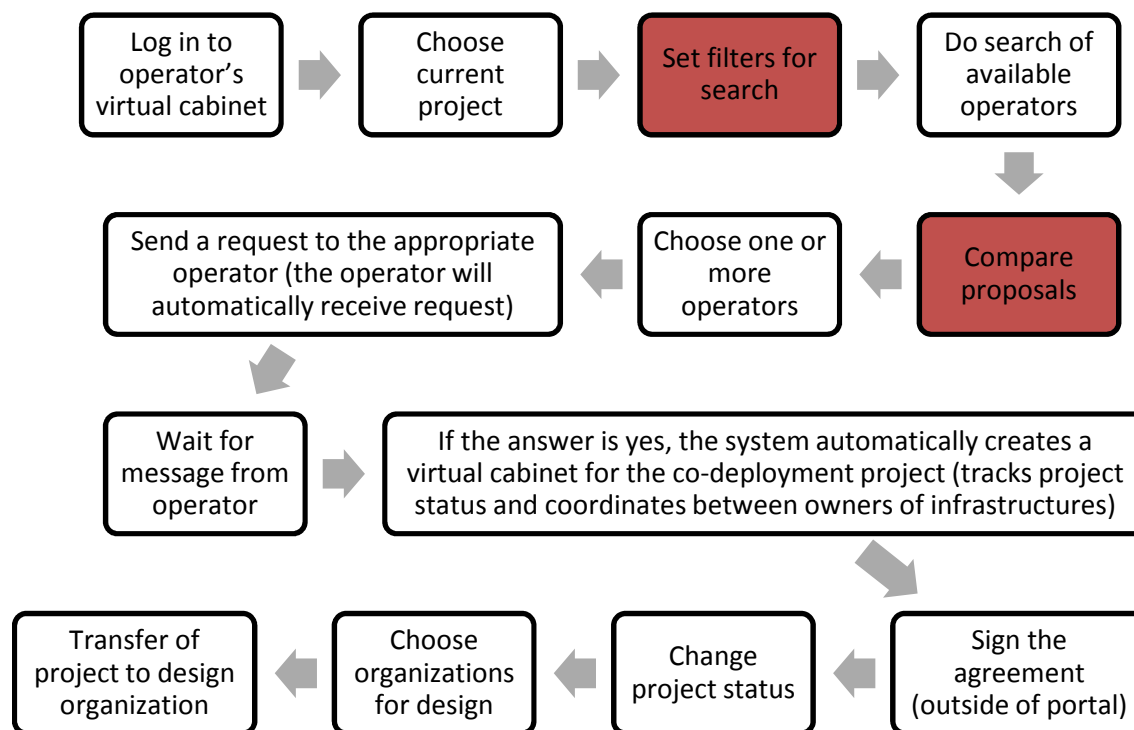
mechanism for supporting telecommunication companies and enterprises of other infrastructure networks in the development and implementation of co-deployment plans



Generalized portal structure



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



Single informational portal: Examples of Similar Systems

Home Reviews About the project Help Authors Українською Руськay Sign in

Welcome to the automated system of choosing the most promising solution for building broadband access networks.


Please log in to work in the system

Login (E-mail)

Password

Send

or sign up



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

Оценка критериев

Ответьте на следующие вопросы

Важнее уровень защиты или простота использования?

Уровень защиты Равноценно Простота

Важнее уровень защиты или функциональность?

Уровень защиты Равноценно Функциональность

Важнее уровень защиты или стоимость?

Уровень защиты Равноценно Стоимость

Важнее простота использования или функциональность?

Простота Равноценно Функциональность


Важнее простота использования или стоимость?

Простота Равноценно Стоимость

Важнее функциональность или стоимость?

Функциональность Равноценно Стоимость

Распределение критериев



Основные требования

Уровень компетенции: Пользователь

Для защиты какого объекта Вам нужна система?

Отдельное устройство/устройства

Выберите ответ «Отдельное устройство/устройства» если у Вас дома/на работе/в школе используется только одно/несколько устройств (компьютер/ноутбук/планшет/смартфон), которые не объединены в некую сеть. Выберите ответ «Сеть передачи данных» если у Вас есть несколько устройств, объединенных в некую сеть.

Укажите тип операционной системы (ОС) которую Вы используете.

☒ Windows x86

☒ Windows x64

☒ Unix

☐ Linux

☐ Mac OS

☐ Android

☐ iOS

☐ Затрудняюсь ответить

Вам нужна возможность управлять системой?

Затрудняюсь ответить

Ответьте «Да» если Вы хотите иметь возможность изменять настройки системы, управлять режимами её работы. Ответьте «Затрудняюсь ответить» если Вы не можете решить, нужна Вам данная характеристика системы или нет (система может обладать или не обладать данной характеристикой).

Вам нужна возможность контролировать время, которое проводит пользователь в Сети?

Затрудняюсь ответить

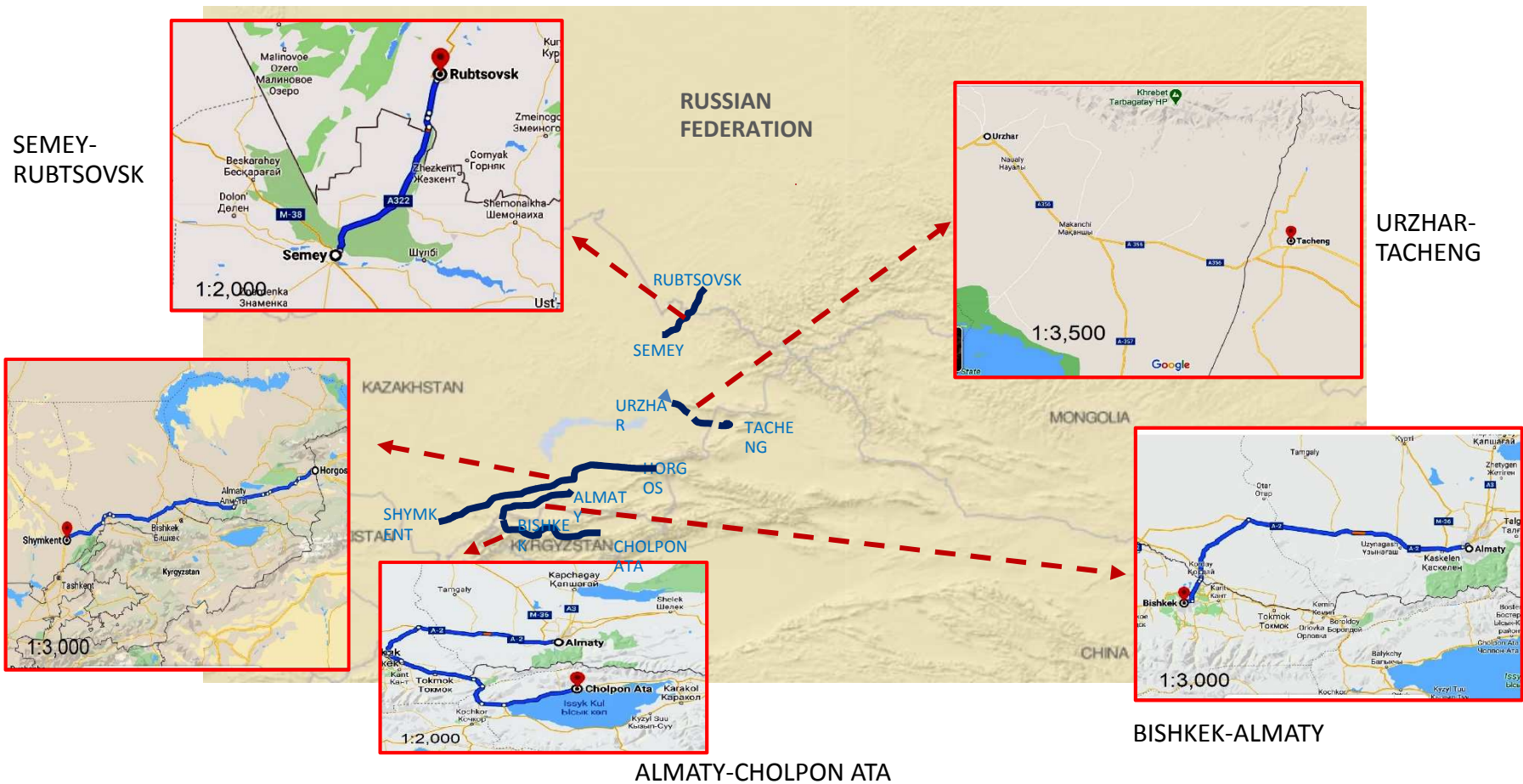
Ответьте «Да» если Вы хотите контролировать и ограничивать время, проведенное в Интернете Вашим ребенком/сотрудником/учеником школы/студентом ВУЗа. Ответьте «Затрудняюсь ответить» если Вы не можете решить, нужна Вам данная характеристика

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

Development of smart corridors

Smart corridors Kyrgyzstan-Kazakhstan-Mongolia



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

Tools

investment fund
special economic zones
concessions
venture capital funds
venture capital companies
technology parks
federal targeted
investment programs
closed real estate mutual
investment funds

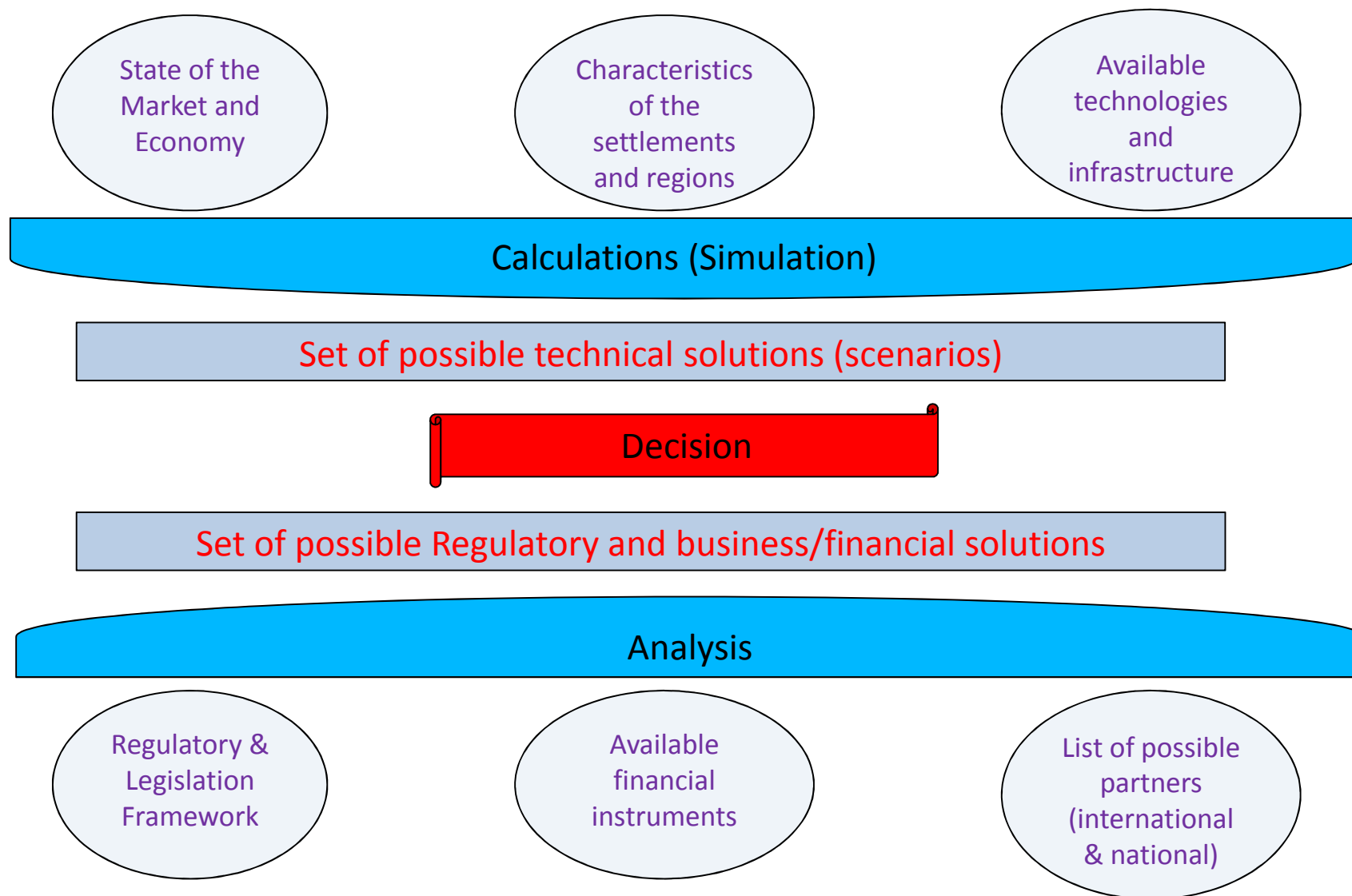
Means

tax benefits
development budgets
interest subsidies on loans
venture capital funds
crowdfunding platforms

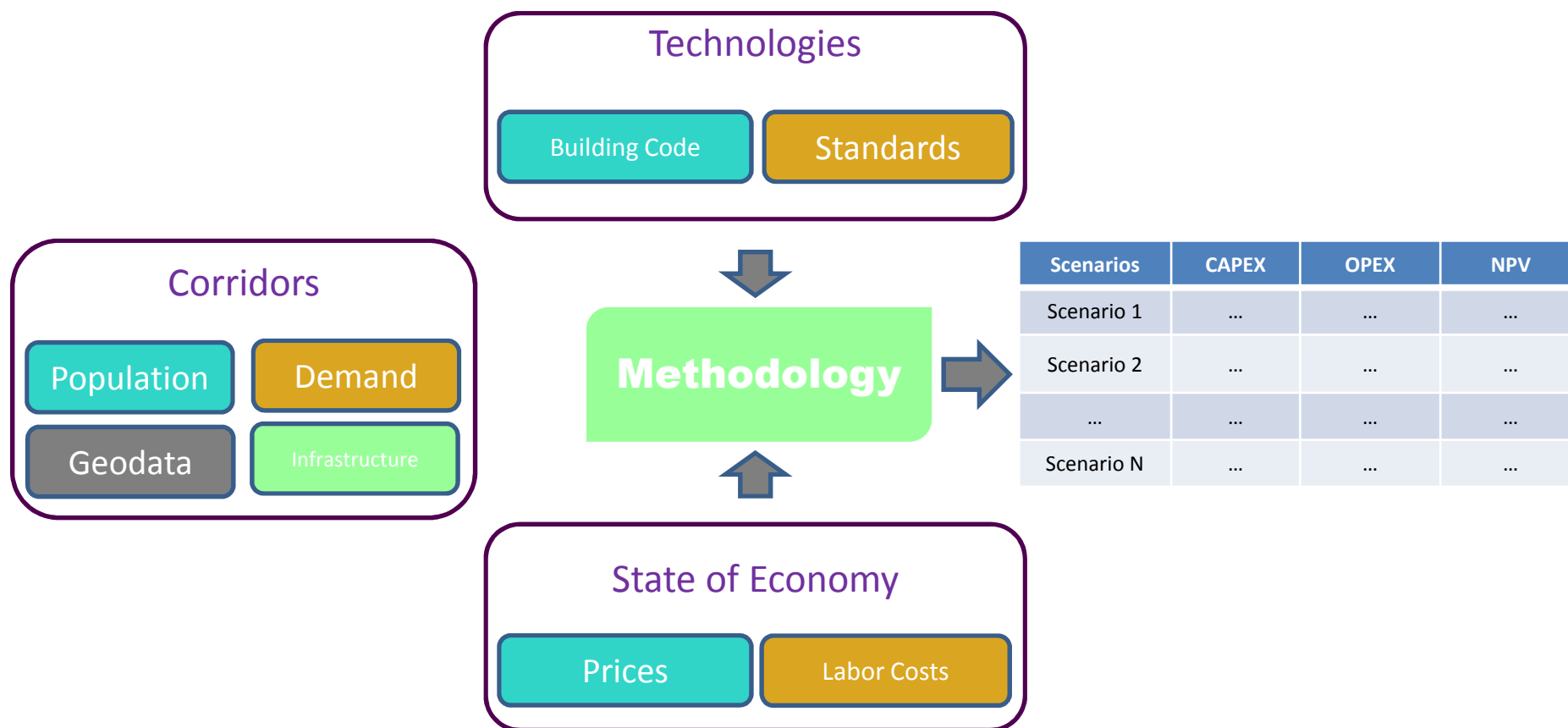
Mechanisms

BOT (Build, Operate, Transfer)
BOOT (Build, Own, Operate,
Transfer)
BTO (Build, Transfer, Operate)
BOO (Build, Own, Operate)
BOMT (Build, Operate,
Maintain, Transfer)
DBOOT (Design, Build, Own,
Operate, Transfer)
DBFO (Design, Build, Finance,
Operate)

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



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



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
- 2
 - 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
- 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



UNITED NATIONS
ESCAP

Economic and Social Commission for Asia and the Pacific

QUESTIONS?