

# STAKEHOLDER SURVEY ANALYSIS

Central Asia (incl. Kazakhstan, Kyrgyzstan,  
Mongolia, Tajikistan, Uzbekistan)



On behalf of:



of the Federal Republic of Germany

# Disclaimer

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This report summarises direct responses from national stakeholders across the project countries, providing average scores by country, sector, and for the region overall. These scores reflect the subjective perceptions of the respondents and are complemented by analytical interpretations from the authors. The findings do not represent the ITF's expert position on transport connectivity, resilience, sustainability, or digitalisation in the region.

It is important to note that the results of the stakeholders' self-assessment may vary based on individual or institutional perspectives and may not fully align with objective evaluations. Consequently, any benchmarking between countries based on these scores should be approached with caution, as the results are inherently subjective and may not provide a reliable basis for direct comparison.

# OUTLINE

- INTRODUCTION
- REGIONAL OVERVIEW
- INFRASTRUCTURE AND CONNECTIVITY
- SUSTAINABILITY
- RESILIENCE
- NATIONAL TRANSPORT PLANNING
- CONCLUSION



# INTRODUCTION



# About ITF

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The International Transport Forum (ITF) is an intergovernmental organisation with 69 member countries. It acts as a think tank for transport policy and organises the Annual Summit of transport ministers. The ITF is the only global body that covers all transport modes. It is politically autonomous and administratively integrated with the OECD.

The ITF works for transport policies that improve people's lives. Our mission is to foster a deeper understanding of the role of transport in economic growth, environmental sustainability and social inclusion and to raise the public profile of transport policy.

The ITF organises global dialogue for better transport. We act as a platform for discussion and pre-negotiation of policy issues across all transport modes. We analyse trends, share knowledge and promote exchange among transport decision makers and civil society. The ITF's Annual Summit is the world's largest gathering of transport ministers and the leading global platform for dialogue on transport policy.

# About SIPA-T

The Sustainable Infrastructure Programme in Asia (SIPA) is a four-year programme supporting the development of cleaner infrastructure in Central and Southeast Asia.

It is led by the OECD and funded by the International Climate Initiative (IKI) of Germany's Ministry for the Environment.

The ITF leads the transport component of the SIPA programme (SIPA-T). It aims to provide transport policy guidance with a focus on the efficiency and sustainability of transport networks at both national and regional levels.

SIPA-T outputs include two regional studies that explore opportunities to improve the connectivity, sustainability, and resilience of freight transport systems in Central and Southeast Asia.

Access more information:

<https://www.itf-oecd.org/sustainable-infrastructure-programme-asia-transport>

## Sustainable Infrastructure Programme in Asia – Transport (SIPA-T)

### Central Asia

Central Asia  
regional study

Uzbekistan  
national study

Mongolia  
national study

### Southeast Asia

Southeast Asia  
regional study

Philippines  
national study

# Acknowledgements

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This stakeholder survey analysis was prepared by Emrecan Erdogan (independent consultant) and Varun Shankar (independent consultant). Ainur Tleuova (independent consultant) coordinated the survey distribution and data collection.

At the ITF, Yaroslav Kholodov, Nicholas Caros, Guineng Chen and Takahiro Nomoto edited and provided feedback on the draft analysis report. Takahiro Nomoto assisted with data processing and visualisation. Mila Iglesias and Apostolos Skourtas provided administrative support.

Renaud Madignier (independent consultant) created the visual identity for the overall project.

Yaroslav Kholodov is the project manager, and Xiaotong Zhang is the project coordinator of the SIPA Central Asia regional study. Nicholas Caros is the project manager, and Diego Botero is the project coordinator of the SIPA Southeast Asia regional study. Guineng Chen is the lead of the overall SIPA-T research programme.

This analysis report is part of the SIPA programme led by the OECD. The ITF would like to thank Virginie Marchal, Peline Atamer, Douglas Herrick, Soojin Jeong, and the entire OECD SIPA team for their valuable contributions and collaboration on this project.

# Survey objectives

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**Project overview:** The project involves a comprehensive review of the current state of regional freight transport and an examination of policy commitments aimed at enhancing the connectivity, sustainability, and resilience of freight transport.

**Survey objective:** The primary objective of the survey is to collect information and viewpoints from local stakeholders with experience in regional freight transport.

**Survey findings and implications:** The survey responses contribute to the project outputs in the following ways:

- **Contextual information and gap identification:** Responses regarding current regional freight transport challenges and practices provide valuable contextual information. This allows the project team to identify existing gaps in the freight transport systems.
- **Quantitative modelling inputs:** Data sources provided by respondents serve as critical inputs for the quantitative modelling process, enhancing the accuracy and reliability of the model.
- **Policy and infrastructure scenario design:** Insights on opportunities to improve the freight transport systems inform the design of alternative policy and infrastructure scenarios. These scenarios are subsequently tested within the model to evaluate their potential effectiveness.



# Survey structure

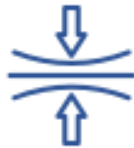
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The survey was designed to cover the following four key areas:



## Connectivity

This section assesses current policy directions, highlights key bottlenecks, identifies priorities for future development, and recognises the region's top five critical infrastructure projects.



## Resilience

This section delves into understanding the vulnerabilities and threats faced by freight transport systems, aiming to identify the most challenging risks that can disrupt the flow of goods and services.



## Sustainability

This section critically assesses the environmental impact of regional freight transport, aiming to identify key challenges and opportunities for enhancing sustainability practices and ensuring long-term environmental stewardship.



## National transport planning

This section delves into the intricate dynamics of freight transport planning, examining hurdles in policy formulation, project prioritisation, financing mechanisms, private investment mobilisation, and the roles of NGOs.

# Survey intended audience

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## **Governments**

Policymakers responsible for transport, logistics, infrastructure, commerce, trade, economic development, or international relations at all levels of government

Public operators and SOEs: ports, airports, railroads, logistics, postal services

Customs and border crossing agencies

Regulatory bodies



## **Private Sector**

Private sector freight carriers, freight forwarders, logistics providers and customs brokers

Industry associations of shippers and forwarders

Trade financing and lending partners



## **International / Regional organisations**

International or regional development and cooperation organisations (e.g. CAREC, ASEAN)

# Survey design and processing

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## Survey structure:

- 22 questions (multiple choice and open-ended).
- Focus on connectivity, sustainability, resilience, and freight planning.

## Country analysis:

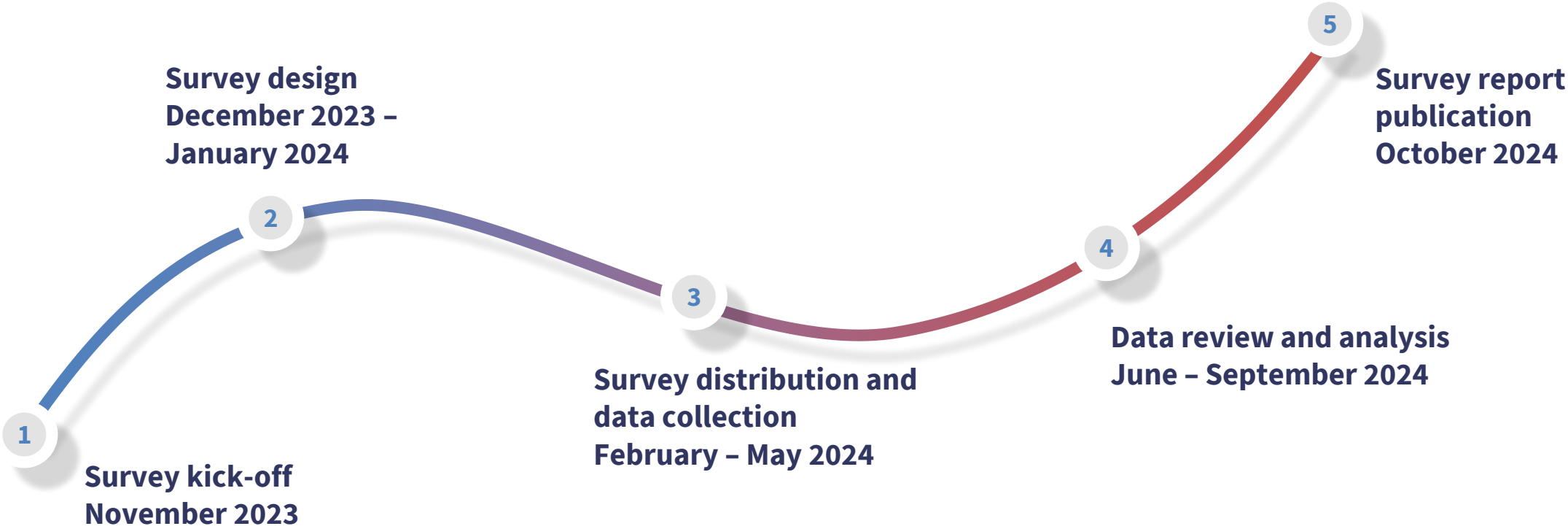
- Calculate the average response rate for each question across all countries.
- Identify common patterns in the region.
- Determine differentiated priorities by country.

## Sectoral analysis:

- Compare the public sector with the private sector. The public sector is represented by the average of the two aggregate response rates from governments and SOEs.
- Identify differences and common perspectives.
- Limited to Kazakhstan, Mongolia and Uzbekistan due to insufficient responses from the private sector in other countries.

# Survey timeline

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# REGIONAL OVERVIEW



# Section summary

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**Analysis of response quantity:** examining the number of responses obtained from each country, highlighting contributions from both the public and private sectors. This analysis will offer insights into the level of engagement and involvement from diverse stakeholders, aiding in understanding the breadth of perspectives.

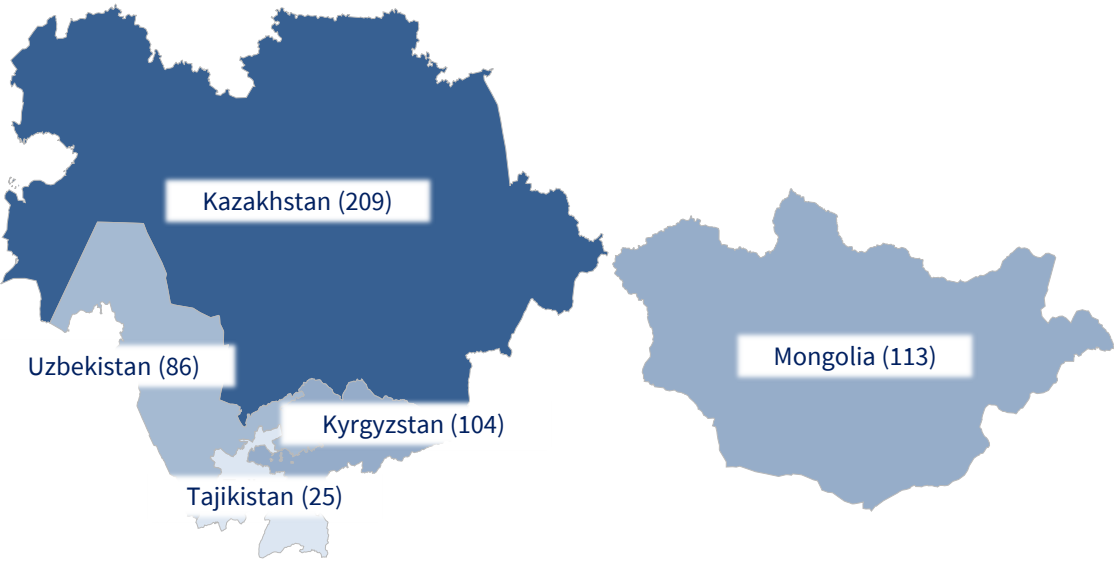
**Assessment of freight transport state:** evaluating the present condition of freight transport in each country, with respondents assigning overall ratings to their country's freight sector.

**Insight on policy prioritisation:** prioritising different performance indicators selected by countries to evaluate upcoming projects and policies. This insight sheds light on the criteria used by nations to gauge the effectiveness and feasibility of future endeavours, facilitating informed decision-making and resource allocation.

**Discussion on environmental and resilience tools:** examining environmental and resilience methodologies employed to assess potential projects across the region's countries. This discussion highlights the strategies and tools utilised to ensure sustainability and adaptability in infrastructure development, contributing to long-term resilience and environmental stewardship.

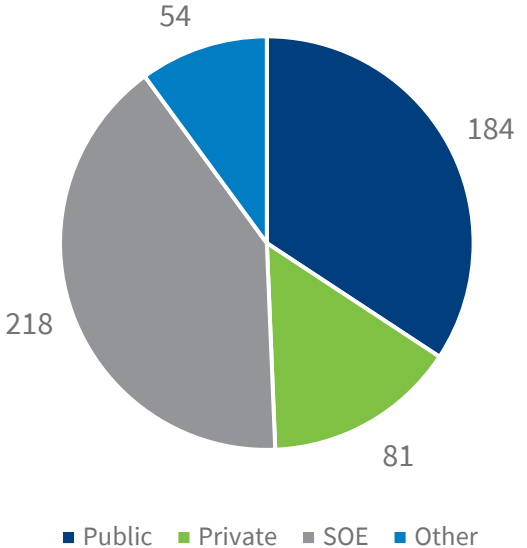
# Regional overview of responses

## Response countries



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## Respondents

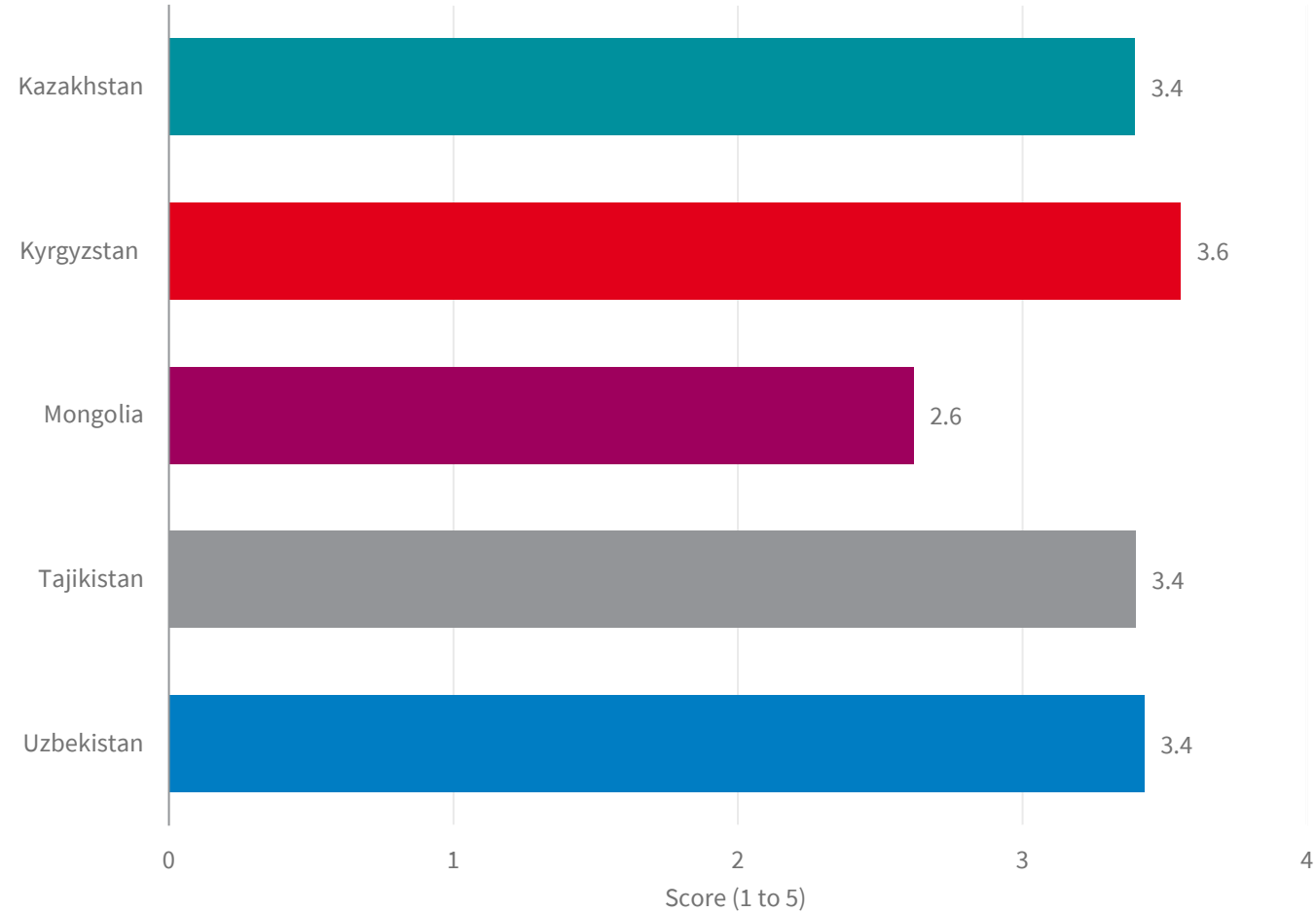


The regional average data presented for each figure in this analysis only accounts for these five countries: **Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, and Uzbekistan.**

About 75% of respondents are from the Public Sector + State Owned Enterprises (SOEs).

# Current state of freight transport connectivity

Connectivity Score



Overall, freight connectivity is a multi-faceted concept related to the efficiency and effectiveness of infrastructure and services that facilitate the movement of goods across various transport modes within and between countries.

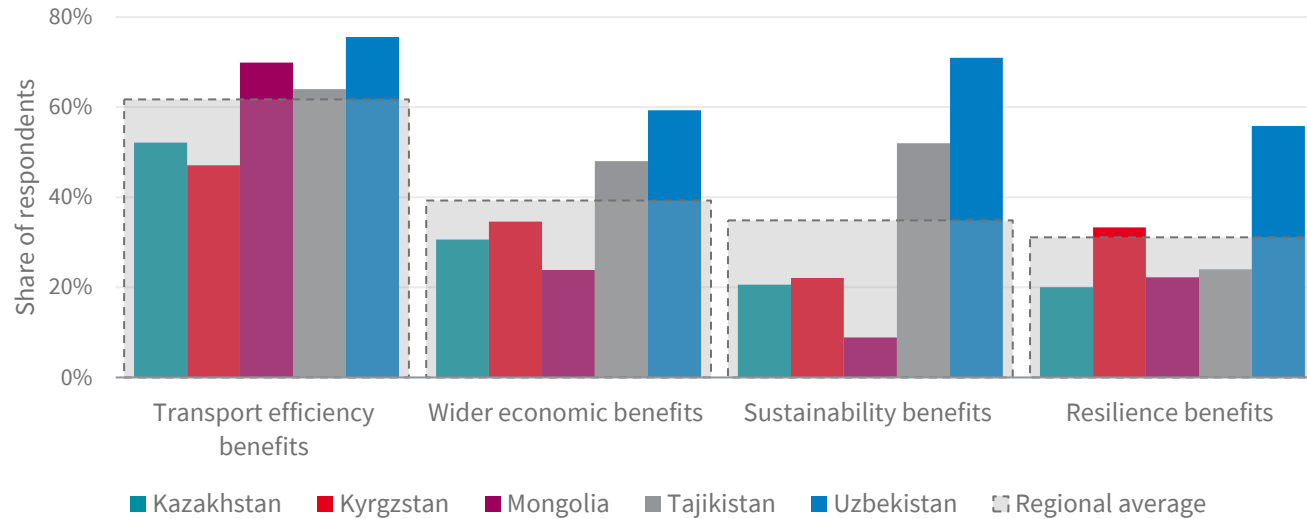
The region's average self-assessed connectivity score is 3.3. **Mongolian** stakeholders evaluate their current connectivity well below this average.

While **Kazakhstan, Uzbekistan, and Tajikistan** received the same score for connectivity, **Kyrgyzstan** scored slightly better than the others.

**Mongolia's** low connectivity score can be attributed to challenges stemming from its vast geography, low population density, inadequate infrastructure and harsh climatic conditions, resulting in remote regions and rural communities frequently finding themselves isolated.



# Criteria for policy and project prioritisation



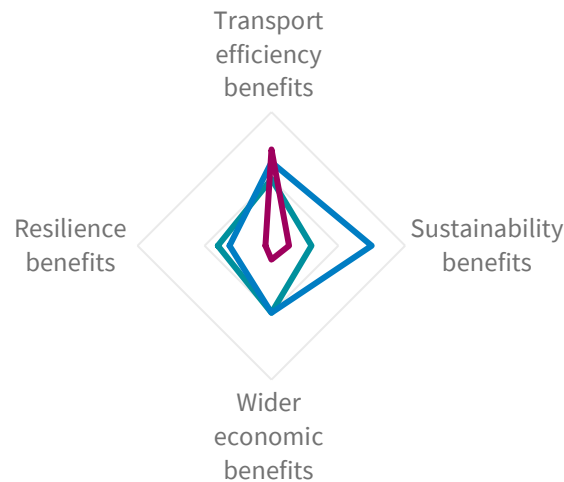
Transport efficiency is the number one priority for all countries, whereas resilience is the least applied criterion by countries.

**Uzbekistan** is above average in each criterion and shows a more balanced approach, demonstrating the country's ambition for future freight infrastructure projects and policies.

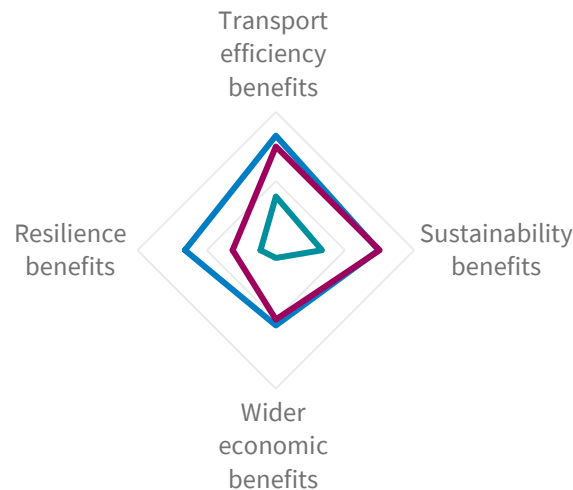
**Tajikistan and Uzbekistan** prioritise sustainability over wider economic benefits.

**Kyrgyzstan** surpasses the regional average in resilience benefits, highlighting the importance of resilience criteria in policy prioritisation for relatively smaller countries with higher vulnerabilities.

## Public sector



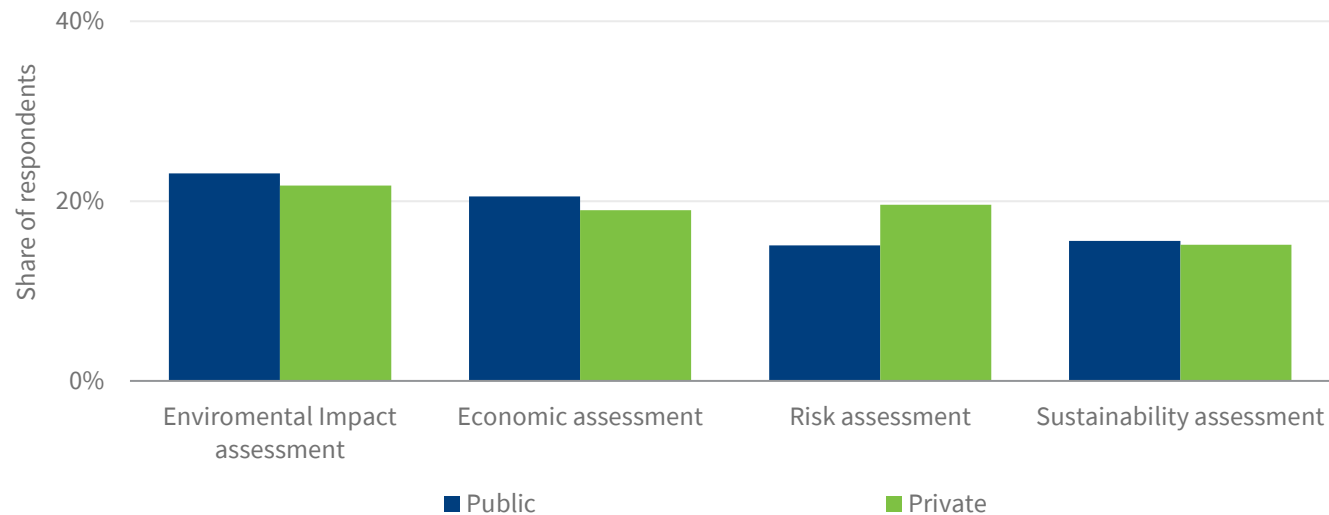
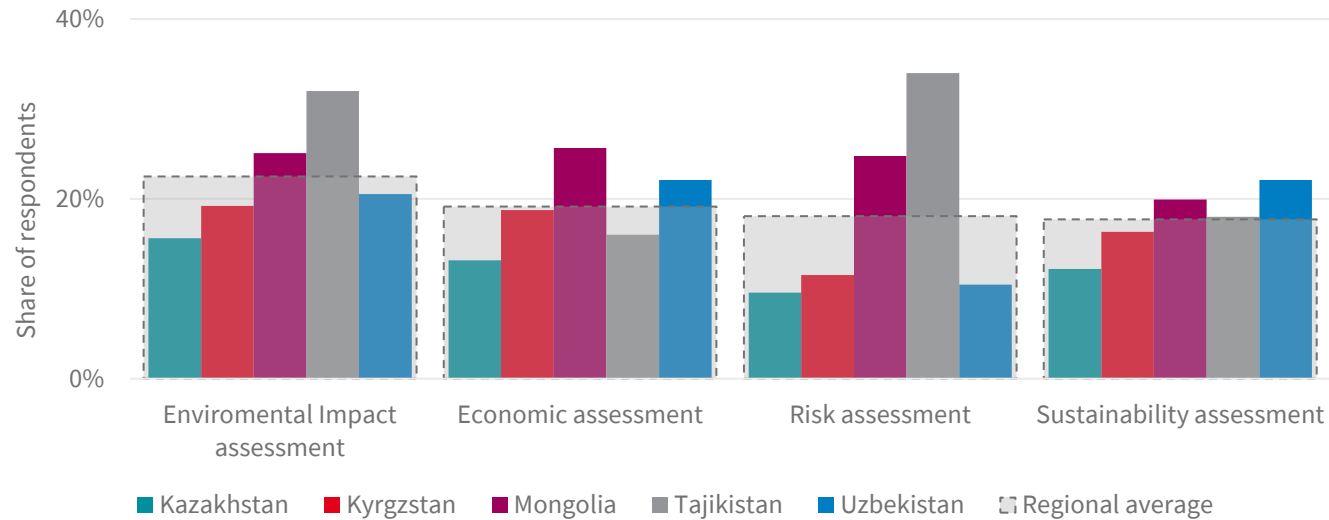
## Private sector



**In Mongolia**, public sector representatives focus solely on transport efficiency benefits, while private sector representatives take a more balanced approach.

**In Uzbekistan**, the public sector representatives heavily focus on the sustainability indicator, while the private sector considers resilience as an important indicator for future projects.

# Environmental and resilience tools for project evaluation



Environmental and resilience tools are underutilised in the evaluation of future projects in the region, with an average usage rate of around 20%.

- Environmental impact assessment is the most used tool across countries, with approximately 32% of respondents in **Tajikistan** and 25% in **Mongolia** indicating their use of it for future projects.
- Economic assessment tools, such as cost-benefit analysis (CBA), are used by approximately 28% of respondents. However, natural capital accounting is only used by around 10%.
- 22% of respondents use risk assessment tools, such as those for climate and natural disaster risks. **Tajikistan and Mongolia** stand out in the region for their higher usage of these tools.
- Sustainability assessment tools include the integration of environmental and social governance (ESG), as well as monitoring, reporting, and verification (MRV). **Kyrgyzstan and Kazakhstan** exhibited a lower than average in this aspect.

The private sector, driven by its business mentality, utilises risk assessment tools more frequently, while the public sector demonstrates greater use of all other tools.

# CONNECTIVITY



# Section summary

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**Identification of major bottlenecks:** understanding the primary challenges and obstacles encountered in freight transport across the region provides valuable context for addressing critical areas for improvement. By pinpointing these bottlenecks, effective solutions can be provided to enhance overall connectivity in the region.

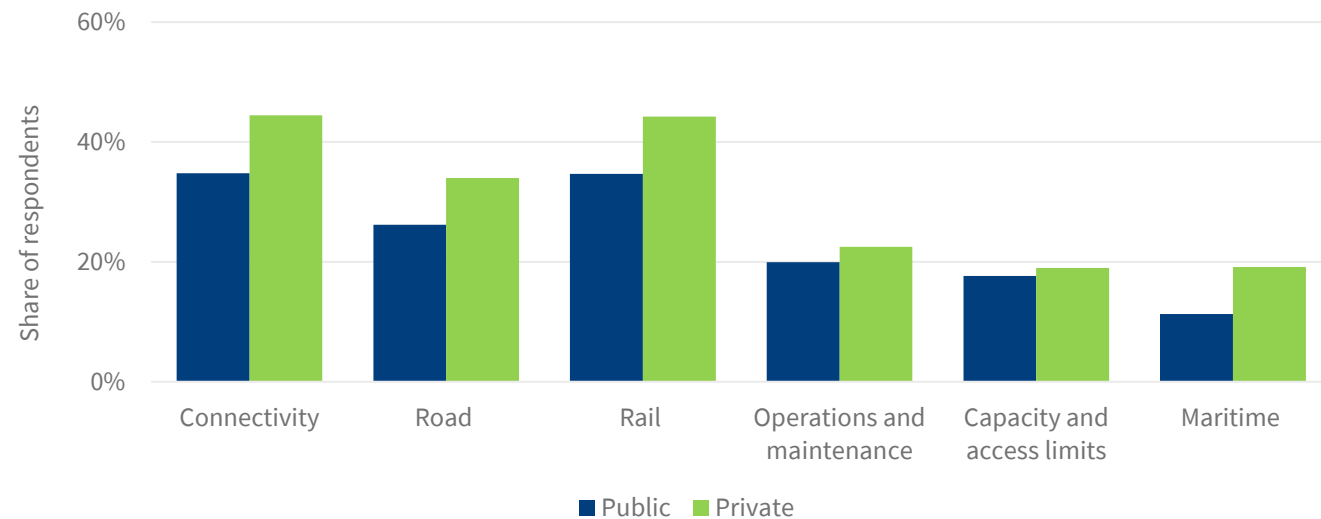
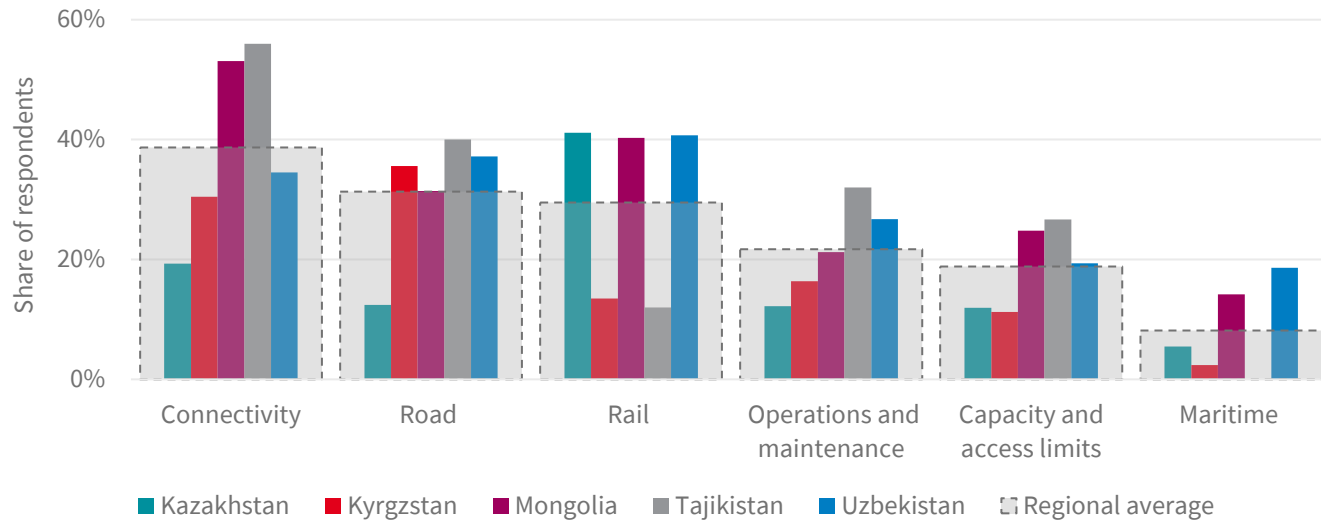
**Assessment of connectivity policies:** exploring the operational efficiency policies already integrated into organisations' freight transport strategies offers valuable insights into existing approaches and their effectiveness. This enables the identification of different mentalities of countries and sectors, informing future policy adjustments or enhancements.

**Recommendations for prioritised freight Infrastructure policies:** gathering recommendations for prioritised freight infrastructure policies highlights areas where future policies can yield the greatest impact. By understanding stakeholders' perspectives on the most pressing needs, decision makers can align strategies with key priorities to optimise resource allocation.

**Comparison of current and recommended policies:** comparing the current policies with recommended ones allows for a comprehensive evaluation of potential gaps or discrepancies. This comparative analysis sheds light on areas where adjustments are needed to bridge the gap between existing practices and desired outcomes.

**Identification of top 5 infrastructure projects:** highlighting the top five infrastructure projects deemed critical for the region offers valuable insights into the infrastructure development priorities of stakeholders. Understanding which project areas are considered most important in which country enables the optimisation of resources and efforts on initiatives with the highest potential for regional impact.

# Major freight transport bottlenecks in the region



The survey indicates that the primary bottleneck for Central Asian countries lies in connectivity. Specifically, two interconnected issues within connectivity emphasise the importance of focusing on Border Crossing Points (BCPs):

- Border crossing delays
- Overcomplicated custom procedures

Stakeholders in different countries are focusing on specific strategies:

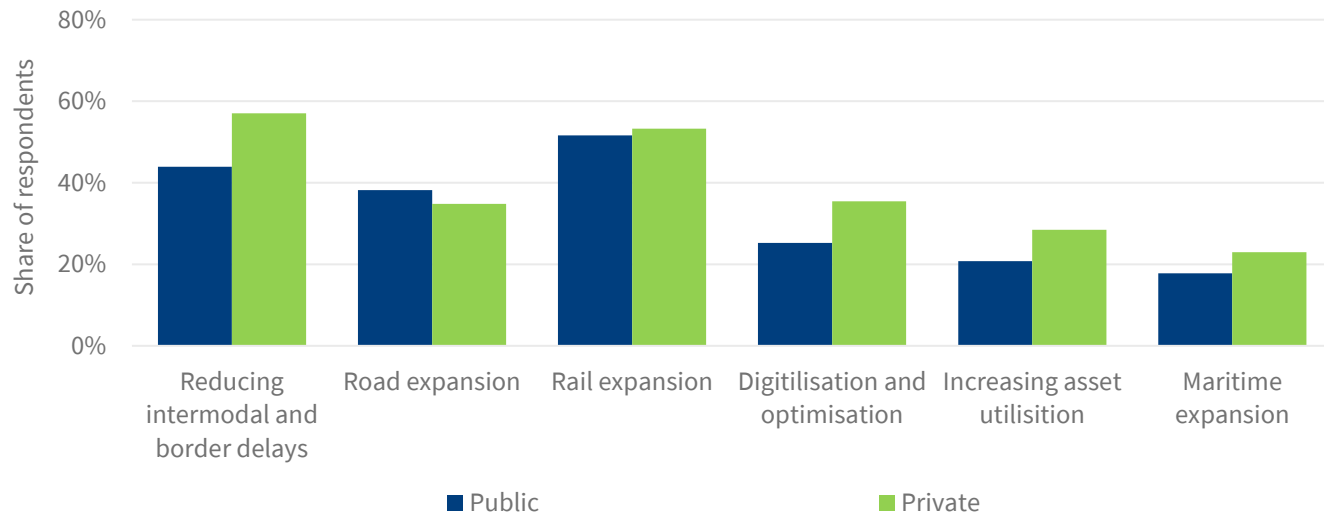
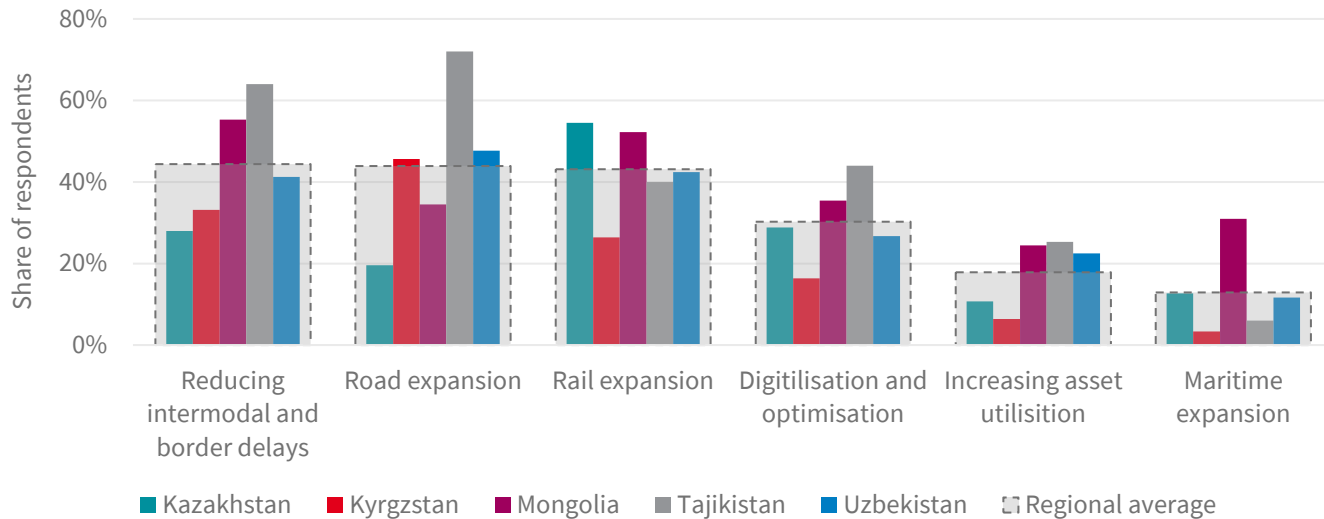
- **Kyrgyzstan and Tajikistan** prioritise road sector improvements.
- **Kazakhstan and Mongolia** focus on improvements in the railway sector.
- **Uzbekistan** assigns more balanced importance to road sector and railway sector improvements.

Despite being landlocked, **Uzbekistan and Mongolia** express great concern regarding maritime sector improvements, particularly maritime congestion and shortage or poor condition of vessels, due to their heavy reliance on neighbouring countries' ports, such as those in China and Russia, for critical import and export trade.

**Tajikistan and Uzbekistan** indicate the necessity of improvements in the operations and maintenance of roads, railways, and terminals.

The private sector is generally concerned with regional bottlenecks, including poor network maintenance and a shortage of intermodal terminals.

# Current freight connectivity policies



Reducing intermodal and border delays is a top priority in the region. While **Tajikistan and Mongolia** prioritise border crossing delays, **Kyrgyzstan** emphasises delays at intermodal transfer points.

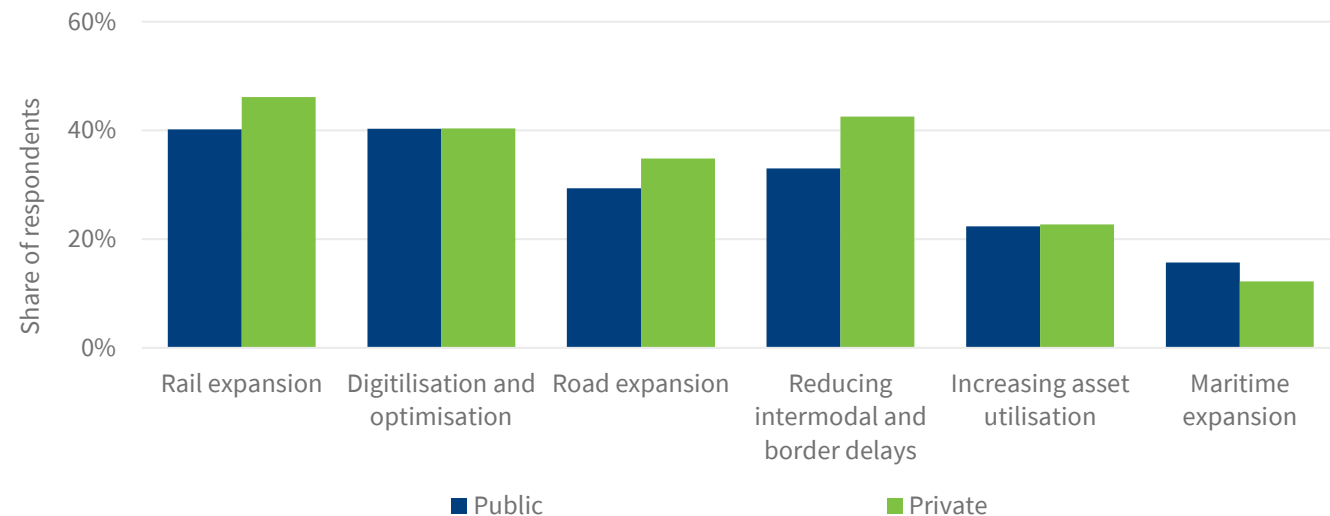
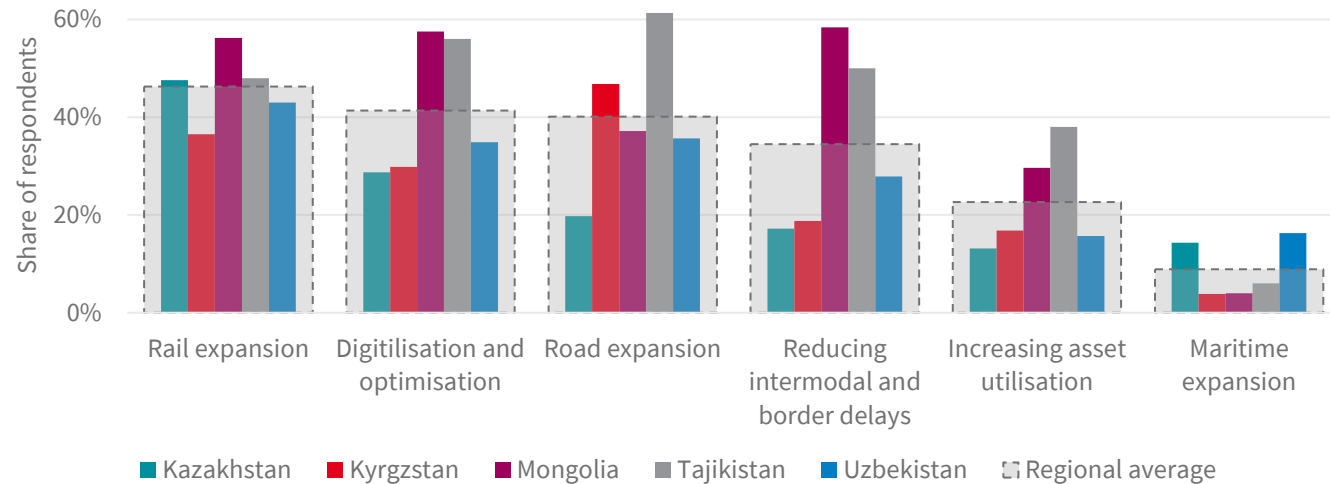
Enhancing digital connectivity and automation is strongly supported in the region, with **Tajikistan and Mongolia** reporting their commitment levels above the regional average.

The division between those favouring road expansion, namely **Tajikistan and Kyrgyzstan**, and those favouring railway expansion, such as **Kazakhstan and Mongolia**, is again evident. **Uzbekistan** follows a more balanced policy between rail and road.

Asset utilisation and maritime expansion lag behind other operational efficiency policies. However, there is a notable emphasis on investing in containerisation and high-capacity vehicles in **Uzbekistan and Tajikistan**.

The private sector has a strong focus on policies for digitisation, optimisation, reducing delays, and increasing asset utilisation. In contrast, the public sector emphasises road expansion more than the private sector.

# Desired freight connectivity policies



Improving digital infrastructure for freight management is a priority for future regional investments, alongside rail and road expansion. However, maritime expansion is not considered a priority for potential future policies.

Although **Tajikistan** still prioritises road expansion over railway expansion for the future, the difference is diminishing, indicating **Tajikistan's** recognition of the importance of railway expansion for long-term needs.

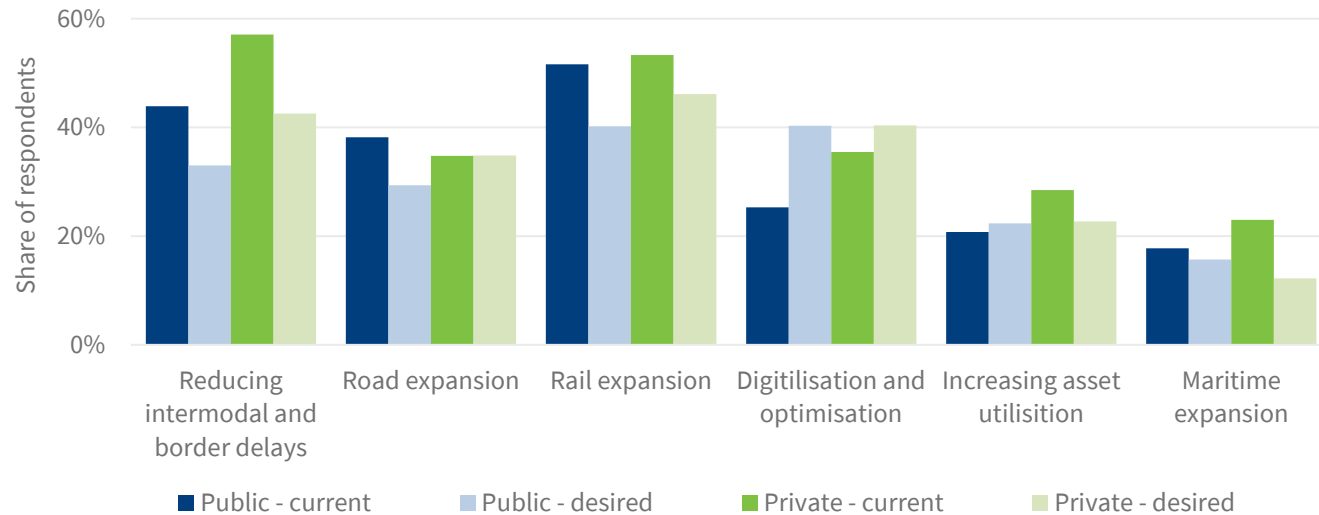
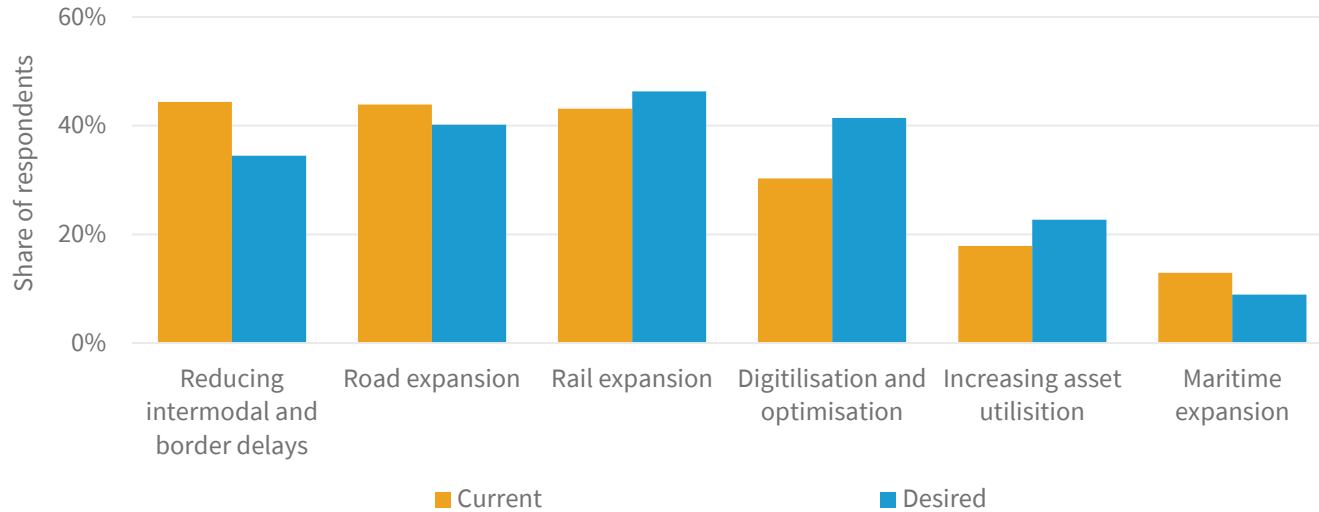
**Kazakhstan's** future policies underscore maritime expansion. This can be associated with the anticipated increase in cargo volume at Caspian Sea ports, necessitating future investments in the maritime sector in **Kazakhstan**.

In **Uzbekistan**, specific attention is also given to inland port expansion.

Increasing asset utilisation is a high priority only for **Tajikistan and Mongolia**. **Mongolia** focuses on increasing intermodal terminal capacity, while **Tajikistan** emphasises warehouse and storage facility expansion.

The private sector places more emphasis on reducing border and intermodal delays, as well as rail expansion, over the public sector. Apart from these, future considerations for freight infrastructure policies are generally aligned between the private and public sectors.

# Comparison of current and desired connectivity policies



Comparing existing policies against those desired for future prioritisation reveals the following:

- The future policies suggest placing more emphasis on increasing asset utilisation compared to the current ones, indicating that the existing policies for asset utilisation are insufficient.
- The disparity between the current digitalisation and optimisation policies and the desired further digitalisation is significant, indicating a substantial gap that needs to be addressed in this area.
- Stakeholders desire rail expansion more than road expansion for future projects.
- Both public and private sector participants show a strong emphasis on digitalisation and optimisation for future policies compared to existing policies.
- Public authorities desire less road and railway expansion but emphasise greater asset utilisation for the future.



# Top 5 freight connectivity policies in the region

	KAZ	KGZ	MNG	TJK	UZB
Railway expansion	1	3	1		3
Railway rolling stock renewal and expansion	2				4
Road fleet renewal and expansion	4				
Road and highway expansion		1	3	4	
Improved quality of existing highways and roads		2		1	
Maritime or inland port expansion	5				2
Digital infrastructure for freight management	3	4		2	
Border crossing infrastructure improvements		5	2	3	
Intermodal terminal capacity increase			5	5	5
Warehouse and storage facility capacity increase			4		1

Respondents from each country rank the most important freight policy areas for future development.

There is a consistency with previous results showing the difference in preference between rail and road in the two country groups:

- **Kazakhstan and Mongolia** prioritise railway expansion projects.
- **Kyrgyzstan and Tajikistan** prioritise road development projects.

This indicates that large geographies with low population densities, available landscapes, and existing networks, such as **Kazakhstan and Mongolia**, favour more railway expansions, while smaller, mountainous countries with limited existing infrastructure, like **Tajikistan and Kyrgyzstan**, focus on road development.

**Uzbekistan**, as a medium-sized country in the region, adopts a balanced approach in line with its geographical scale.

Digital infrastructure and freight management are prioritised in most countries of the region.

**Uzbekistan and Mongolia** give more importance to logistics-related future projects such as warehouse and storage capacities, intermodal terminals, inland port expansions, and border crossing point infrastructure improvements.

# SUSTAINABILITY



# Section summary

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## **Strategic frameworks for freight infrastructure planning:**

by exploring the strategic frameworks utilised to guide freight infrastructure planning, the aim is to understand the overarching principles and priorities driving the sustainable development of regional freight. Understanding these frameworks provides valuable context for assessing the alignment of current practices with broader sustainability goals.

## **Current sustainability policies in freight transport**

**strategies:** examining the sustainability policies already integrated into organisations' freight transport strategies offers insights into existing approaches and their effectiveness.

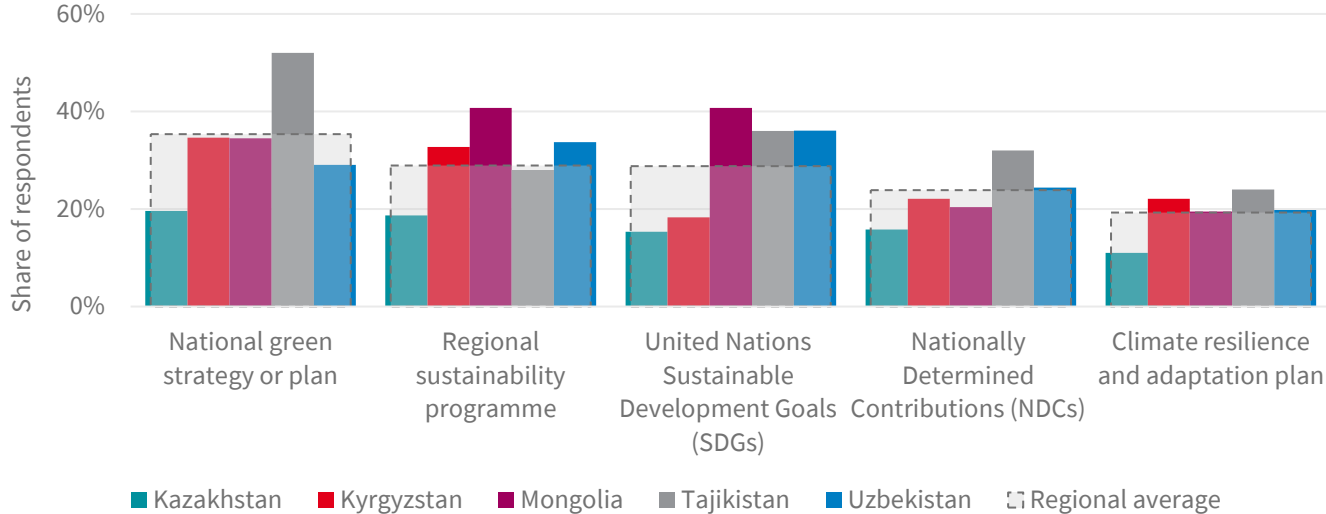
## **Recommended sustainability policies to minimise**

**environmental impact:** gathering recommendations for sustainability policies to minimise environmental impact highlights opportunities for advancing sustainability efforts within the region's freight networks. These recommendations offer valuable insights into stakeholders' perspectives on key strategies for mitigating environmental externalities and promoting sustainable practices.

## **Comparison of current and recommended policies:**

comparing current sustainability policies with recommended ones allows for a comprehensive evaluation of potential gaps or discrepancies. This comparative analysis sheds light on areas where adjustments are needed to bridge the gap between existing practices and desired sustainability outcomes, facilitating informed decision-making and policy formulation.

# Sustainability frameworks for freight infrastructure planning

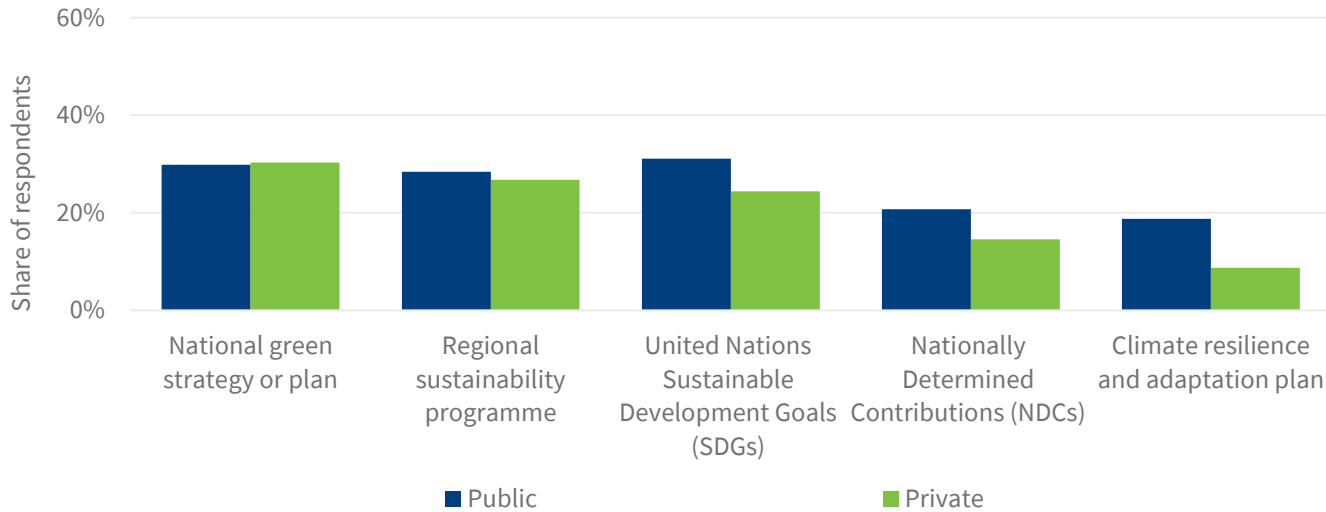


The national green strategy or plan ranks as the primary strategic framework utilised by Central Asian governments, signalling that environmental policies are considered integral components of national agendas rather than regional or international endeavours.

Climate resilience and adaptation programs rank lowest, suggesting that countries in the region are not prioritising these frameworks despite their vulnerability to climate change and other external shocks.

**Tajikistan and Uzbekistan** exceed the regional average in utilising both NDCs and SDGs as a framework to guide freight infrastructure planning.

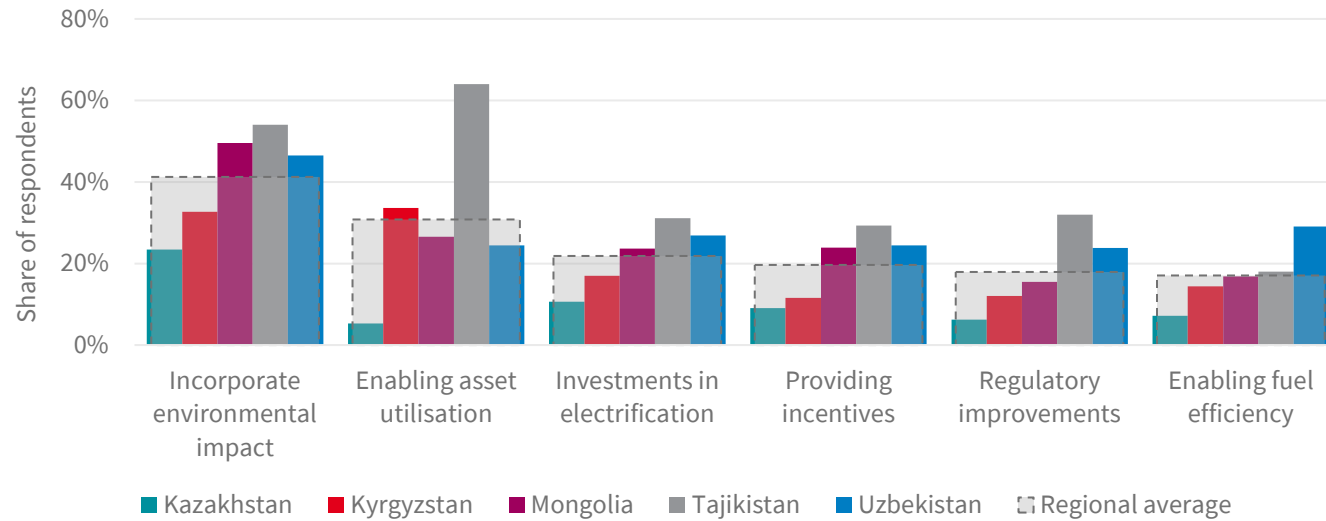
**Mongolia** emphasises regional sustainability programs and UN SDG goals over national strategies.



Among the different frameworks, the private sector’s response rate is high in national green strategies and plans and regional sustainability programs.

The public sector places significantly more emphasis on the Sustainable Development Goals (SDGs) and NDCs compared to the private sector.

# Current freight sustainability policies



Incorporate environmental impact into national freight plans and transport infrastructure design ranks first in the region for freight sustainability policies.

Enhancing asset utilisation is the next priority. Respondents from **Tajikistan** highlight that reducing truck overloading is crucial for improving asset utilisation.

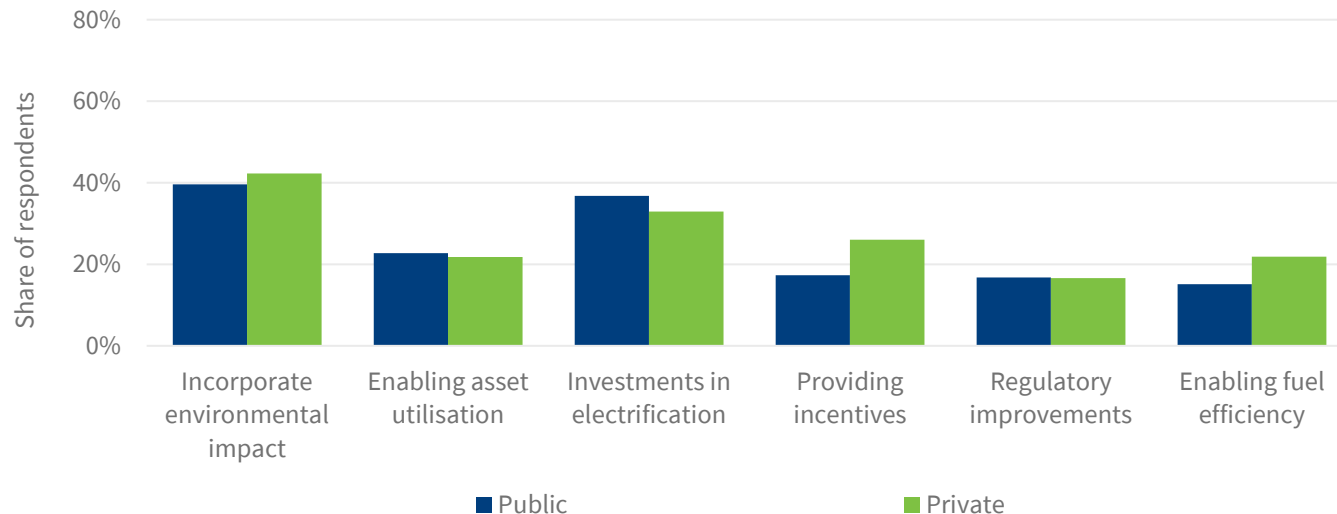
Enabling fuel efficiency is the least utilised sustainability policy in the region. **Uzbekistan** stands out by focusing on fuel economy standards for road freight vehicles.

Regulatory improvements are another area lagging behind, with **Tajikistan** distinguishing itself in endeavours to shift freight transport to renewable energy sources.

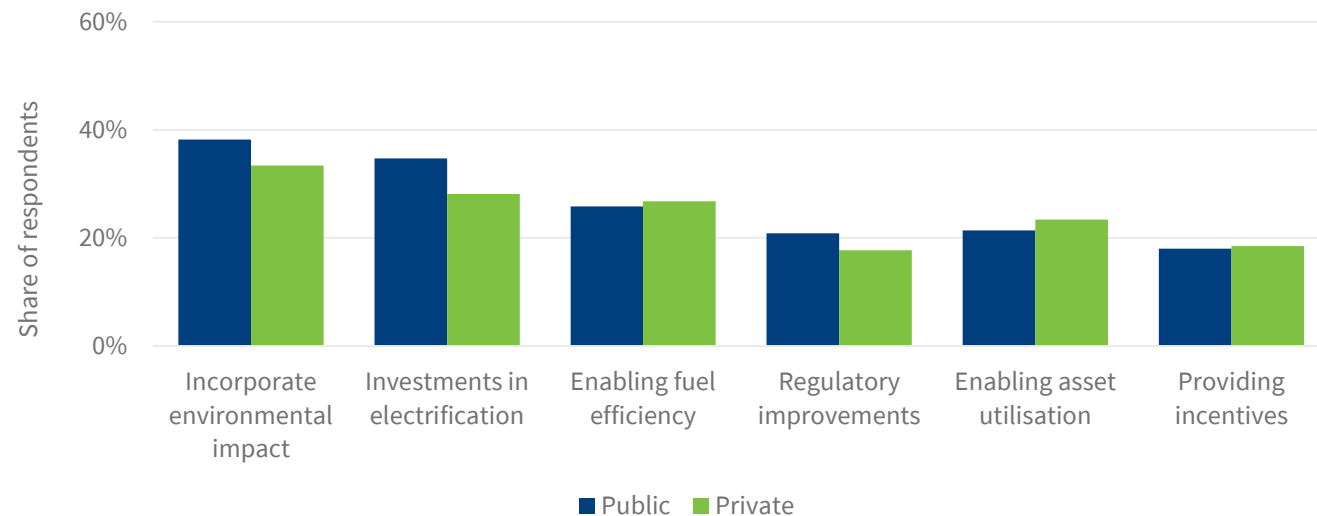
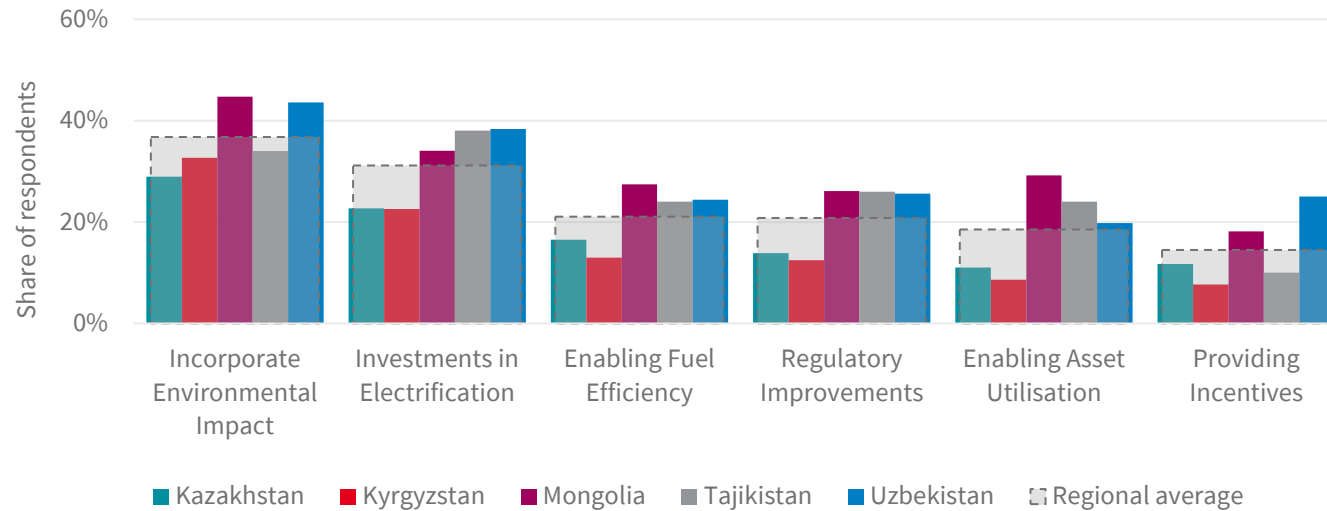
**Tajikistan, Uzbekistan, and Mongolia** provide more incentives in the sustainable transport sector than **Kazakhstan and Kyrgyzstan**.

- **Tajikistan** incentivises truck and van fleet renewal,
- **Mongolia** incentivises mode shift to rail, and
- **Uzbekistan** incentivises through low transport fees for fuel-efficient vehicles.

The private sector seeks incentives and fuel efficiency policies, while the public sector prioritises investment in electrification.



# Desired freight sustainability policies



The desired priorities include the policies to incorporate environmental impact and investment in electrification.

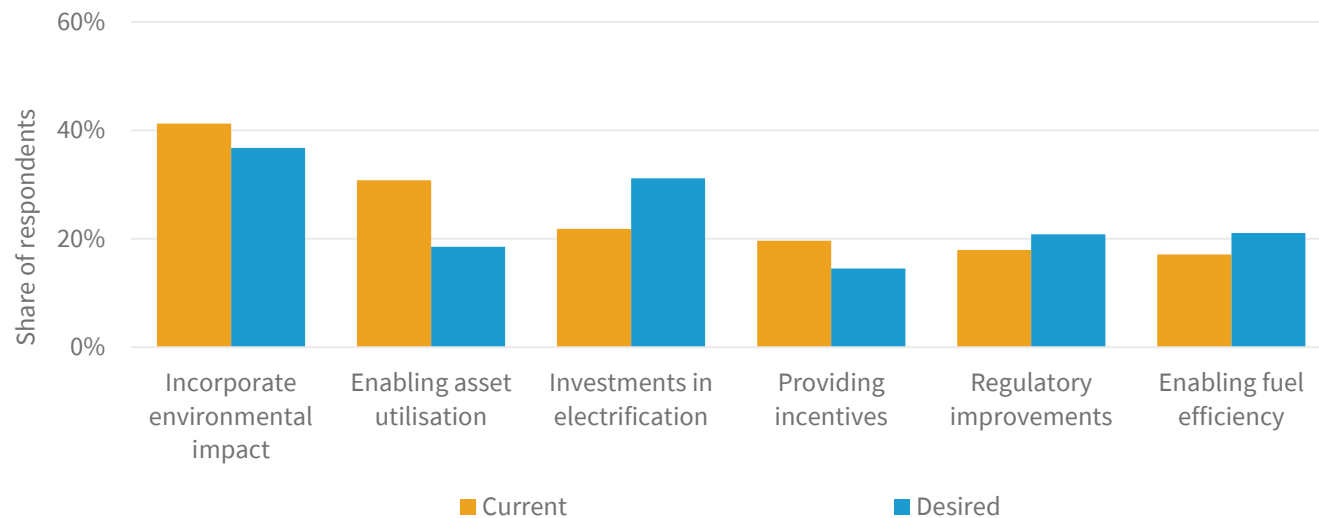
In **Tajikistan, Mongolia, and Uzbekistan**, there is a consistent focus on investment in electrification and enabling fuel efficiency, regulatory improvements, and enhancing asset utilisation, all above the regional average compared to **Kazakhstan and Kyrgyzstan**.

- In **Tajikistan**, investment in infrastructure to allow high-capacity vehicles is considered crucial for asset utilisation.
- In **Mongolia**, load optimisation and efficient routing emerge as key components of enabling fuel efficiency policies.
- In **Uzbekistan**, implementing fuel economy standards for road freight vehicles is strongly recommended as a regulatory improvement.

**Uzbekistan** emphasises providing incentives significantly above the regional average, particularly by reducing port, highway, and customs fees for fuel-efficient trucks.

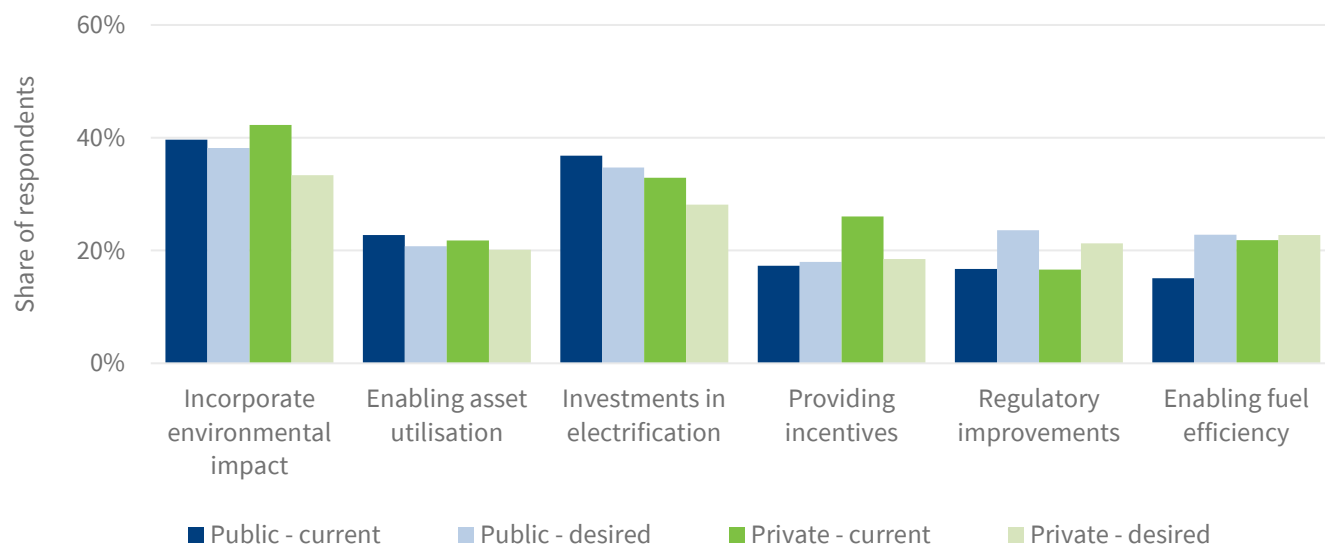
A distinction exists between the public and private sectors in their investment recommendations: the public sector prioritises electrification, while the private sector leans slightly more towards incentives and fuel efficiency.

# Comparison of current and desired sustainability policies



Comparing existing policies against those desired for future prioritisation reveals:

- A higher desire for developing investments in the electrification of railways.
- Additionally, regulatory improvements and fuel efficiency policies are highlighted for future desires, showcasing the potential to enhance these measures in policy development.
- Conversely, developing sustainability policies, enhancing asset utilisation, and offering incentives are less desired for the future, as these initiatives are viewed as more immediate concerns rather than long-term priorities by the countries in the region.



Both public and private sector representatives are shifting their focus to regulatory frameworks and enabling fuel efficiency policies, leading to the largest difference between current and desired policies.

# RESILIENCE





# Section summary

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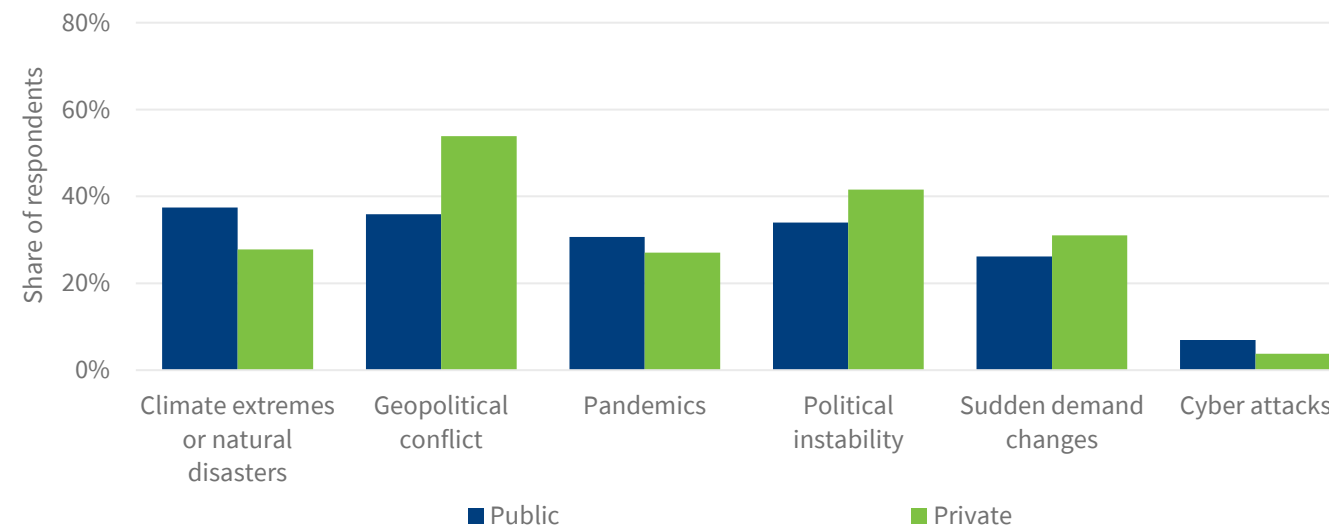
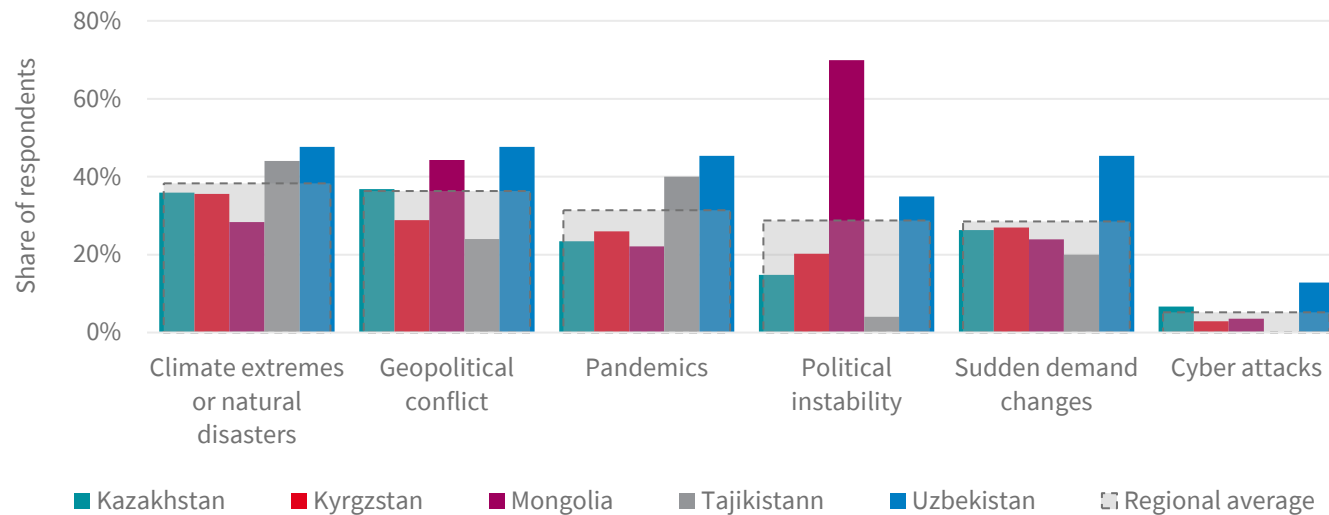
**Most challenging risks for freight transport networks:** identifying the most challenging risks faced by the freight transport networks makes it possible to understand the vulnerabilities and threats that can disrupt the flow of goods and services in the region. This assessment provides a clear picture of the critical issues that need to be addressed to ensure a robust and efficient freight system.

**Current resilience policies in freight transport strategies:** examining the resilience policies already included in organisations' freight transport strategies offers insights into existing measures aimed at mitigating risks and enhancing network resilience. This review helps to gauge the effectiveness of current policies and identify strengths and weaknesses in the existing resilience framework.

**Desired policies to improve freight infrastructure resilience:** gathering recommendations for policies to improve the resilience of freight infrastructures highlights opportunities for enhancing the durability and adaptability of the freight network. These recommendations reflect stakeholders' perspectives on key strategies for bolstering the network's ability to withstand and recover from disruptions.

**Comparison of current and desired policies:** comparing current resilience policies with recommended ones allows for a comprehensive evaluation of potential gaps or discrepancies. This comparative analysis sheds light on areas where adjustments are needed to bridge the gap between existing practices and desired resilience outcomes. By identifying these gaps, stakeholders can make informed decisions and formulate policies that better protect the freight transport network from future risks.

# Most challenging risks for freight transport networks



Resilience-related risks are not a regional priority, with response rates for any given risk rarely exceeding 40%.

Climate extremes or natural disasters are the biggest resilience risks in the region due to the region’s vulnerability to climate change impacts and the low maintenance of freight assets.

Cyber attacks are the least considered risk, which can be attributed to the low digitalisation rate of the transport sector in the region.

Geopolitical conflicts rank as the second most significant resilience risk in the region and the top risk for **Kazakhstan**, which is particularly vulnerable to the impacts of the Ukraine war on transport and trade linkages.

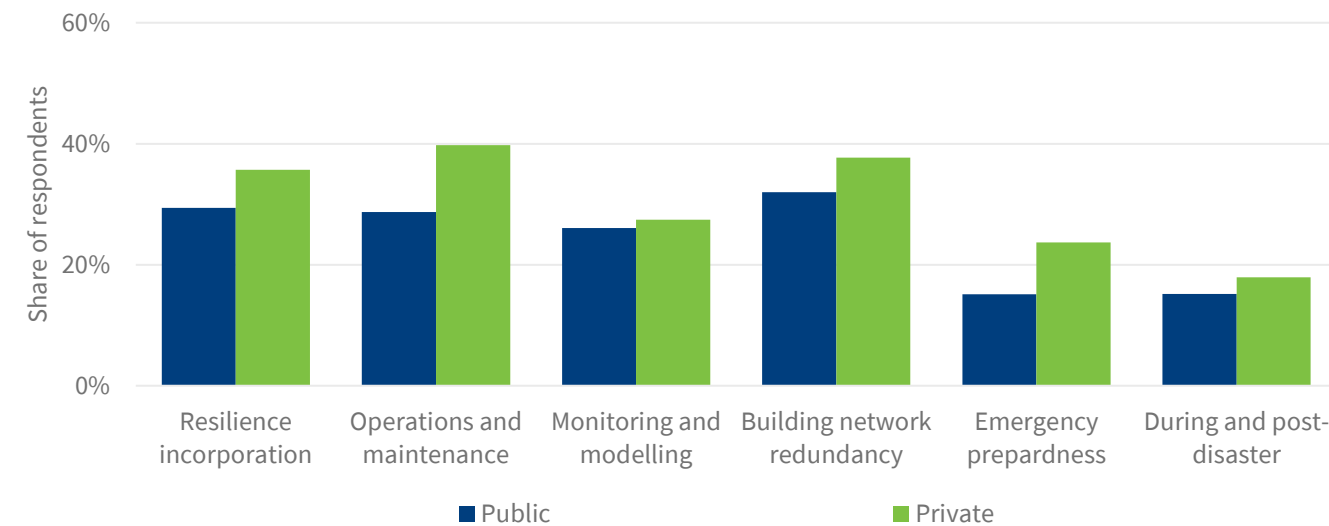
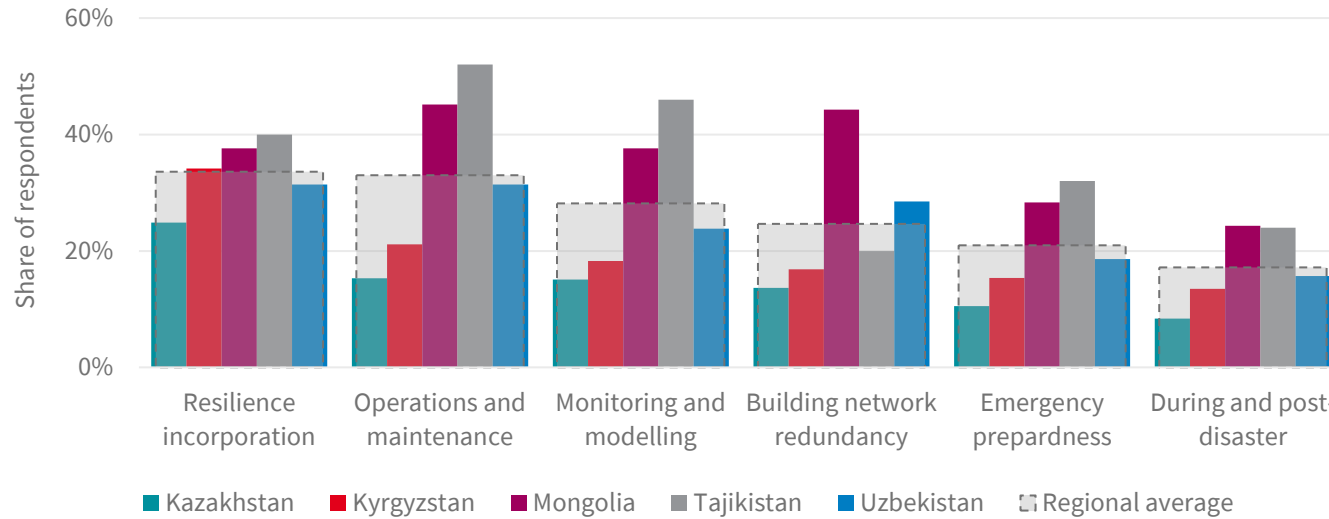
There is a significant variation in the perception of political instability risks among countries. While the rate in **Mongolia** is at almost 70%, it is only 4% in **Tajikistan**.

Sudden demand changes affect **Uzbekistan** the most, while other countries in the region remain below the average.

The private sector’s risk perception of geopolitical conflicts and political instability is higher than that of the public sector, as private operators are more vulnerable to the effects of such conflicts.

On the other hand, climate extremes are a more important risk for the public sector, as most transport assets are publicly owned in the region, and all disaster-related deteriorations need to be addressed by the public sector.

# Current freight resilience policies



Resilience policies are not strongly integrated into freight transport strategies, with various resilience strategies adoption not exceeding 33% overall in the region.

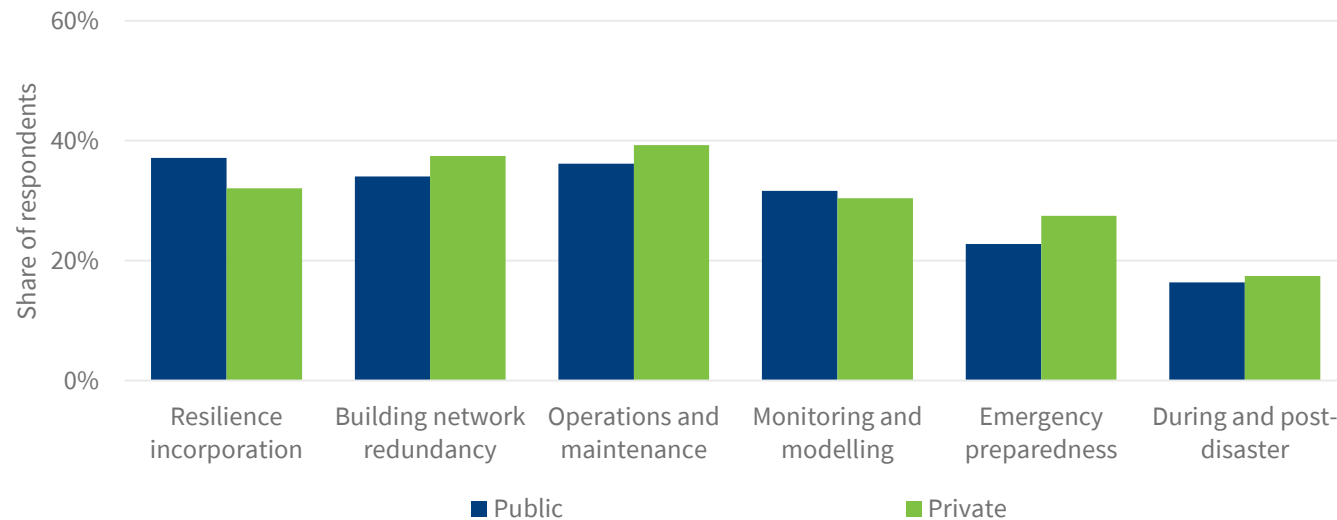
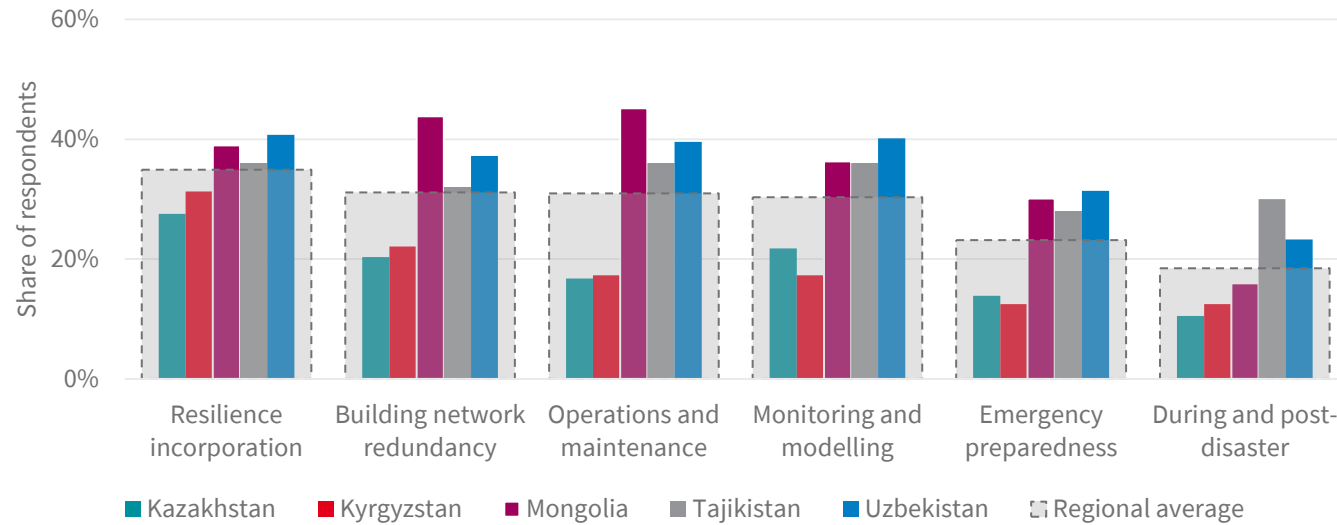
Among the current resilience policies, Resilience incorporation and operation and maintenance policies are more prominent, while during and post-disaster and emergency preparedness receive much less attention.

Operations and maintenance policies, along with monitoring and modelling strategies, are highly adapted to the freight transport strategies in **Tajikistan and Mongolia**. These two countries stand out in Central Asia, above the average in each resilience policy implementation.

Building network redundancy is important for **Uzbekistan**, as it is the only category in which it is above the regional average. Specifically, investing in infrastructure redundancy and robustness (e.g., spare capacity) is a priority for **Uzbekistan**.

The private sector is more attentive to every resilience policy in their current strategy compared to the public sector. The biggest difference is seen in the operations and maintenance strategies.

# Desired freight resilience policies



Future policy recommendations on resilience receive around a 30% response rate, indicating that resilience policies are not a priority for future freight transportation in the region compared to sustainability and connectivity policies.

Among the components of resilience policy, integrating resilience into national freight plans and project design is prioritized, followed by building network redundancy and operational and maintenance policies

Emergency response strategies and during and post-disaster policies remain the least focused areas.

**Kazakhstan and Kyrgyzstan** follow the same pattern and do not prioritise resilience policies in the future.

However, interest in resilience policies is higher in **Tajikistan, Mongolia, and Uzbekistan** in the longer term.

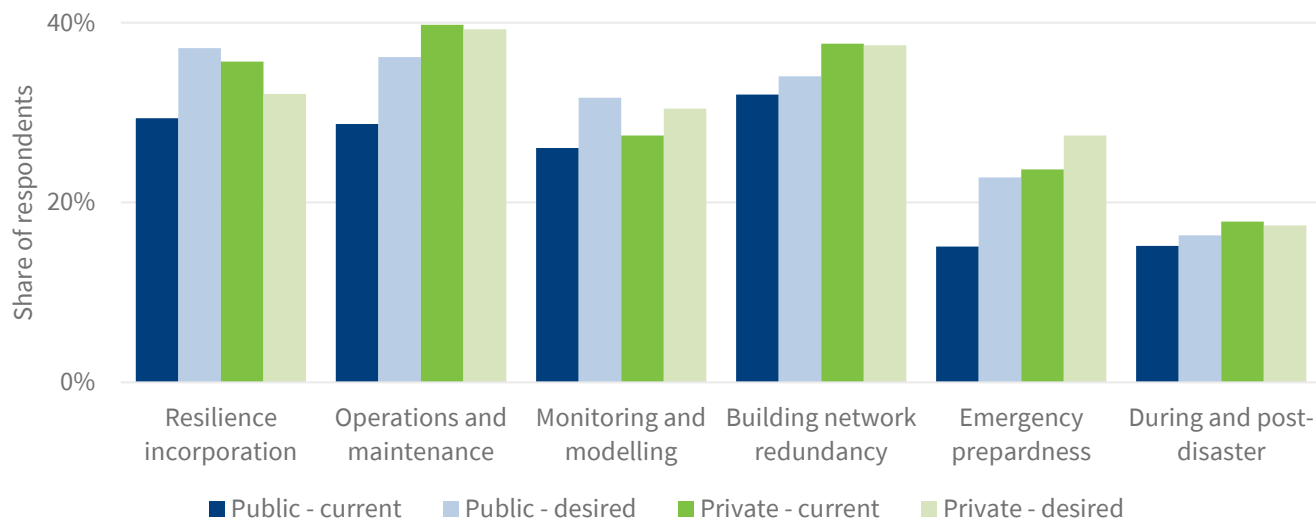
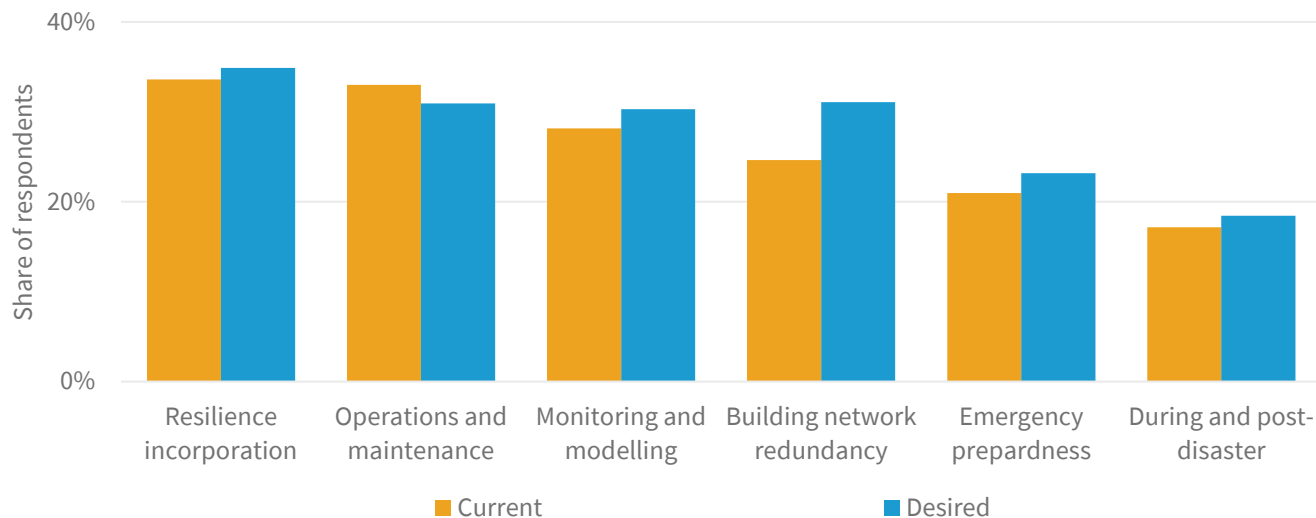
For **Uzbekistan**, monitoring and modelling become a priority in the upcoming period.

**Tajikistan** is leading in during and post-disaster policies and procedures.

**Mongolia** is the top country in the region to prioritise operations and maintenance and build network redundancy in the future.

The public sector is willing to close the gap with the private sector in future resilience policies.

# Comparison of current and desired resilience policies



Comparing current and desired policies to improve resilience, the following points can be identified:

- Respondents in the region express a desire for future improvements in all resilience policy categories, except for operational and maintenance policies. This indicates that the current state of the latter is considered adequate by the respondents.
- Building network redundancy policies experience the highest increase in future priorities, underlining the necessity of investing in infrastructure redundancy and robustness.
- Respondents from the public sector wish to close the gap in emergency preparedness in the future.
- The private sector also expects an increase in future resilience policy implementations, particularly in emergency preparedness, monitoring, and modelling policies.

# NATIONAL TRANSPORT PLANNING



# Section summary

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## **Major bottlenecks in freight transport policymaking:**

providing insights into the major obstacles that hinder effective policy formulation. Understanding these challenges is essential for streamlining the policy development process and ensuring the timely and efficient creation of policies that address the needs of the freight transport sector.

## **Capacity challenges in evaluating future freight**

**infrastructure investments:** highlighting the limitations in expertise, resources, and infrastructure that impede thorough evaluation. Addressing these challenges is crucial for making informed, strategic decisions regarding future investments in freight infrastructure.

**Ranking of criteria used for project prioritisation:** revealing the factors that influence decision-making in freight infrastructure development. Understanding these criteria helps ensure that projects are selected based on their potential to deliver the greatest benefits in terms of efficiency, sustainability, and economic impact.

## **Ex-post reviews, audits and environmental impact assessments in the policy implementation process:**

providing an understanding of how well policies are monitored and evaluated post-implementation.

## **Financing sources for key freight infrastructure:**

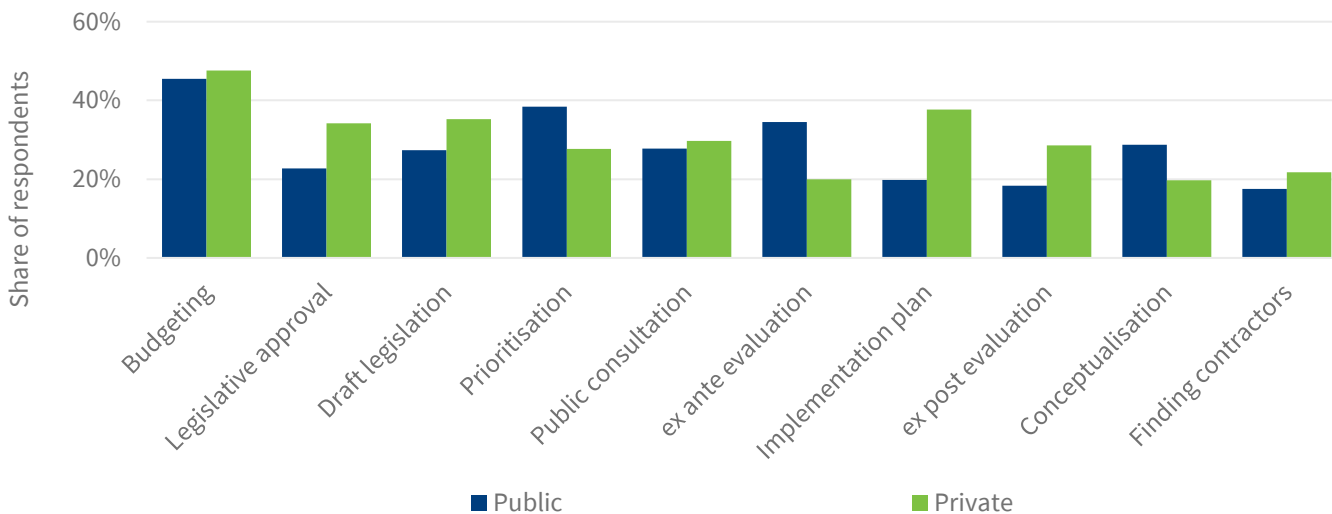
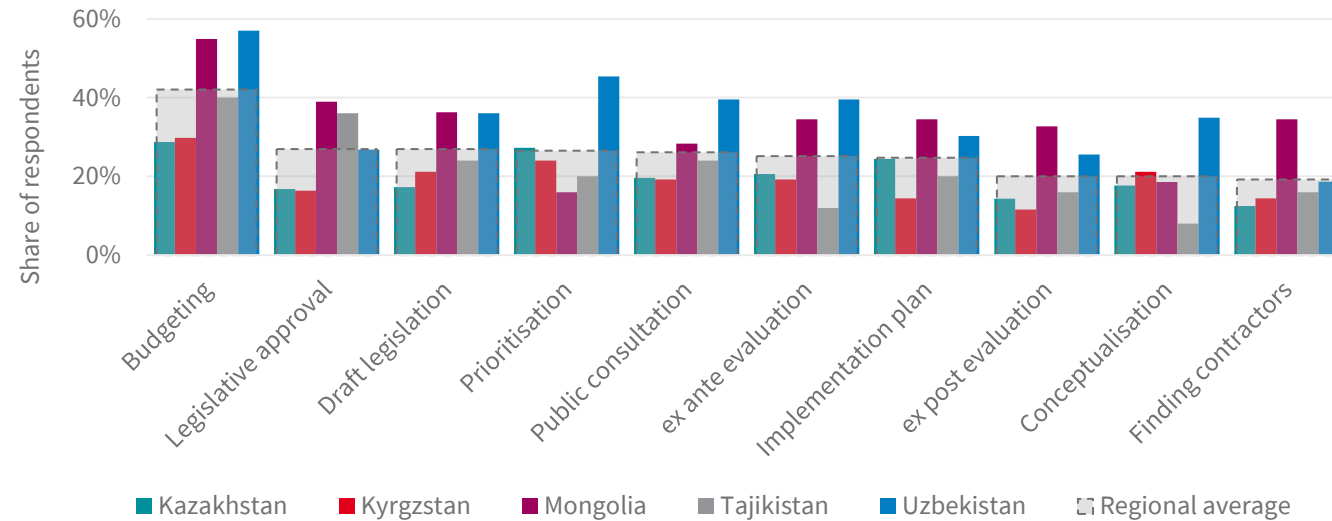
explaining financial mechanisms that support infrastructure development. This examination reveals the dependence on various funding sources and highlights opportunities for diversifying financing for future projects.

## **Government policies to mobilise private investment:**

providing insights into strategies to attract private capital.

**Role of non-governmental stakeholders in regional and national freight planning:** highlighting the potential contributions of NGOs to freight infrastructure development. It underscores the areas where NGOs can assist national governments the most.

# Major bottlenecks in freight transport policymaking



For freight transport policy development, budgeting is identified as the biggest bottleneck in the region.

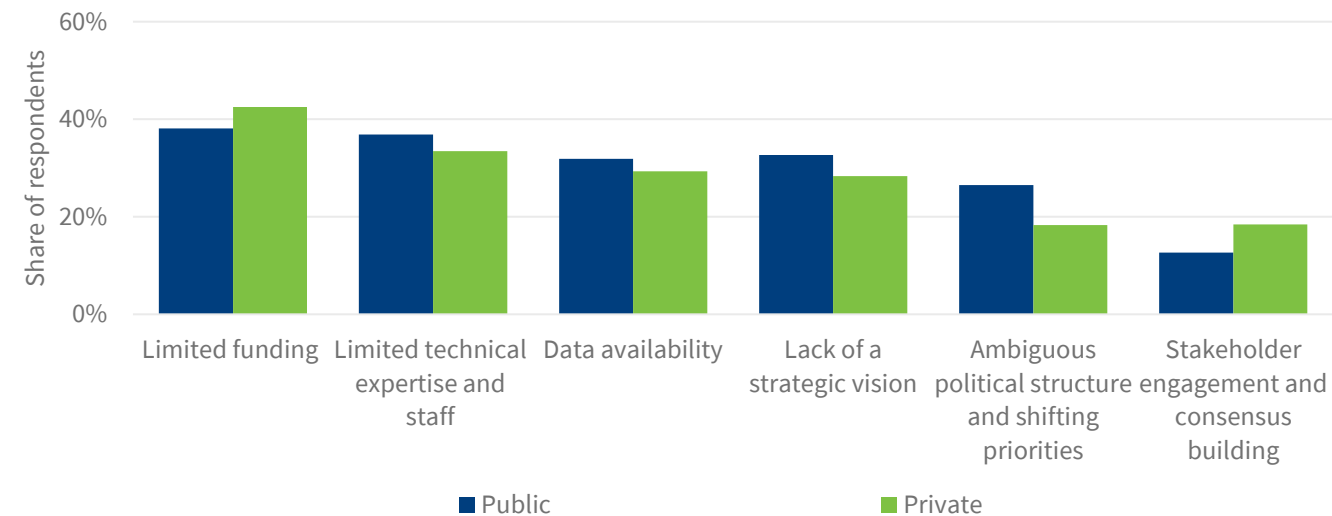
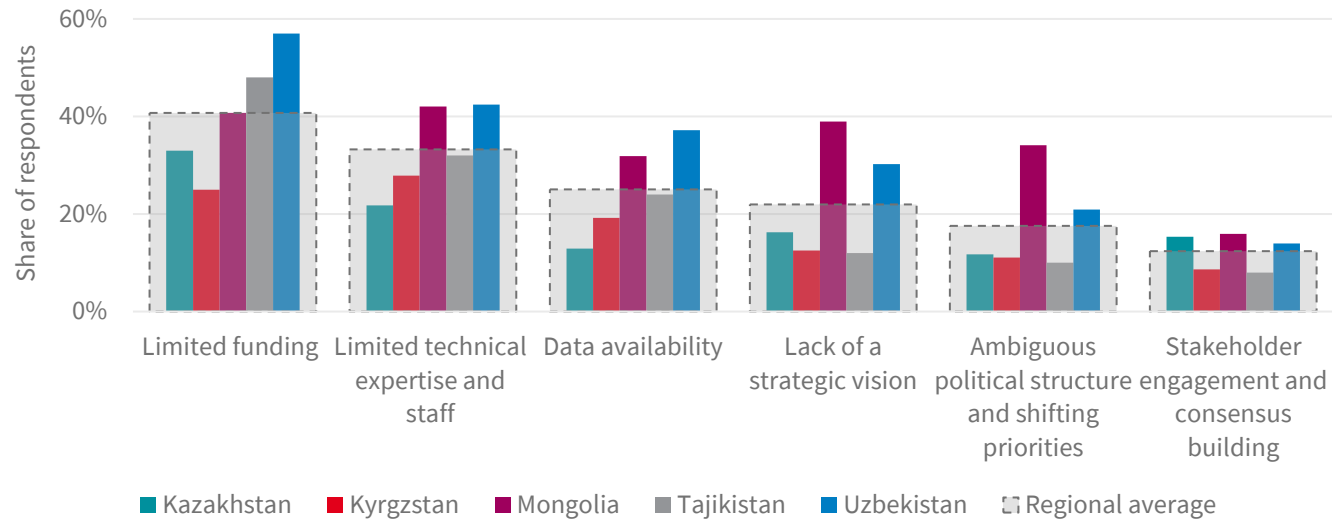
Policies related to the (post)implementation process are less frequently identified as problem areas by respondents.

- **In Uzbekistan**, prioritisation, conceptualisation, budgeting and stakeholder consultation are more challenging compared to the rest of Central Asia.
- **Tajikistan** is only above the regional average for legislative approval, indicating specific struggles with this component in transport policy development.
- **Mongolia** faces specific difficulties in finding and vetting contractors, setting it apart from other countries in the region.
- In **Kazakhstan**, prioritisation and in **Kyrgyzstan**, conceptualisation are the only elements slightly above the regional average.

Beyond budgeting, private sector respondents highlight implementation planning as the biggest bottleneck, while public sector respondents emphasise prioritisation.



# Capacity challenges in evaluating infrastructure investments



Limited funding, limited technical expertise, and limited staff are two prominent capacity challenges identified by respondents.

Stakeholder engagement and consensus building are less challenging than other areas.

**Uzbekistan and Mongolia** face more capacity challenges in freight infrastructure investment than other countries.

- **In Mongolia**, a lack of strategic vision and an ambiguous political structure are significant issues.
- **Tajikistan** specifically experiences challenges with limited funding.
- **In Uzbekistan**, limited funding, technical expertise, and data availability are noted as major barriers.
- **In Kazakhstan**, stakeholder engagement and consensus building are the only capacity challenges above the regional average.
- **In Kyrgyzstan**, limited technical expertise is the top challenge, although all challenges are below the regional average.

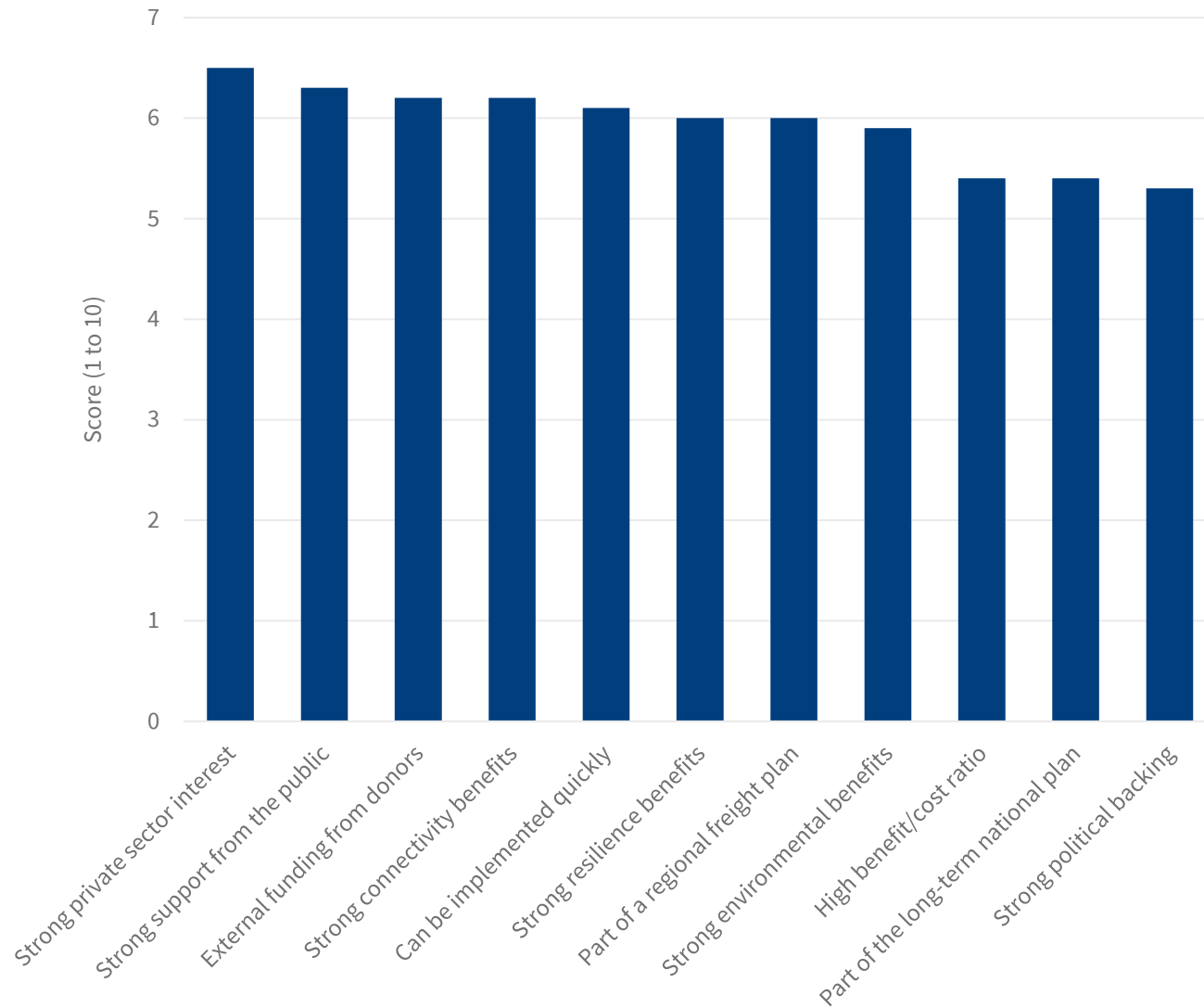
The private sector faces more difficulty securing funding than the public sector. However, the public sector suffers more from limited technical expertise, lack of strategic vision, and an ambiguous political structure.

# Ranking of criteria used for project prioritisation

Country	Strong political backing	High benefit/cost ratio	Strong environmental benefits	Strong resilience benefits	Strong connectivity benefits	Quick implementation	Part of a long-term national plan	Part of a regional freight plan	Strong private sector interest	Strong support from the public	External funding from donors
<b>KAZ</b>	5.4	5.0	6.2	5.8	6.3	5.4	5.2	6.5	6.8	7.0	6.3
<b>KGZ</b>	5.4	5.9	6.4	5.6	6.4	5.6	6.0	6.2	5.8	5.3	6.9
<b>MNG</b>	5.8	4.7	5.5	6.6	5.9	7.0	3.9	5.2	7.3	7.4	6.4
<b>TJK</b>	4.1	6.1	5.1	6.1	6.7	6.1	5.9	5.5	6.8	6.1	5.3
<b>UZB</b>	5.7	5.2	6.2	6.0	6.0	6.3	6.1	6.4	5.8	5.8	6.2
<b>Average</b>	<b>5.3</b>	<b>5.4</b>	<b>5.9</b>	<b>6.0</b>	<b>6.2</b>	<b>6.1</b>	<b>5.4</b>	<b>6.0</b>	<b>6.5</b>	<b>6.3</b>	<b>6.2</b>

Score 1 to 10:  Above average  Below average  Regional average

# Ranking of criteria used for project prioritisation

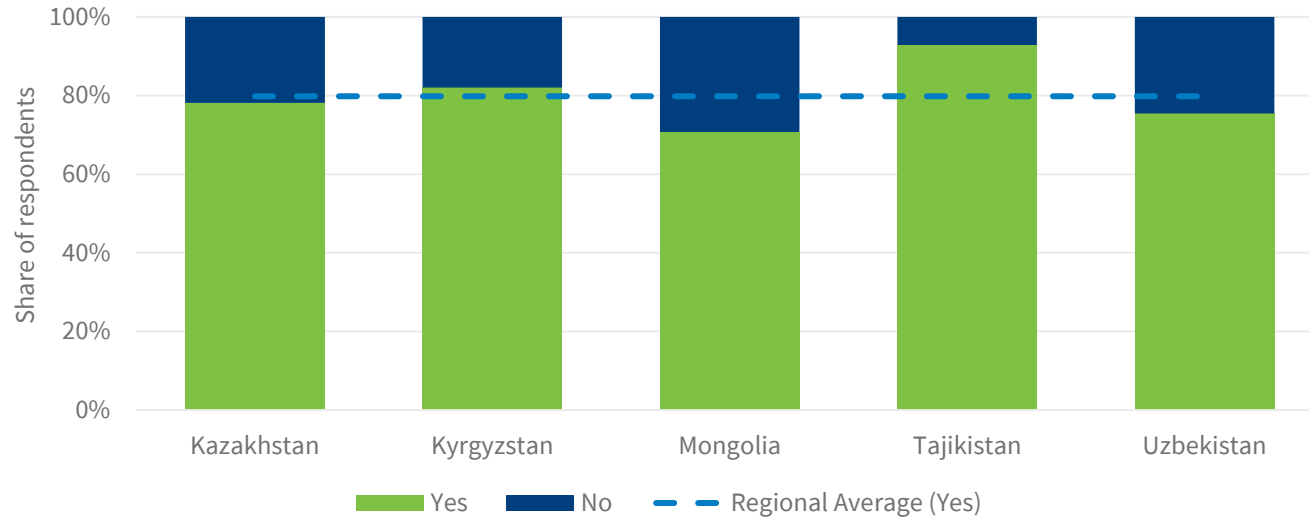


Notably, respondents from:

- **Kazakhstan and Mongolia** prioritise strong support from the public.
- **Kyrgyzstan** prioritise external funding from donors.
- **Tajikistan** prioritise strong private sector interest.
- **Uzbekistan** prioritise being part of a regional freight plan.

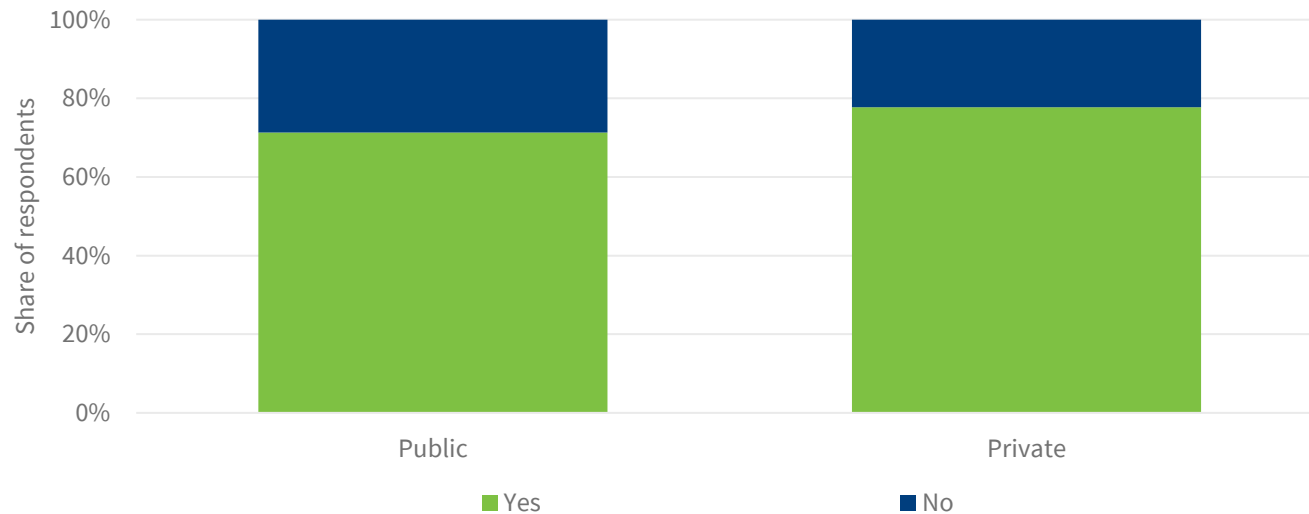
According to the identified top three criteria, countries in the region determine priority projects based on a consensus between the public and private sectors, as well as donor priorities for providing funding.

# Ex-post reviews, audits, and environmental impact assessment



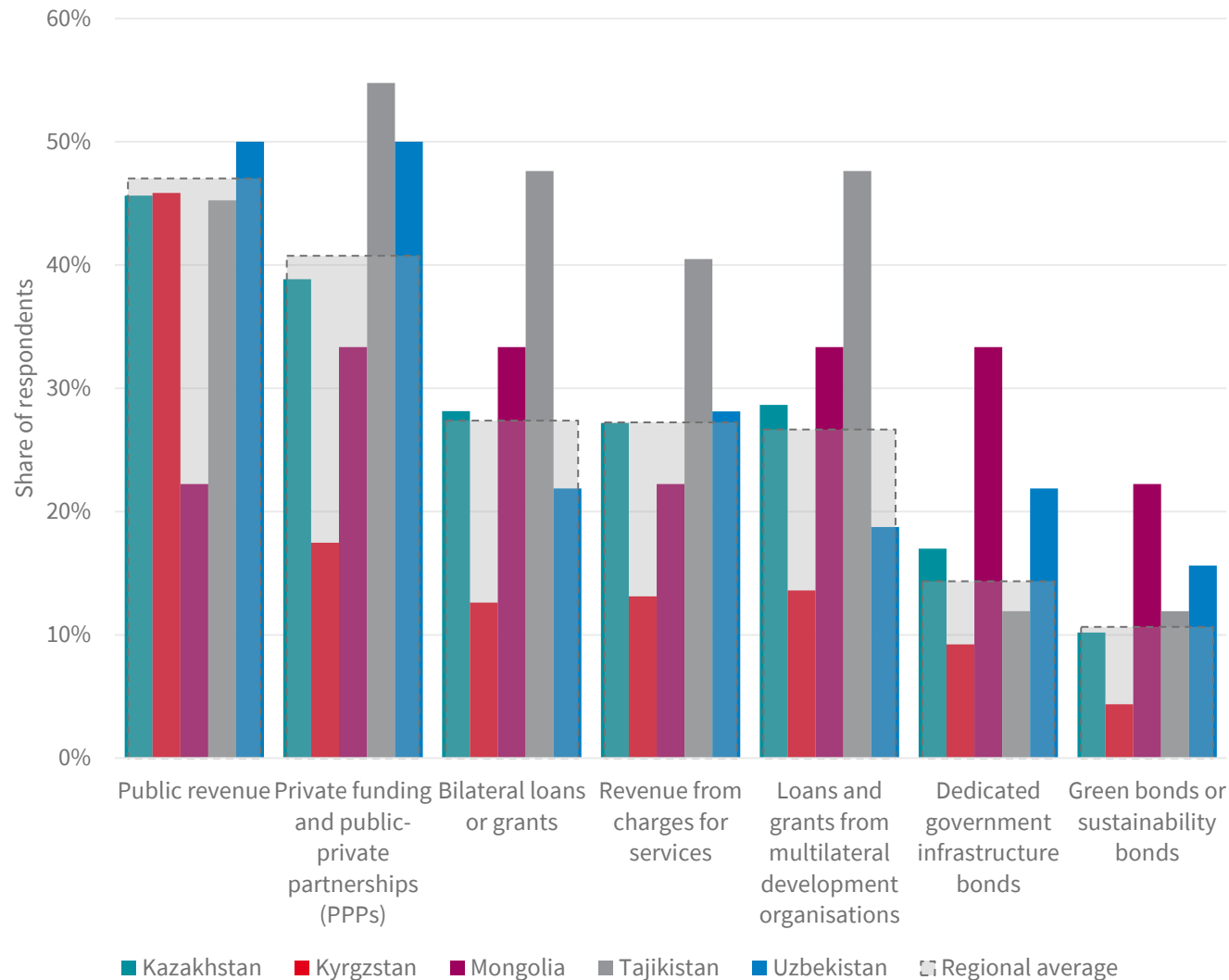
More than 70% identify ex-post reviews or audits, including environmental and carbon emissions impact assessments, as a part of their policy implementation process.

Most respondents in **Tajikistan** have these policies included.



A slightly greater proportion of the private sector includes ex-post reviews in their policy implementation process than the public sector.

# Financing sources for key freight infrastructure



Across the countries in the region, public revenue is the primary source of financing, while green bonds or sustainability bonds are the least used.

Public-private partnerships (PPP) also attract strong interest in project finance, especially in **Tajikistan and Uzbekistan**.

**Kyrgyzstan** is conservative about using different financing sources and relies mostly on public revenue.

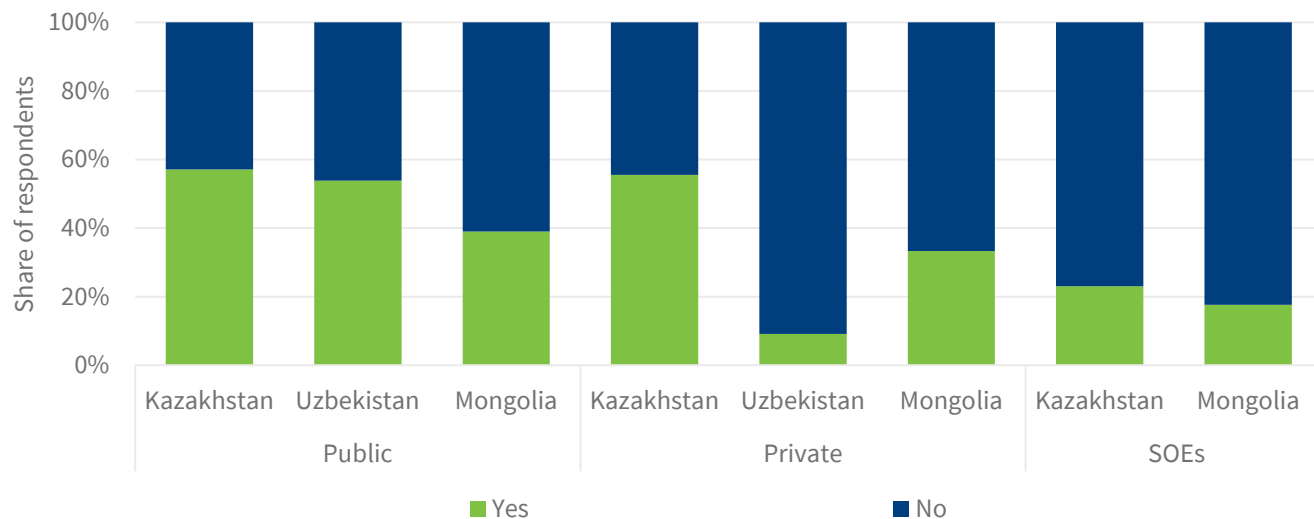
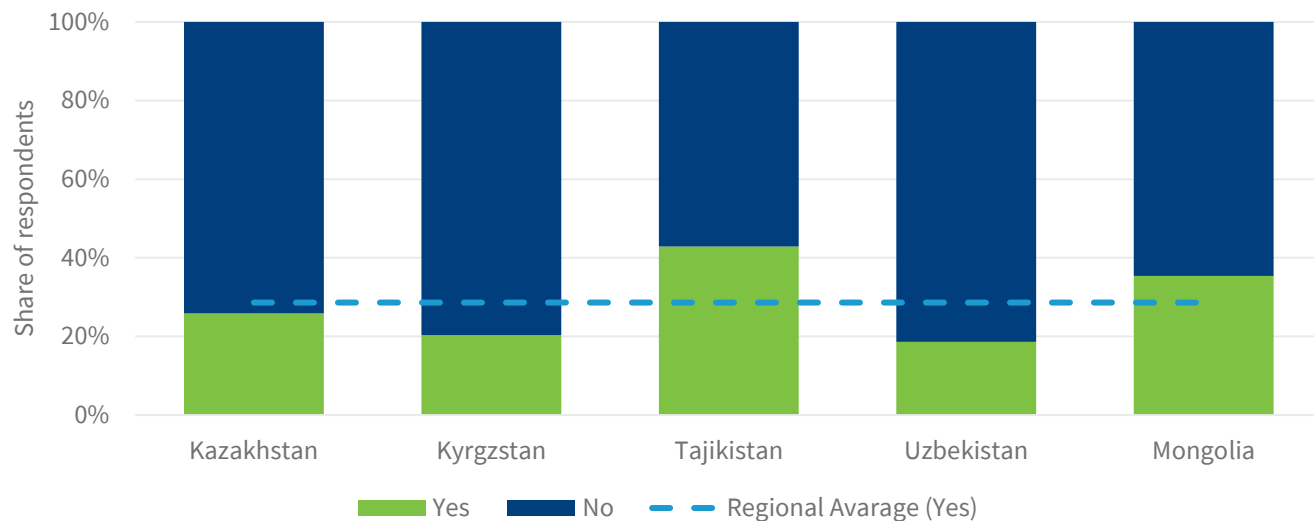
**Tajikistan**, which has highly prioritised budgeting and funding issues for infrastructure projects in other questions, shows a very high response rate for alternative financing sources such as PPPs, loans, fees, and grants.

**In Mongolia**, public revenue is the least selected source, indicating a strong interest in using different financing methods, including green and sustainability bonds.

**Kazakhstan** is above the regional average in using loans and grants from bilateral and multilateral development organisations and dedicated government bonds.

**Uzbekistan** is the only country where public revenue accounts for 50% of the responses, placing it above the regional average.

# Government policies to mobilise private investment



Government policies to mobilise private sector investments are seen as insufficient in each country, with an average response rate of 70% indicating inadequacy.

None of the countries received positive feedback on this issue. However, **Uzbekistan** and **Kyrgyzstan** reported lower satisfaction rates, while **Tajikistan** reported the highest, though still inadequate.

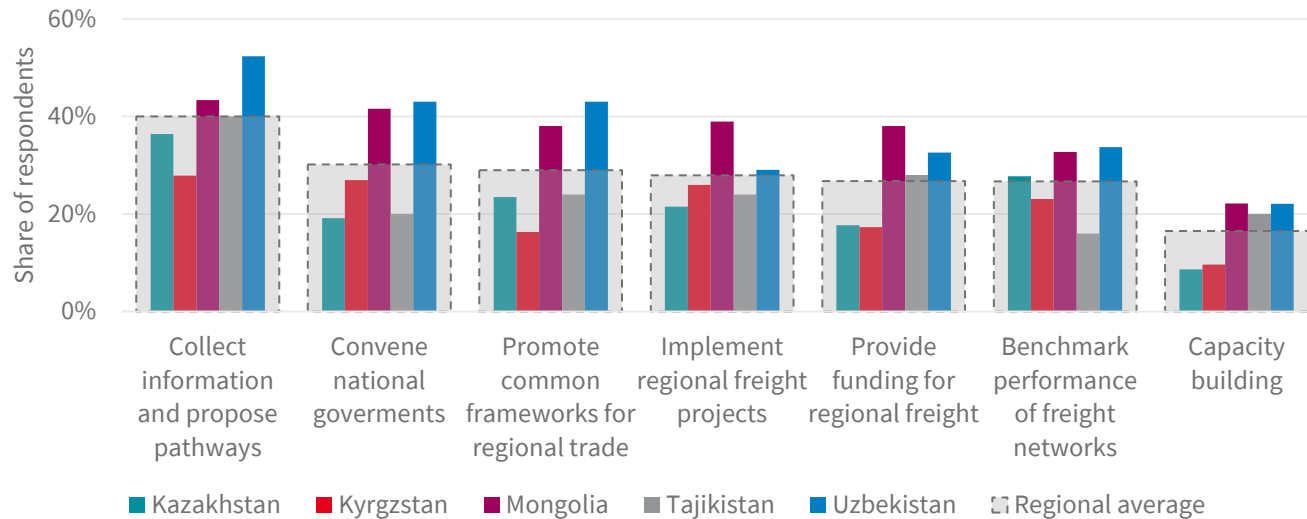
The relatively higher score for **Tajikistan** aligns with other questions, indicating that Tajikistan is trying to close the funding gap. Mobilising private sector investment is seen as one way to achieve this, but it is still not deemed sufficient.

There is a dramatic difference between the opinions of **Uzbek** public and private sector respondents. **Uzbek** private sector representatives find the government policies to mobilise private sector investments insufficient.

**In Kazakhstan**, private sector representatives are slightly more positive about government policies, but 77% of SOEs respond negatively. Since 84% of respondents are SOEs, Kazakhstan is below the regional average.

**In Mongolia**, SOEs are less positive than private sector respondents regarding government policies to mobilise private investment.

# Role of non-governmental stakeholders in freight planning



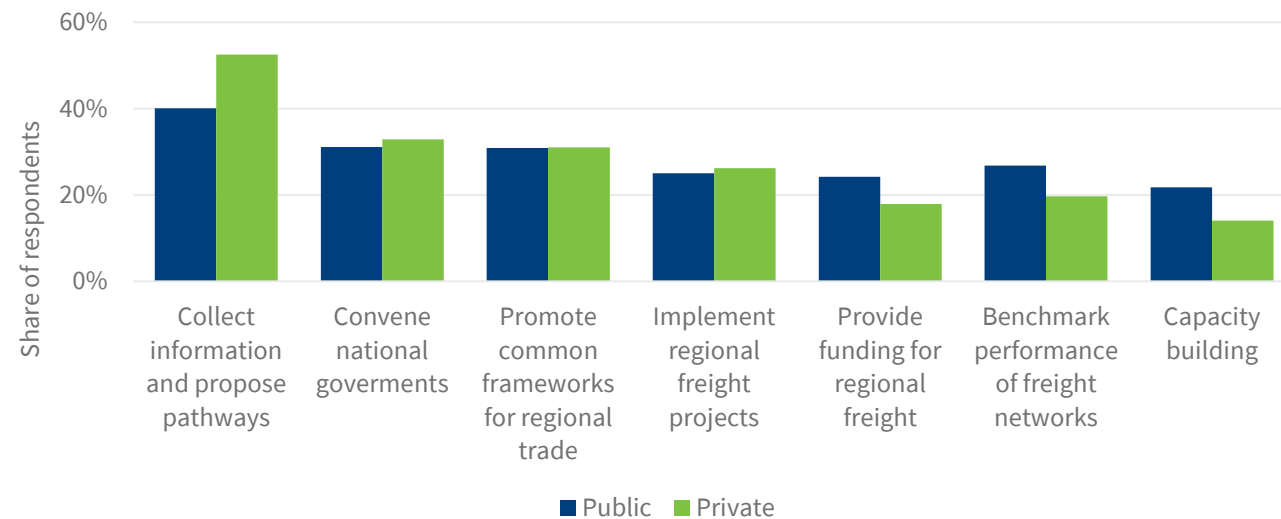
The key areas in which respondents highlight the role of NGOs are:

- Collecting information and proposing pathways for improvement.
- Convening national governments for regional policy and infrastructure discussions.
- Promoting common frameworks for regional trade.

Interestingly, capacity building ranks lowest among these roles, despite previous recognition of limited technical expertise and staff as significant bottlenecks for freight investments. This could indicate that capacity-building activities are not commonly linked to the perceived role of non-governmental stakeholders in the region.

However, national governments need support from NGOs to conduct their capacity-building activities. In this regard, collecting information and proposing pathways for improvements are important areas where NGOs can support the governments.

Another area where Central Asian stakeholders expect support from NGOs is initiating regional policy and infrastructure discussions and promoting common frameworks for regional projects. This can address the long-lasting issue of lack of communication and coordination among stakeholders for transport connectivity in the region.



# CONCLUSIONS





# Conclusions

## CONNECTIVITY

Delays at border crossings and complex customs procedures create bottlenecks for transport connectivity.

Strong regional support for digitalisation and automation to streamline these processes.

Concerns from the private sector highlight the need for improved network maintenance and the development of intermodal terminals.

Focus on optimising asset utilisation as a key area for future improvement.

## SUSTAINABILITY

National green strategies serve as Central Asia's cornerstone of environmental policy.

However, a critical gap exists: climate resilience programs remain outside the main policy scope despite the region's vulnerability to climate change.

Enabling fuel efficiency is the least implemented sustainability policy.

Regulatory improvements and electrification investments are desired for future focus.

## RESILIENCE

Resilience risks are currently under-prioritised in Central Asian transport strategies.

Among others, climate extremes are the top concern due to vulnerability and infrastructure challenges.

Cyber threats are least considered due to low digitalisation in the region.

The private sector assigns more importance to resilience than the public sector, especially in operations and maintenance.

Future focus on resilience is rising, which is reflected in desired policies for the long term.

## TRANSPORT PLANNING

Budgeting is the biggest bottleneck.

Limited funding and technical expertise are key capacity challenges.

The private sector sees funding as the most challenging factor, while the public sector does so with expertise and vision.

Public funds dominate, and green bonds are the least used. Public-private models hold promise.

Government efforts to attract private investment are seen as inadequate.

Collecting information and proposing improvement pathways are important areas for NGO's assistance.



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