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Report No: PAD5274

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED FINANCING

IN THE AMOUNT OF US\$ 585 MILLION

TO

UKRAINE

FOR A

REPAIRING ESSENTIAL LOGISTICS INFRASTRUCTURE AND NETWORK CONNECTIVITY
(RELINC) PROJECT

February 5, 2023

Transport Global Practice
Europe And Central Asia Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective Dec. 31, 2022)

Currency Unit =

UAH 36.75 = US\$1

US\$ 1.33 = SDR 1

FISCAL YEAR

January 1 - December 31

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ABBREVIATIONS AND ACRONYMS

ACG	Anti-Corruption Guideline	IOM	Int. Organization for Migration
AM	Accountability Mechanism	IPF	Investment Project Financing
AR	State Agency for Restoration and Development of Infrastructure of Ukraine	km	Kilometer
BCP	Border Crossing Point	M&E	Monitoring and Evaluation
CERC	Contingent Emergency Response Component	m ²	Square meter
CPF	Country Partnership Framework	MCTID	Ministry for Communities, Territories and Infrastructure Development of Ukraine
DFIL	Disbursement and Financial Information Letter	MOF	Ministry of Finance of Ukraine
ECA	Europe and Central Asia	OHCR	Office of the High Commissioner for Human Rights
EIRR	Economic Internal Rate of Return	PDO	Project Development Objective
ERW	Explosive Remnants of War	PIU	Project Implementation Unit
ESCP	Environmental and Social Commitment Plan	POM	Project Operations Manual
ESF	Environmental and Social Framework	PPP	Purchasing Power Parity
ESIA	Environmental and Social Impact Assessment	PPSD	Public Procurement Strategy for Development
ESIRT	Environmental and Social Incident Response Toolkit	RDNA	Rapid Damage and Needs Assessment
ESMF	Environmental and Social Management Framework	RELINC	Repairing Essential Logistics Infrastructure & Network Connectivity
ESS	Environmental and Social Standard	RSDP	Road Sector Development Project
EU	European Union	RSIP2	Second Road and Safety Improvement Project
FCV	Fragile and Conflict Affected	SEP	Stakeholder Engagement Plan
FM	Financial Management	STEP	Systematic Tracking of Exchanges in Procurement
FY	Fiscal Year	TA	Technical Assistance
GDP	Gross Domestic Product	TC	Tender Commission
GRM	Grievance Redress Mechanism	UAD	Ukravtodor (State Road Agency of Ukraine)
GRS	Grievance Redress Service	UAH	Ukrainian Hryvnia
HEAL	Health Enhancement and Lifesaving	UNHCR	United Nations High Commissioner for Refugees
HEIS	Hands-on Enhanced Implementation Support (procurement)	UNOPS	United Nations Office for Project Services
IBRD	International Bank for Reconstruction and Development	URTF	Ukraine Relief, Recovery, Reconstruction, and Reform Trust Fund
IFC	International Financial Corporation	US\$	United States Dollar
IFI	International Financial Institution	UZ	Ukrzaliznytsia (Ukrainian Railways)

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name		
Ukraine	Repairing Essential Logistics Infrastructure & Network Connectivity (RELINC) Project		
Project ID	Financing Instrument	Environmental and Social Risk Classification	Process
P180318	Investment Project Financing	Substantial	Urgent Need or Capacity Constraints (FCC)

Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input checked="" type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input checked="" type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input checked="" type="checkbox"/> Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
10-Feb-2023	31-Dec-2024

Bank/IFC Collaboration

No

Proposed Development Objective(s)

The Project Development Objective is to provide the means for mitigating the immediate impact that disrupted transport networks have on Ukraine's population and economy.

Components

Component Name	Cost (US\$, millions)
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Component A: Lifeline road connections	289.00
Component B: Lifeline rail connections	289.00
Component C: Readiness for urgent reconstruction initiatives and project management	7.00
Component D: Contingent emergency response	0.00

Organizations

Borrower:	Ukraine
Implementing Agency:	State Agency for Restoration and Development of Infrastructure of Ukraine Ukrzaliznytsia

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	585.00
Total Financing	50.00
of which IBRD/IDA	0.00
Financing Gap	535.00

DETAILS

Non-World Bank Group Financing

Trust Funds	50.00
Trust Funds	50.00

Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2023	2024	2025
Annual	35.00	15.00	0.00
Cumulative	35.00	50.00	50.00

INSTITUTIONAL DATA



Practice Area (Lead)

Transport

Contributing Practice Areas

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● High
2. Macroeconomic	● High
3. Sector Strategies and Policies	● Low
4. Technical Design of Project or Program	● Moderate
5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● High
7. Environment and Social	● Substantial
8. Stakeholders	● Moderate
9. Other	● High
10. Overall	● High

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

Yes No

Does the project require any waivers of Bank policies?

Yes No



Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank’s due diligence assessment of the Project’s potential environmental and social risks and impacts, please refer to the Project’s Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description

The Recipient, through MCTID, shall maintain, throughout the implementation of the Project, an organization within MCTID with composition and resources acceptable to the Bank to be responsible for overall Project supervision, coordination and reporting.

Sections and Description

...the Recipient shall cause AR to hire, not later than thirty (30) days from Effective Date: (i) an environmental specialist and a social specialist for the AR PIU; and (ii) one environmental and social specialist to support the MCTID with coordination of environmental and social management for the Project between the two PIEs, all three with terms of reference and qualifications acceptable to the Bank.

Sections and Description

...the Recipient shall cause UZ to hire, not later than thirty (30) days from Effective Date, an environmental



specialist and a social specialist, all with terms of reference and qualifications acceptable to the Bank.

Sections and Description

No later than thirty (30) days after the Effective Date, the Recipient, through MCTID, shall adopt, and shall cause AR to adopt the AR OM and UZ to adopt the UZ OM, both in form and substance acceptable to the Bank, each containing detailed implementation and institutional arrangements for the parts of the Project to be carried out by the respective PIE; including, inter alia: (a) specific provisions on detailed arrangements for carrying out the Project; (b) composition and responsibilities of the PIU; (c) specific internal controls and segregation of tasks and responsibilities between the MCTID, the PIU and UNOPS; (d) procurement, financial management and disbursement requirements; (e) monitoring and evaluation arrangements; (f) grievance mechanism for the Project; and (g) such other technical, administrative, fiduciary or coordination arrangements as may be necessary to ensure effective Project implementation.

Sections and Description

No later than two (2) weeks after the Effective Date, the Recipient, through MCTID, shall, and shall cause the PIEs and UNOPS to, establish and thereafter, publicize, maintain and operate, throughout the implementation of the Project, an accessible grievance mechanism, to receive and facilitate resolution of concerns and grievances of Project-affected people, and take all measures necessary and appropriate to resolve, or facilitate the resolution of, such concerns and grievances, in a manner acceptable to the Bank.

Conditions

Type	Financing source	Description
Disbursement	Trust Funds	<p>...no withdrawal shall be made:</p> <ul style="list-style-type: none"> (a) for payments made prior to the Signature Date; (b) under Category (1) unless and until the AR Subsidiary Agreement has been executed on behalf of the Recipient and AR on terms and conditions satisfactory to the Bank; (c) under Category (2) unless and until the UZ Subsidiary Agreement has been executed on behalf of the Recipient and UZ on terms and conditions satisfactory to the Bank;
Effectiveness	Trust Funds	<p>This Agreement shall not become effective until evidence satisfactory to the Bank has been furnished to the Bank that the conditions specified below have been satisfied:</p> <ul style="list-style-type: none"> (a) the Recipient has signed a Subsidiary Agreement with a Project Implementing Entity on terms and conditions satisfactory to the Bank;



		<p>(b) for the Project Implementing Entity that has met the condition contained in Section 5.01(a) above, that PIE has signed an Outputs Agreement with UNOPS, on terms and conditions acceptable to the Bank; and</p> <p>(c) the Subsidiary Agreement referenced above in Section 5.01(a), the Outputs Agreement referenced above in Section 5.01(b) and this Agreement have been duly authorized or ratified by all necessary governmental action.</p>
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I. STRATEGIC CONTEXT

A. Country Context

1. **Russia's invasion of Ukraine has exacerbated vulnerabilities and heightened economic, social, and health risks for women and girls.** The war on Ukraine has caused civilian casualties and destruction of civilian infrastructure, forcing people to flee their homes seeking safety, protection, and assistance. The Office of the United Nations High Commissioner for Human Rights recorded 17,595 civilian casualties in Ukraine as of December 18, 2022, including 6,826 deaths and 10,769 injuries.¹ At least 1,218 children in Ukraine have been killed or injured since the war escalated nine months ago.² On average over four children are killed or injured each day. Since the onset of the Russian invasion, nearly one-third of Ukrainians have been forced from their homes. As of December 5, 2022, approximately 5.9 million people have been displaced within Ukraine, 57 percent of whom are women (2 percent are pregnant or breastfeeding women) (IOM, December 5, see Figure 1 for further information)³.

2. **A high share of Internally Displaced Persons (IDP) households report vulnerabilities.** One quarter report at least one household member with a disability, 42 percent report having at least one older person (aged 60+) present, 39 percent report having at least one person who is chronically ill, 3 percent report have at least one infant, 14 percent report having at least one child aged 1-5 and 42 percent report having at least one child aged 5-17 (IOM, December 5, 2022).⁴ As of December 13, 2022 over 7.8 million people have fled their homes to the neighboring countries (UNHCR).⁵ Ninety percent of refugees are women and children, while most men aged 18–60 are required to stay behind under martial law. Ukraine has a large number of people with disabilities (over 2.7 million), of whom more than one million are women and girls. Rapid Gender Analysis conducted by the UN Women and CARE revealed that women are facing immense hardship when it comes to health, safety, and access to food as a result of the war.

3. **The protracted war in Ukraine has had substantial economic, social, and poverty consequences.**⁶ It has significantly disrupted economic activities in many ways: damage to productive assets and infrastructure, logistics problems, labor force losses, decimated supply and demand chains, increased uncertainty, and elevated risks. The contraction in gross domestic product (GDP) in 2022 is projected to be around 35 percent year-on-year. The downside risks are high, related to the unpredictability of the protracted war and high potential for further large-scale damage of infrastructure and negative social and poverty impacts. Based on the global poverty line of US\$6.85 per day (2017 purchasing power parity), poverty was projected to increase from 5.5 percent in 2021 to 25 percent in 2022. Headline inflation hit 24.6 percent in September 2022, with high food price inflation hurting the poor in particular. Yet, despite the war, the Government has continued to deliver key public services and the financial sector is functioning normally, stabilizing the foreign exchange market. However, the intense attacks to energy infrastructure since mid-September are challenging the ability of the government to keep providing energy and water supply in many regions, putting millions of lives at risk and substantially hindering economic activities in most of the country.

4. **Public revenues are under immense stress, while war-time expenditures are growing.** Before February 2022, the fiscal deficit was expected to narrow over the medium-term to just under 2.5 percent of GDP by 2024, helped by a recovery in tax revenues. However, since February 2022, the Government has made strategic decisions to reduce the tax burden

¹ <https://www.ohchr.org/en/news/2022/12/ukraine-civilian-casualty-update-19-december-2022>

² <https://www.ohchr.org/en/news/2022/12/ukraine-civilian-casualty-update-19-december-2022>

³ International Organization for Migration (IOM), Ukraine Returns Report, December 2022

⁴ International Organization for Migration (IOM), Ukraine Returns Report, December 2022

⁵ <https://data.unhcr.org/en/situations/ukraine>

⁶ All statistics in this and subsequent sections are estimates by World Bank Staff based on official statistics of Ukraine's public authorities.



on the population (both individuals and businesses) during a time of crisis, resulting in a sharp decline in tax revenues. Specifically, tax collection has been deferred for key businesses, land and municipal taxes have been suspended for the duration of the war, and the Government has shifted to a simplified tax regime for extended categories of taxpayers. In addition, overall war-related declines in economic activity (including due to out-migration) and the inability to collect taxes in conflict areas also contribute to constrained tax revenues. In this context, the Government has made efforts to cut non-essential current expenditures and capital spending and has reached an agreement with external creditors regarding a two-year debt deferral. Nevertheless, fiscal financing needs – consisting of the deficit (excluding grants) and debt repayments - are expected to grow from US\$4 billion per month in the first half of 2022 to US\$4.5 billion per month in the second half of 2022 (including US\$2 billion of non-military needs). In addition to non-military monthly financing needs, starting from September 2022, the Government could also face the high costs of gas purchases by Naftogaz for the heating season (US\$2.2 billion) and funding of the most critical reconstruction needs (US\$3.4 billion).

5. **Similarly, the war has generated immediate balance of payments pressures. Exports have fallen precipitously as the Black Sea ports were closed from February until July 2022.** Despite some resumption of agricultural exports under the deal brokered through the United Nations (UN), their capacity is limited. Beginning in May 2022, imports recovered quickly. On the capital account, pressures have emerged from the withdrawal of foreign exchange by Ukrainian refugees. Since February 2022, the National Bank of Ukraine has spent around US\$12 billion on currency interventions. This has eroded international reserves, which declined from a pre-war level of US\$29 billion to US\$22.4 billion at the end of July 2022. In August 2022, reserves improved to US\$25.4 billion thanks to donor support.

6. **The Government's proposed 2023 budget is austere, with substantial compression of social and other non-military expenditures and the World Bank's contribution so far has been to ensure delivery of essential administrative expenditure.** The public sector wage bill (including health and education) will be cut by 10 percent, the minimum wage and subsistence minimum income (based on which social transfers are calculated) have been frozen in nominal terms, and capital expenditures have been minimized (US\$700 million), leaving most recovery and reconstruction needs unfunded. Even after these cuts in social expenditure, fiscal needs are estimated at US\$3-4 billion per month. The World Bank has been in the forefront of supporting the Government's ability to pay pensions, healthcare, and essential administrative expenditures, through the PEACE Project that has mobilized \$13 billion as of December 20, 2022.⁷

7. **The funding needs for recovery and reconstruction are gigantic.** Just taking into account the damages till the beginning of June 2022, funding needs were estimated at approximately US\$349 billion, which is more than 1.6 times Ukraine's 2021 GDP.⁸ About one-third of this amount (US\$105 billion) was estimated to be needed in the immediate- and short-term to address the most urgent needs, including social infrastructure (such as schools and hospitals), preparation for the upcoming winter through winterization and restoration of heating and energy to homes, urgent repairs, gas purchases, support to agriculture and social protection, and restoration of vital transport routes. However, these estimates did not include the recent attacks on the energy infrastructure, that have damaged over 50 percent of the energy assets and whose massive impact on losses and needs are under evaluation.

8. **Recovery and reconstruction investments will lay the groundwork for Ukraine to restore services to the population, reinvigorate economic activity and consolidate its development path towards a more modern, low-carbon, climate resilient and inclusive country that is more closely aligned with European standards.** Before the war Ukraine had made impressive commitments on mitigation measures to addressing climate change. Ukraine ratified the Paris Agreement in 2016 and submitted an ambitious updated National Determined Contribution (NDC2) in July 2021 with the

⁷ <https://www.worldbank.org/en/country/ukraine/brief/world-bank-emergency-financing-package-for-ukraine>

⁸ World Bank, Government of Ukraine, and European Commission. 2022. Ukraine Rapid Damage and Needs Assessment, August 2022. Washington, DC: World Bank.



target of an economy wide net GHG emission reduction of 65 percent by 2030 compared to the 1990 level. The country had also committed to reaching carbon neutrality by 2060. In January 2020, the government published the draft concept for Green Energy Transition of Ukraine until 2050, which aimed at increasing renewable energy share in the national energy balance up to 70 percent by 2050.⁹ Ukraine has reiterated these commitments despite the war. Beyond mitigation, reconstruction investments will also need to consider Ukraine's vulnerability to the impact of climate change. This includes vulnerability to wildfire, droughts, high temperatures, heatwaves, heavy precipitation, mudslides, and floods. Unfortunately, the ongoing war significantly exacerbates the climate risks in the country and weakens the capacity to manage climate-related vulnerabilities.

B. Sectoral and Institutional Context

9. ***The war has affected about 26 percent of Ukraine's area including critical corridors for imports and exports.***

Most notably, there have been severe disruptions to maritime ports along the Black Sea and Azov Sea which previously handled approximately 135–150 million tonnes of cargo per year prior to the war. This included approximately 70 percent of all exports specifically about 95 percent of all grain exports from Ukraine. In lieu of Black Sea access, Ukraine's shippers rely on longer road and rail routes to ports on the Baltic, Adriatic, Atlantic, or Romanian/Bulgarian Black Sea coast. The additional distance required to reach alternative ports is approximately 1,200–1,500 km, which adds direct transport cost to shipping via alternative routes. Beyond the direct cost of transport, war-related disruptions to logistics chains impose additional cost due to higher inventory carrying costs, increased chance of spoilage or loss during transit, and greater complexity in coordinating the logistics chain to more distant ports.

10. ***Direct damage to Ukraine's transport network is extensive totaling more than US\$ 29.9 billion and economic losses from disrupted transport total an additional US\$ 26.1 billion as of June 1, 2022.***

A particularly noteworthy element of transport infrastructure damage has been road and railway bridges (3.5 million m² and 63,000 m² damaged respectively)¹⁰. The extent of damage to bridge assets aligns with the critical role that bridges play in connectivity. As readily identifiable, critical points, bridges have been deliberately targeted throughout the war to sever or deny access. The war has also affected critical corridors for imports and exports and created urgent needs to develop alternatives. Economic losses from disruptions to maritime ports along the Black Sea and Azov Sea have been particularly severe. Port disruptions alone have created an estimated US\$ 17.9 billion in economic losses for Ukraine between February 24 and June 1 (67% of total transport losses for that same period). In addition, the war has created significant needs for transporting Internally Displaced Persons (IDPs), refugees, and humanitarian cargo. UZ alone provided an estimated US\$ 364 million in services to transport IDPs, refugees, and humanitarian cargo during the first 3-4 months of war alone.

11. ***Rapid emergency repairs are urgently needed to enable Ukraine's transport network to support humanitarian relief and recovery in war affected communities.***

The Bank estimates that 2,100 villages, 51 towns, and 35 cities in areas that have returned to Government of Ukraine control are experiencing disrupted transport networks due to war. There are also 728 further linkages on Ukraine's wider road and railway network as of June 1, 2022 (beyond formerly occupied areas) that have suffered war damages. Restoring the transport network's basic functionality is an essential precondition for relief and recovery from war related impacts. However, there is a need to use technical approaches that can be deployed quickly and without major civil works due to disrupted supply chains and contractor markets in Ukraine. Modular bridge solutions have therefore been identified as viable short-term solutions for restoring network functionality

⁹ Concept of "Green" Energy Transformation by 2050.

[https://mepr.gov.ua/files/images/news_2020/14022020/eng_pdf_%D0%B7%D0%B5%D0%BB%D0%B5%D0%BD%D0%B0%20%D0%BA%D0%BE%D0%BD%D1%86%D0%B5%D0%BF%D1%86%D1%96%D1%8F%20\(1\).pdf](https://mepr.gov.ua/files/images/news_2020/14022020/eng_pdf_%D0%B7%D0%B5%D0%BB%D0%B5%D0%BD%D0%B0%20%D0%BA%D0%BE%D0%BD%D1%86%D0%B5%D0%BF%D1%86%D1%96%D1%8F%20(1).pdf)

¹⁰ As of June 1, 2022. These figures do not include additional damages following the additional liberation of territory in Kharkiv Oblast and Kherson that occurred during the summer and fall of 2022.



in the case of damaged road and railway bridges. Modular bridge solutions consist of standardized prefabricated steel components designed for quick assembly on sites (often in a matter of days). They can be adapted to specific site needs and configured to meet different loading requirements for a given road or rail line. While they are quick to deploy, they can serve for years if needed. They can be removed and redeployed to other points on the transport network as permanent repairs are eventually implemented. Modular bridges are available from international suppliers and can be delivered to staging areas or sites in “kits” or bespoke configurations if needed using shipping containers or other means of road or rail cargo transport. Modular bridges have been used to restore damaged transport network access in numerous Fragile and Conflict Affected (FCV) contexts including Bosnia and Herzegovina, Iraq, and Afghanistan. They are also commonly stocked by road and rail agencies globally as a measure to enhance climate or other forms of resilience by enabling rapid response to unexpected bridge failures.

12. **Road border crossings and increased use of containerized rail transport are priorities for resilient westward logistics chains that protect Ukraine’s economy and enable critical supplies to reach the Ukrainian people.** Road borders have been heavily capacity constrained throughout 2022. For example, in August 2022, border queues for trucks transporting agricultural commodities from Ukraine were estimated to stretch 40 km and require 5-6 days to clear. This was estimated to cost Ukrainian farmers an additional US\$80-90 per ton of agricultural product that they managed to export.¹¹ Investments to expand throughout capacity of road Border Crossing Points (BCPs) and the road networks connecting to them are urgently needed to alleviate these constraints. Ukraine’s railway has traditionally focused on bulk transport (i.e. moving loose cargo in boxcars, hopper wagons, tank cars, or gondola cars). In contrast, EU railways have increasingly focused on containerized cargo (20 or 40 foot shipping containers) which relies on flatbed wagons rather than bulk cargo rolling stock. In 2020 about 20.6% of all EU rail freight tonne-km were containerized which represents continual year-on-year growth in containerization since 2010¹² when only 15.4% of EU rail cargo tonne-km were containerized. In contrast, containerized rail freight represents only around 2.1% of UZ’s annual tonne-km. Rolling stock fleets on either side of the break of gauge reflect this difference, resulting in a “mismatch” between rolling stock fleets. Between July and September 2022, UZ trains have reportedly needed to wait an average of 13.3 days for the availability of rolling stock on 1435 mm networks. The project’s support to expand the containerized cargo capacity of Ukraine’s railway with additional flatbed wagons will help address this by configuring cargo in a form that aligns better to EU logistics chains and simplifies transloading across different railway gauge. It will also facilitate the movement of containerized humanitarian aid. Between March and mid-November 2022 alone UZ transported just under 4,000 shipping containers of humanitarian aid via flatbed wagons (roughly 15 containers per day) for which they received no revenue and provided transport as a public service. The Project’s support to enhancing westward logistics chains (road and rail) is highly complementary to the European Union’s “Solidarity Lanes” program that seeks to help Ukraine export its agricultural produce via Europe’s transport network.

13. **Alongside emergency repairs and enhancements to transport “lifelines,” there is a parallel urgent need to ready Ukraine’s transport institutions and implement key reforms that will amplify benefits of development assistance.** The international experience of relief, recovery, and reconstruction efforts in conflict-affected countries provides clear evidence that reforms to enhance transparency, improve institutional effectiveness, and ensure accountability are critical to initiate even while war is ongoing. Ukraine’s Ministry of Communities Territories and Infrastructure Development (MCTID) is actively pursuing initiatives to restructure underperforming legacy procedures, augment anti-corruption systems, systematize donor coordination, and develop urgently needed complex projects to international standards of

¹¹ The letter of German Der Agrarhandel (Association of Agricultural Trade) to the EU commission on the logistics of grains and oilseeds from Ukraine sent on August 23, 2022.

¹² Eurostat: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Freight_transportedin_containers_-_statistics_on_unitisation



technical, social, and environmental quality. Binding fiscal and capacity constraints affect the speed and effectiveness of these efforts. There is a corresponding opportunity for urgent assistance from development partners to support MCTID in achieving reform objectives to increase readiness for delivering urgent initiatives. If successful, this would pay immediate benefits to relief operations with additional benefits accruing during subsequent recovery and reconstruction phases across the transport sector.

14. ***MCTID is the lead oversight and policy institution for Ukraine’s transport sector and oversees the implementing bodies for national roads and Ukraine’s railway.*** The State Agency for Restoration and Development of Infrastructure of Ukraine (AR) was formed in January 2023 from the State Road Agency of Ukraine Ukravtodor (UAD) and other institutions. AR is now the MCTID’s implementing agency for the national road network of state importance. Ukrzaliznytsia (UZ) is a joint stock company that is wholly owned by Ukraine’s Cabinet of Ministers with responsibility for Ukraine’s railway sector. The most notable funding flows in the transport sector prior to the war occurred in the road sector through a national road fund under AR (US\$2 billion in 2021). UZ’s pre-war annual turnover averaged approximately US\$ 2.5 - 3 billion across both freight and passenger services with minimal inputs from public funds but a heavy cross subsidy between freight services and passenger services. The war has affected the financial landscape across the transport sector considerably, yet both AR and UZ remain able to fund their basic operations with ongoing support from the international community.

C. Relevance to Higher Level Objectives

15. ***The Project aligns with Ukraine’s National Recovery Plan¹³ which articulates the Government’s blueprint for short, medium, and long term action.*** The Ukraine Recovery Plan has three specific objectives: (i) to provide economic, social and environmental resilience in the marathon to victory; (ii) to find efficient solutions for the soonest recovery of the crucial economic and social processes, and natural ecosystems; and (iii) to develop a modernization plan to ensure expedited sustainable economic growth. The Project’s support to expand capacity of westward transit linkages specifically supports Ukraine’s “resilience” objective. Developing westward transit networks is urgently needed to mitigate the impact of disrupted Black Sea access and to provide alternative means of import / export as needed for economic resilience. In addition, the project’s focus on rapid production of flatbed wagons to increase containerized freight capacity and procurement of rapidly implementable repair technologies (i.e. modular bridges) aligns with the National Recovery Plan’s objectives concerning speed.

16. ***The Project aligns with the approach outlined in the World Bank Group’s “Relief, Recovery, and Resilient Reconstruction” paper.¹⁴*** The three key elements of this approach are: (i) prioritizing relief during the war to maintain the operation of the economy and protecting the population; (ii) implementing quick and coordinated actions to stimulate Recovery in the immediate aftermath of cessation of hostilities, effecting a timely exit from sub-optimal wartime policies; and (iii) designing and coordinating a Resilient Reconstruction strategy in the medium term, rebuilding both institutions and infrastructure. In line with this approach, the proposed Project would finance urgently needed physical investments to restore and enhance the transport network’s basic functionality which is a fundamental requirement for relief efforts while war remains ongoing. In addition, the project will finance urgently needed institutional preparations that will provide the foundation for delivering more complex and urgently needed recovery investments and will further develop the capabilities of AR, UZ, and MCTID to ready critical projects up to the standards needed for IFI financing.

17. ***The Project supports the outcomes of the Ukraine Relief, Recovery, Reconstruction and Reform Trust Fund (URTF).*** Specifically, Outcome 1.2 of the URTF results framework seeks to ensure that the Government of Ukraine “has financial and implementation support to execute critical recovery and reconstruction operations.” The Project’s

¹³ <https://www.urc2022.com/urc2022-recovery-plan>

¹⁴ <https://documents1.worldbank.org/curated/en/099608405122216371/pdf/IDU08c704e400de7a048930b833049a329ab3ca.pdf>



interventions directly contribute to URTF Output 1.2b that supports this through “enabling emergency relief operations by restoring essential infrastructure.” Similarly, the proposed Project supports Outcome 2.1 of the URTF results framework which seeks to ensure that the Government of Ukraine “has (i) relevant data and analytics; and (ii) needed sectoral planning and project preparation capacity for recovery, reconstruction, and reform.” Component C of the proposed Project would specifically contribute to Outputs 2.1b, 2.1c, and 2.1d relating to this objective which cover institutional reforms, project preparation tasks and associated development of capabilities needed for recovery and reconstruction.

18. ***The proposed Project aligns with the broader objectives of the Ukraine Country Partnership Framework (CPF) for the period FY17 – 21 (Report #114516 approved on June 20, 2017) which remain relevant.*** The theme of CPF Focus Area 1 is “making markets work” which covers issues relating to inadequate and ineffective infrastructure, gaps in the effectiveness of public investment management, and increasing the pace of reforms in the infrastructure sectors. The Project supports both transport network repairs and sector reforms under the Ministry of Communities Territories and Infrastructure Development which support of the CPF’s objectives.

II. PROJECT DESCRIPTION

19. ***The Ukraine RELINC Project is designed as a US\$ 585 million “framework project” that will use an IPF instrument under the policy framework provided by OP/BP 10.0 Investment Project Financing and OP/BP 8.00, Rapid Response to Crises and Emergencies.*** Project design supports activities that enable Ukraine to partially address the ongoing emergency situation caused by the attacks on the transport infrastructure, with a scope that is informed by both available and future financing over the immediate- and short-term. The Project has been designed and appraised for the full US\$585 million, including envisaged results indicator targets that match this envelope. The design outlines Project activities that will be implemented with an initial funding envelope of US\$ 50 million grant, as well as additional activities to be financed by an additional resource mobilization of US\$535 million, which is expected to be filled as subsequent Bank and donor funding (through trust funds, or co-financing) materializes. As additional funding becomes available it would be allocated to the components depending on the evolving needs in consultation with MCTID and MOF based on: (i) analysis of Ukraine’s situation and the highest priority needs for achieving the Project’s Development Objective; (ii) consideration for planned or ongoing support by other development partner programs; and (iii) availability and feasibility of implementation modalities required to deploy funds effectively.

20. ***This “framework” approach provides a clear line of sight for the Government of Ukraine, the World Bank, and other development partners on the urgent needs in the sector, as well as a simplified process to move from the available financing (US\$50 million) to the US\$585 million financing target.*** It also reflects the importance of acting with the agility and speed of delivery required in the context of a wartime emergency. With this in mind, Project components are designed for achieving sustainable results within the available financing, while also being sufficiently flexible and scalable enough to easily absorb additional financing as resources become available. As more financing becomes available, incorporation of such additional funds would be added to the unfunded or partially funded components of the framework project according to the principles noted above with processing steps appropriate to the funding (e.g. additional trust fund grants) or financing (e.g. IBRD) being committed. Any further increase beyond US\$585 million will entail Additional Financing and restructuring to scale-up the Project. Furthermore, should mobilization of anticipated resources provide more difficult than anticipated, efforts to identify additional resources will be intensified or, alternatively, the Project will be restructured to adjust indicator targets. It is envisaged that the Bank’s management will update the Board as appropriate as the framework approach secures additional funds. For example, an update on the RELINC Project was recently delivered via a complementary briefing associated with the Board’s discussion of the Health Enhancement and Lifesaving (HEAL) Ukraine Project (P180245) on December 20, 2022.



21. **The Project follows an analogous framework approach to the Health Enhancement and Lifesaving (HEAL) Ukraine Project (P180245).** The HEAL project is designed as a framework approach with an overall envelope of \$ 500 million in total and an initial funding commitment of US\$ 110 million. The Board’s approval of the project authorized the Regional Vice President to approve incremental financial commitments up to the Board-authorized envelope (with notification to the Board and after coordinating with relevant internal stakeholders, including the Operations Policy and Country Services and Credit Risk departments). This authorization is valid for the duration of the Project as approved by the Board. The RELINC project has been designed similarly. It’s initial funding of US\$ 50 million grant is provided through the URTF¹⁵ which does not require Board approval. In case of any subsequent financing that does require Board approval (such as IBRD), it is expected that the project will be submitted to Board requesting authorization for the Regional Vice President to approve incremental financial commitments up to the Board-approved financing envelope for the framework, less any funds that would have been committed by then.

A. Project Development Objective

PDO Statement

22. The Project Development Objective is to provide the means for mitigating the immediate impact that disrupted transport networks have on Ukraine’s population and economy.

Intended results

23. The proposed Project aims at three key results: (i) providing means to relink communities with transport access; (ii) providing capacity to increase the resilience of critical logistics chains; and (iii) accelerating recovery and reconstruction of Ukraine’s transport network. These are summarized below.

Key Result	Objective(s)	Indicators
Provide the means to relink communities with transport access	<ul style="list-style-type: none"> Enable emergency repairs to Ukraine’s transport network that can relink communities with the transport accesses needed to support essential relief and reconstruction efforts. 	<ul style="list-style-type: none"> Estimated # of communities that can be reconnected using Project supplied materials and equipment.
Provide capacity to increase the resilience of critical logistics chains	<ul style="list-style-type: none"> Increase the capacity of Ukraine’s westward logistics chains to mitigate the impact of disrupted Black Sea access and facilitate physical integration with the EU and Moldova. 	<ul style="list-style-type: none"> Increased container transport haulage capacity of UZ’s rolling stock fleet; Additional throughput capacity available for trucks at western border crossings.

¹⁵ The URTF is established by the WBG to channel grant resources from partners to finance projects and critical analytical and advisory work. This is in coordination with international partners and in line with the WBG’s Approach Paper to support Ukraine during the current relief phase, as well as the recovery and reconstruction phases.



Key Result	Objective(s)	Indicators
Accelerate recovery and reconstruction of Ukraine’s transport network	<ul style="list-style-type: none"> Prepare Ukraine’s transport sector institutions for delivering recovery and reconstruction activities; Advance readiness of essential projects for recovery and reconstruction investment to a standard needed for sourcing funding / financing from development partners. 	<ul style="list-style-type: none"> Adoption and implementation of cost estimation reform by MCTID;

24. **The Project’s ability to measure results is limited by the high levels of uncertainty that are affecting Ukraine and its transport sector.** As Ukraine liberates territory, the physical extent of the available transport network changes which affects transport demand. Significant international events such as the Black Sea Initiative, increased western transport network integration following Ukraine’s status as an EU candidate country, and the impact of returning IDPs and refugees also affect transport demand in Ukraine. For these reasons the project’s results framework measures outputs as well as outcomes related to re-linking conflict affected networks or enhancing the capacity supplied of undamaged networks but stops short of seeking to measure demand for transport.

B. Project Components

Summary

25. **The proposed Project’s design consists of four components:** Components A & B will finance physical elements needed to ensure essential transport network functionality for: (i) humanitarian relief and recovery in war affected communities; and (ii) enhancing the resilience of economically vital westward logistics chains that connect Ukraine to EU neighbors and Moldova. Component C focuses on Ukraine’s transport sector institutions and initiating the key reforms they need to advance readiness for delivering larger and more complex recovery programs which are likely to involve extensive cooperation with development partners. Component D provides a contingency response capability if required. Specific investments under each component are described below. Annex 2 contains a summary table of total needs under the framework project, current funding, and expected future funding by component at Appraisal.

Component A: Lifeline road connections (US\$ 23.5 mln funded; estimated funding need is US\$ 289 mln)

- **A1: Modular bridges needed to restore damaged bridge connections:** This sub-component will fund: (i) procurement of modular bridge systems (approximately 500 linear meters) needed to provide immediate and urgent repairs to restore damaged road network bridges; (ii) transport of modular bridge systems into Ukraine and delivery to AR staging areas; (iii) training on modular bridge installation for AR.
- **A2: Materials required for urgent road and artificial structures repairs and winter access:** This sub-component will fund: (i) procurement of materials required for road and artificial structures repair and ensuring road access during winter months, including aggregates, bitumen, salt, grit, steel, concrete, bridge components, and road safety related equipment (including temporary barriers, signage, lighting, crash attenuators); and (ii) delivery of materials and equipment into Ukraine to AR staging areas.
- **A3: Enhancement to western road Border Crossing Points (BCPs) to mitigate impacts of Black Sea disruption:** This sub-component will fund: (i) procurement of scanning equipment for heavy goods vehicles and passenger cars for high priority BCPs; (ii) procurement of video surveillance for heavy goods vehicle zones at BCPs; and (iii) other equipment or technology solutions as needed to facilitate BCP operations.



Component B: Lifeline rail connections (US\$ 23.5 mln funded; estimated funding need is US\$ 289 mln)

- **B1: Flatbed wagon production to increase containerized transport capacity:** This sub-component will fund flatbed railway wagon production which is urgently needed to increase the capacity of Ukraine's railway to move containerized freight. The expected quantity of flatbed wagons is approximately 200 units.
- **B2: Materials, components, and equipment for repair of vital rail lines:** This sub-component will fund procurement of: (i) steel rail; (ii) sleepers and fasteners; (iii) switches; (iv) power supply equipment; and (v) safety and signaling equipment as needed to repair damaged railway lines and corresponding railway power supply systems.
- **B3: Rolling stock for operational efficiency:** This sub-component will fund: (i) procurement of 1435 mm gauge rolling stock for transport of agricultural commodities (hopper cars and tank wagons needed for grain and oil seeds) on European railway networks; (ii) procurement of shunting locomotives to enhance resilience and efficiency of shunting operations; and (iii) mainline locomotives (both diesel and electric). This additional rolling stock is urgently needed to support export of Ukraine's agricultural commodities via EU ports.
- **B4: Materials, equipment, and modular bridges for damaged rail bridge repairs:** This sub-component will fund: (i) procurement of modular bridge systems to restore damaged rail network bridge connections; (ii) procurement of steel members and other materials for repair of damaged rail bridges in-situ where technically feasible; (iii) training on modular bridge installation for UZ; (iv) transport of modular bridge systems and materials into Ukraine and delivery to UZ staging areas; and (v) equipment needed for repair of bridges and placement of modular bridging systems.

Component C: Readiness for Urgent Reconstruction Initiatives and Project Management (US\$ 3 mln funded; estimated funding need is US\$ 7 mln)

26. The component will fund (i) the cost and fees associated with support from UNOPS for deploying a portion of the Project's initial US\$ 50 million funding; (ii) technical studies, including the detailed engineering designs and feasibility study; (iii) stakeholder engagement, a sector-wide Environmental and Social Management Framework (ESMF) and environmental and social instruments; (iv) incremental operating costs and delivery consultancy support within MCTID / UZ / AR; and (v) Project audits, technical supervision consultants for remote supervision and verification of transportation and delivery of the procured goods.

Component D: Contingent emergency response (US\$ 0 million)

27. ***Given the inherent uncertainty created by ongoing war, this zero-dollar component is designed to provide swift response in the event of an emerging crisis or emergency.*** The Government of Ukraine would be able to request the World Bank to reallocate Project funds to address humanitarian or other critical emergency needs that may materialize. In the event this Component would be triggered, a Contingent Emergency Response Manual ("CERC Manual") will be prepared by MCTID / AR / UZ (or a combination depending on the nature of the emergency concerned). This will specify implementation arrangements for the component, including its activation process, roles and responsibilities of implementing agencies, a positive list of activities that may be financed, ESF related instruments, and fiduciary arrangements.

C. Project Beneficiaries

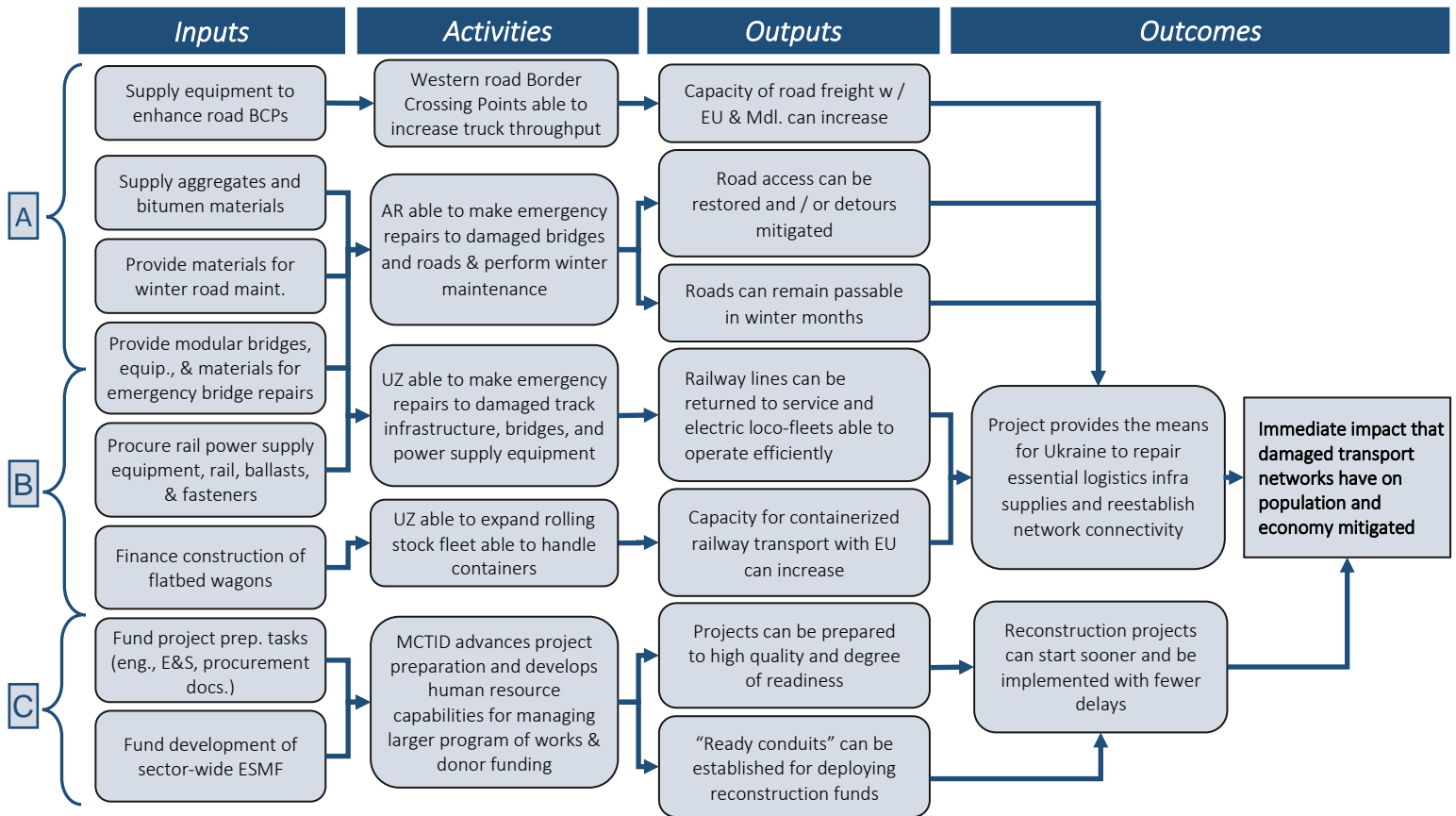
28. ***The primary beneficiaries of the project will be people currently living in oblasts where territory has been liberated from Russian forces as well as displaced persons returning home.*** Prior to the war, approximately 15.02 million people were estimated to live in Oblasts that previously or are currently experiencing Russian ground invasion after February 24, 2022. Transport networks in these Oblasts have seen the heaviest damage due to both occupation as well



as shelling across front lines. Specifically, Donetsk, Luhanska, Khersonska, Kharkivska, Mykolaivska, and Zaporizka oblasts together account for an estimated 74 percent of transport reconstruction needs. Within this larger set of Project beneficiaries, are the remaining and prior residents of the approximately 2,186 settlements (53,349 km² of territory) that Ukraine has liberated from Russian occupation since February 24, 2022, as of November 20, 2022. The population living in these formerly occupied areas was approximately 2.1 million people prior to the war. Beyond front line Oblasts, the Project is expected to benefit road / rail passengers and shippers more broadly who rely on Ukraine’s inland transport networks that have been damaged by long range strikes.

D. Results Chain

Theory of change



E. Rationale for Bank Involvement and Role of Partners

29. **There are three main value drivers behind the Bank’s support for the proposed project.** These include:

- Providing a technical and fiduciary framework for meeting immediate, urgent needs in the transport sector. The proposed Project provides a framework that enables additional development partners to channel financial resources towards immediate needs in Ukraine’s transport sector. The procurement activities and fiduciary procedures that apply under the framework project can provide a basis for others to channel their funding through joint or parallel financing structures as such funding becomes available without needing to develop redundant structures;



- *Complementarity with the Bank’s analytical activities and ongoing technical assistance.* The proposed Project draws upon outputs from the Ukraine Rapid Damage and Needs Assessment which was jointly released in September 2022 by the Bank and the European Union. Results from this analytical process have provided the basis for identifying the investments financed under Components A and B. Similarly, ongoing Bank-supported technical assistance to the MCTID has been developing reforms to the project cycle and its key procedures (e.g. cost estimation) with a view to increase readiness for future recovery and reconstruction initiatives; and
- *Providing scalability under the Bank’s Environmental and Social Framework.* The Project’s activities will be implemented in compliance with the Bank’s Environmental and Social Framework (ESF) which will also serve as the basis for scaling up Project interventions as and when additional funds may become available. The ESF is designed to align broadly with the social and environmental standards that apply to various bilateral and multilateral development partners which would increase the fundability of investments prepared according to ESF requirements. This would provide the pipeline of ready projects that can intersect with available funding.

F. Lessons Learned and Reflected in the Project Design

30. ***Learning from the Road Sector Development Project (RSDP; P149322) and Second Road and Safety Improvement Project (RSIP2; P127156) about robustly preparing major civil works to avoid implementation challenges:*** The Bank’s most recent transport sector projects in Ukraine (RSDP and RSIP2) faced delays in the delivery of civil work contracts relating to deficiencies in the preparation of civil works. Loan Closing Dates for each operation were extended and both projects experienced costly change orders. The primary contributing factors were: (i) absence of design documentation at project Appraisal; (ii) gaps in design solutions that subsequently required revisions; (iii) need for additional citizen engagement (consultations) with associated design revisions; and (iv) missed opportunities to use support from local administrations. These were eventually addressed through additional engagement but at the cost of additional delay. The proposed Project has been informed by these experiences. Component C accordingly funds the tasks needed to prepare future critically needed civil works thoroughly, reform institutional processes, and develop the teams required for preparing Ukraine’s reconstruction. These tasks are urgent and necessary considering the likelihood that transport sector institutions would be asked to rapidly mobilize and scale up complex reconstruction programs even while war continues.

31. ***Case studies in relief, recovery, and reconstruction in war-affected countries:*** During the summer of 2022 the Bank’s transport team worked with the US Treasury’s Office of Technical Assistance and MCTID to produce 5 case studies on post war relief, recovery, and reconstruction. These cases covered the Marshall Plan, Japan, the Former Yugoslavia, Iraq, and the Republic of Korea. Key lessons included: (i) the criticality of basic transport access and infrastructure services as enablers of broader humanitarian relief efforts and recovery initiatives; (ii) the importance of undertaking project preparations for recovery / reconstruction projects while relief efforts are still underway (even if war remains ongoing); (iii) the benefits of government reforms that simplify processes, enhance transparency, and improve effectiveness of delivery when using international assistance; (iv) the criticality of government’s role in coordinating / convening development partners around well-prepared framework interventions; and (v) the importance of speed and “implementability” for initial development interventions to build capacity for increasingly complex interventions that follow. The proposed Project’s design reflects these lessons in the scope of its subcomponents. Components A and B aim at providing the basic transport network functionality needed to support relief efforts and Component C which focuses on critical institutional actions and readiness for reconstruction.



III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

32. ***MCTID will oversee State Agency for Restoration and Development of Infrastructure of Ukraine (AR) and Ukrzaliznytsia (UZ) in delivering the Project.*** Existing Project Implementation Units (PIUs) within Ukraine's national road authority AR and its national railway company UZ will implement the project. MCTID has assigned a Deputy Minister to oversee the two PIUs and to lead overall project activities. This arrangement will ensure that, where necessary, the Implementing Agencies are coordinated and communicating with each other and the MCTID, as needed, to deliver intended results. The Project's initial grant agreement will be signed between Ukraine and the Bank for an initial US\$ 50 million in funding. The United Nations Office for Project Services (UNOPS) will support the Implementing Institutions under separate Outputs Agreements (Delivery of Outputs under Bank-financed Projects Standard Form of Agreement) signed with each Implementing Agency. Subsequent funding / financing arrangements under the framework project may involve additional subsidiary agreements between the MCTID and Implementing Agencies or alternative arrangements determined at a future time.

33. ***While transport networks have suffered extensively due to war, implementation capacity in the transport sector has proven remarkably robust.*** AR and UZ have continued to undertake emergency repairs, deliver services, and inventory damaged assets in reclaimed territory and across Ukraine. The project will be implemented by PIUs within AR and UZ that have experience of working with IFI supported projects and the associated fiduciary, environmental, social, and technical requirements that they entail. The PIU that operates within AR has recently implemented the IBRD-financed Road Sector Development Project (RSDP) and Second Road and Safety Improvement Project (RSIP2) under old safeguards policies and 3R: Reconnect, Revitalize, Recover Project under Environmental and Social Framework. The PIU that operates within UZ is currently managing projects financed by the European Investment Bank and the European Bank for Reconstruction and Development. While the PIU within UZ does not have experience of working with IBRD's ESF and will require additional guidance, it is expected that such support will come from the PIU within AR and from MCTID – both of which have extensive experience of working effectively with the Bank. The implementation capacity of AR, UZ, and MCTID at Appraisal is considered adequate for the entirety of the proposed framework Project.

34. ***There is an immediate need to mitigate the risk of current disruptions to basic utility services which can slow administrative processes.*** Throughout the fall and early winter of 2022 missile and drone strikes have disrupted basic utility services throughout Ukraine (e.g. electricity, water supply, heating, telecoms, etc.) which is impacting civilian life and the speed of administrative processes. This poses a risk of delay to the Project's intended Development Objective. The Project's involvement of UNOPS for the goods contracts under its initial funding (US\$ 50 million) will provide a temporary solution while disruptions continue. The objectives of this arrangement are to: (i) mitigate the impacts and potential future risks of disrupted utilities services (power, water, heating, telecoms etc.) that are affecting Ukraine; (ii) to allow government to focus its capacity on the delivery of emergency repairs which is a high priority for protecting the livelihoods of Ukraine's population; (iii) to provide means for rapidly scaling activities in line with the Project's framework structure. It is expected that the arrangements with UNOPS will be temporary for the implementation of goods contracts under the initial US\$ 50 million funding envelope that the Project's framework approach will deploy. However, the Bank will assess the future for continuation or an alternative structure in consultation with Government as Ukraine's situation evolves.

35. ***MCTID will coordinate across both Implementing Agencies and assign either UZ or AR to lead activities under Component C as appropriate.*** The scope of activities envisaged under Component C will rely on external service providers (e.g. engineering, environmental, social consultancies, or non-governmental organizations) which are available from



within Ukraine and / or from the international market. For initially funded services contracts under Component C within the Project's initial US\$ 50 million, AR and UZ will manage procurement directly in their respective sub-sectors. It is envisaged that activities in the roads subsector would be assigned to AR while activities in the railway subsector would be assigned to UZ. For activities such as environmental and social risk management and preparation of the relevant ES instruments including the sector-wide Environmental and Social Management Framework (ESMF), AR will hire an E&S Specialist to work directly with MCTID to coordinate efforts across 2 PIU's. Both PIU's will also have designated environmental specialists and social specialists funded under Component C and engaged by AR and UZ respectively.

36. Annex 3 provides a summary of implementation arrangements and a table of roles and responsibilities that relate to the arrangement with UNOPS.

B. Sustainability

37. ***UZ and AR have the capacity to sustain the Project's investments despite the challenges imposed by the war.*** The implementation model that AR and UZ follow to sustain Ukraine's transport network differs considerably but has proven effective. UZ relies heavily on internal "daughter" companies that implement design activities, physical works, and rolling stock supply / maintenance. This model has performed extremely well at providing resilience during wartime and the highly unpredictable needs that war damages have created. In contrast, AR maintains a leaner organizational structure. While AR continues to maintain in-house engineering design capabilities, implementation of works relies almost entirely on both local and international contractors that are procured from the domestic and international market. Despite the differences between models, both have been able to perform under wartime conditions. For example, AR was able to complete works under the IBRD-supported Road Sector Development Project (RSDP; P149322) throughout the summer of 2022 despite war related disruptions to supply chains. Similarly, UZ has been effective at implementing emergency repairs to track and power supply infrastructure to partially restore freight and passenger services. Considerable needs remain unaddressed because of the limited availability of key inputs. However, if binding constraints on the availability of inputs (modular bridges, materials, components, equipment, etc.) there is confidence that the implementation capacity of AR and UZ can deliver and sustain intended results.

C. Monitoring and Evaluation

38. ***The Project's supervision structure aims to mitigate additional risks arising from limits on Bank missions, difficulties in making field visits, and potential safety / security risks around the management of location-specific information.*** Component C of the Proposed project will fund additional services required for supervision of activities under Components A and B. Under the framework project's initial US\$ 50 million funding, this is expected to include one or more technical firms and / or individual consultants based in Ukraine who will monitor project activities and report to the Implementing Agencies on activities and compliance with Project requirements. For monitoring and supervision of modular bridge deployment, the following approach will be used to manage security risks: (i) the Implementing Agencies will provide (ex-ante) a dossier of information for each site that is anonymized for the specific location and time when bridge deployment will occur; (ii) following bridge deployment (ex-post), the Implementing Agencies will delay reporting of full location details until 15-45 days depending on when the Implementing Agencies deem that the installed bridge has become readily available public knowledge. This approach aims to mitigate incremental safety and security risks that crews may face from accidental disclosure of bridge installation sites ex-ante while enabling validation that project requirements are systematically followed. For flatbed wagon construction, the envisaged approach is for supervision consultants and / or MCTID's own engineers to make visits to the designated production facility at randomized time intervals in direct coordination with UZ. In the event of major injuries relating to the Project, the Implementing Agencies will notify the Bank within 48 hours according to the Bank's Environmental and Social Incident Response Toolkit (ESIRT).



At that time, the Bank and the Implementing Agencies will consider and agree on a case-by-case basis any necessary approaches to managing location-specific information that could pose an incremental security risk.

39. ***For goods contracts under the Project's initial US\$ 50 million UNOPS will ensure an appropriate internal monitoring and control system is in place.*** This shall include but is not limited to (i) provision of procurement plan and updates to the Implementing Agencies before initiating procurement activities; (ii) publishing of Contract Award Notices in due time; (iii) copying the Implementing Agencies and the Bank on any complaints under the project, etc. UNOPS has concurred regarding the need to establish and maintain a secure mechanism allowing tracking of modular bridges delivery to Ukraine. This will be accessible by the Bank and other key stakeholders and help enhance project monitoring and mitigate related risks.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

Technical Analysis

40. ***The Project's immediate focus on modular bridges under subcomponents A1 and B4 is technically sound.*** Modular bridges offer several key advantages for temporary repair of damaged bridges, including the following: (i) they have interchangeable and compatible components by design such that they can be used in different configurations to address the unique needs of particular sites; (ii) they deploy quickly and can be constructed with minimal equipment as needed to rapidly address network disruption; (iii) they can be used for "overbridging" one or more damaged bridge spans to isolate damage within a larger multi-span bridge; (iv) they can be used as temporary roads on top of road sections that have become so severely damaged as to become impassible; (v) they can be removed with minimal environmental impact and redeployed to additional locations when permanent repairs to a damaged structure are complete or network priorities change; (vi) after permanent bridge repairs are complete they can be stored for future emergencies as a means of enhancing transport network resilience (e.g. to climate related impacts); (vii) if no longer needed, they can be sold or transferred to other jurisdictions to generate revenues for funding other investments. The Implementing Agencies have adequate capacity to deploy modular bridges either through engagement with private contractors or through Force Account. This capacity has been demonstrated throughout the war through emergency works on roads, railway infrastructure, and bridges that have been able to take place to date throughout Ukraine.

41. ***Modular bridge solutions are proven in conflict and disaster response applications.*** Because they are quick to assemble and can be deployed to use remaining sound elements of a damaged bridge (undamaged abutments, piers, or sections of bridge deck), modular bridges are commonly used in conflict and disaster response efforts to restore access. Modular bridges can also be delivered to the sites in containers as ready "kits" that simplify the logistics of their supply. They have been used in Bosnia and Herzegovina, Iraq, Afghanistan, and other conflict affected countries. They have also been used in response to hurricanes, flooding, earthquakes, landslides, and other disaster contexts. There are established international companies specialized in the engineering and fabrication of modular bridges that can also provide bundled training solutions to implementing agencies for modular bridge deployment. The Bank is providing technical inputs to the development of specifications and requirements for supplier capabilities to ensure that modular bridges procured can achieve the Project's intended results. These inputs are also reflecting consideration for supply chain capabilities and the potential to scale up modular bridge deliveries as may be necessary.

42. ***The Project's immediate focus on flatbed wagons under subcomponent B1 for increasing containerized railway freight transport is technically sound for integrating logistics chains with Ukraine's EU neighbors.*** Disruption to Ukraine's Black Sea port access since February 24, 2022, has increased the strategic importance of westward transport



linkages with EU neighbors and Moldova. While railway transport offers a potentially high-capacity and cost-efficient mode, there are key constraints to what can be transshipped across the break of gauge between EU and Ukrainian networks. These include border crossing point capacity and administrative processes, transloading capacity, and rolling stock availability. Throughout 2022, the foremost set of constraints has concerned the availability of 1435 mm gauge bulk cargo wagon fleets within the European Union. While Ukraine has ample bulk cargo rolling stock, there has been constrained availability within the EU to fully meet the needs posed by Ukrainian bulk exports. This reflects Europe's greater reliance on road transport for the movement of agricultural commodities and overall lower reliance on railways in general for freight (77 percent of inland freight tonne-km in the EU moved by road; 16.8 percent moved by rail). Fleet constraints within the EU have resulted in significant delays to turnaround times for Ukrainian rolling stock at transloading locations. In contrast, the availability of flatbed railway wagons and trucks for moving containers within Europe is greater given Europe's greater use of containerized transport. Despite the war, containers are presently available for transport into and out of Ukraine and are not a binding constraint on increasing containerized transport. However, containerization is currently restricted by a limited quantity of UZ flatbed wagons for 1520 mm (broad gauge) track. The Project would help to alleviate this constraint and in so doing will help to align Ukraine's railway cargo capacity with the type of rolling stock fleet that EU cargo haulers can more readily provide.

43. ***Increasing UZ's containerized transport capacity is urgently needed to support supply of international humanitarian assistance during the war.*** Under instructions from Ukraine's Cabinet of Ministers, UZ has already provided an estimated US\$ 364 million worth of passenger and freight services to transport IDPs, refugees, and humanitarian cargo during the first 3-4 months of the war alone. These essential public services have been provided on UZ's own accounts without public subsidy. Expanding UZ's ability to deliver critical public services to sustain Ukraine's population requires urgent expansion of containerized transport capacity. Containers are a cargo configuration of choice for transporting humanitarian aid and have been widely used internationally for relief efforts. Shipping containers provide self-contained delivery options for critical aid supplies such as medical stations / clinics, forms of temporary shelters, power supply units, and emergency refrigeration units. Within the transport sector, containers are regularly used for delivery of equipment or solutions that need to remain together in transit such as modular bridge kits and railway signaling equipment.

44. ***The Bank's technical appraisal of materials, 1435 gauge rolling stock, and equipment to enhance road border crossing points under Components A and B confirms that these investments are technically sound and urgently needed.*** Investments envisaged under Components A2, A3, and B2 are not funded at the time of Appraisal but have been assessed relative to findings from the Bank-supported Rapid Damages and Needs Assessment (RDNA) and operational data from UZ and AR. The deployment of materials is expected to occur within existing standards governing road and railway infrastructure in Ukraine which are fit for the Project's intended purpose of providing materials needed for emergency repair. While the quantities used to develop cost estimates for the Project's framework will not meet the entirety of needs that the RDNA identified, they do reflect estimated deployment capacity of UZ and AR on the rail and road network over 3-9 months implementation period. Quantities and estimated prices would be adjusted as needed based on actual conditions in Ukraine at the time of funding. Similarly, the Bank Appraised the proposed supply of 1435 mm gauge rolling stock relative to current UZ data on waiting times which are considered one source of binding constrained to increased railway logistics integration with the European Union. This rolling stock (and its operation) is expected to conform with UIC standards, Technical Specifications for Interoperability, and relevant national standards and regulations that apply in the EU neighbor states that border Ukraine. In the case of equipment needed to enhance road border crossing point throughput, the Bank has Appraised the list of urgent needs provided by Ukraine's Ministry of Communities Territories and Infrastructure Development (MoCTCID). This aligns with recommendations from ongoing Bank-supported analytical work to mitigate the impact of disrupted Black Sea access. While equipment would not fully compensate for disrupted Black Sea access, it is considered part of the urgently needed and ready and available interventions that can help to reduce long truck waiting times at Ukraine's EU borders.



Economic Analysis

45. **The Bank undertook an indicative economic assessment of subcomponents A1 and B4 (modular road and railway bridges) which shows a strong economic case for intervention to restore vital access using modular bridges.** In the case of the component A1, the analysis considered a sample of damaged bridges that require different lengths of modular bridge repair under the assumption that larger more complex bridges would be (on average) more common on higher standard roads (motorways and highways) where design standards require greater use of structures to bridge obstacles and terrain contours. The analysis assumed depressed traffic volumes that are believed to characterize present wartime conditions on Ukraine’s national road network where travel demand is suppressed or reduced due to human migration away from conflict areas. The analysis considered only national roads as this is the section of Ukraine’s overall road network that is managed by the Project’s implementing agency for Component A (Ukravtodor). These results (summarized below) suggest that the economic case for modular bridges is robust even under the pessimistic scenario where traffic volumes remain suppressed by war. It should be noted that this analysis did not account for increasing traffic volumes that would likely accompany cessation of war or return of refugees / Internally Displaced Persons to areas that have been liberated for extended periods of time. These phenomena would increase rates of economic return beyond what is noted below which represent a conservative case estimate.

<i>National Road category</i>	<i>Est, ADT (wartime)</i>	<i>Est. average bridge spans</i>	<i>EIRR</i>
Road (M - Motorway)	2 500	3	40.2%
Road (H - National)	2 250	3	35.3%
Road (P - Regional)	1 500	2	35.3%
Road (T - Territorial)	750	1.5	20.0%

46. The Bank also undertook economic appraisal of a sample of damaged railway bridges that could be restored to functionality using modular bridge solutions. This analysis confirmed a strong economic rationale for the Project’s interventions. The economic case is based on the vehicle operating cost savings generated by modal shift from trucking back to rail after a damaged rail connection would be restored. A moderate to low level of freight demand (about 4 trains per day carrying 1,000 tonnes of cargo each) and bridges of different lengths were considered. A summary of the results is presented below.

<i>Item</i>	<i>Number of spans</i>	<i>Cost, USD</i>	<i>IRR</i>
Large bridge	5	\$4,271,710	44.5%
Medium bridge	3	\$2,563,026	79.0%
Small bridge	1	\$854,342	243.8%

47. **The Bank also performed an indicative economic analysis of Component B1 (flatbed wagons) which considered the impact of using containerized cargo to streamline the interface between 1520 mm/1435 mm railway networks.** The analysis focused on the potential for containerization to accelerate transshipment across break of gauge at Ukraine’s borders with the EU. Specifically, the analysis considered both time savings in transloading operations as well as time needed to wait for EU bulk cargo rolling stock availability on 1435 mm gauge networks. Purchasing 200 additional flatbed platforms will allow to containerize about 300,000 tons of bulk cargo annually, assuming that a round trip for an average wagon is 7 days. This will reduce the time spent to transload cargo from 3 hours to 50 minutes per wagon. Additional



savings will be generated by reduced waiting time due to greater rolling stock availability within the EU. According to UZ, weighted average waiting time on the border between Ukraine and the EU is 15.6 days. Part of this delay is due to transloading and part is due to rolling stock availability. The Appraisal considered 70% of delay could be eliminated by switching to containerized cargo (about 11 days) which is a conservative assumption. A summary of the results is presented below.

<i>Item</i>	<i>Quantity</i>	<i>Cost, USD</i>	<i>EIRR</i>
1520 mm flatbed platforms	200	\$15 000 000	32.6%

48. Economic analysis of additional subcomponents would be prepared when further clarity is available regarding funding of these sub-components which may affect the scale and scope of investment as well as associated benefits.

B. Fiduciary

Financial Management

49. ***The assessment of the Project’s Financial Management arrangements was carried out and was based on the analysis of performance of AR in the recently implemented RSIP2 and RSDP projects as well as expanding on the recent WB assessment of UZ.*** The FM assessment covered capacity assessment of AR and UZ, project implementing agencies. Assessment was conducted taking into consideration: (i) World Bank’s Operational Policy 8.00 on Rapid Response to Crises and Emergencies; and (ii) Guidance Note on Financial Management in Rapid Response to Crises and Emergencies. The Project was appraised for the full US\$585 million scope, although the currently available financing is grant funding in the amount of US\$50 million. Given that this project follows a “framework” approach and the large size of the operation, continuous capacity of the implementing agencies will be monitored on an ongoing basis, and existing capacity matched to the changing scope of the operation (if any changes). Financial Management performance and risk ratings will then be updated accordingly. While implementation support will be provided throughout project implementation, it is anticipated that more intense support will be needed in the first 12 months after project approval, with monitoring taking place every four months. It is envisioned that intensive support (including missions) will be provided remotely initially. The Bank will also engage a third-party agency for supervision and verification of the project activities, and its scope will cover Financial Management and disbursement performance of the Project.

50. ***Financial Management arrangements were confirmed to be adequate and will be further strengthened.*** AR has proven capacity to implement large scale IBRD-financed operations. The PIU within AR maintains qualified experienced staff and established systems that will continue to be used for the implementation of the proposed Project. The last Financial Management monitoring of AR was carried out in November 2022. This resulted in a “Moderately Satisfactory” rating, due to an outstanding audit from the IBRD-supported Road Sector Development Project (P149322) which closed on September 30, 2022 and will be completing final payments before December 31, 2022. The final audit of this project has been delayed. Specifically, the tender for this final audit could not be completed within 2022 when the corresponding budget allocation was not made due to war impacts on the 2022 budget. However, AR has provided adequate budget allocation to conduct the audit in early 2023 and a time-bound action plan has been agreed with AR to finalize it before the end of April 2023. In contrast to AR, UZ does not have recent prior experience of managing IBRD funds. However, UZ does have extensive experience managing EIB and EBRD funds as well as managing a major international bond issuance program. A preliminary Financial Management assessment was carried out in 2021 during preparation of a prior IBRD-financed project that was later dropped due to the outbreak of war. It is expected that the RSDP audit report covering both 2021 and 2022 will be received in April 2023. Based on results of the ongoing assessment, UZ has experienced staff and systems in place, including qualified staff, accounting, and reporting systems, and is familiar with the requirements of



IFIs with respect to financial management and disbursement. UZ would particularly benefit from more robust implementation support, particularly during the first months of implementation. Further details as to the specific internal controls and segregation of tasks between the Implementing Agencies and UNOPS as well as other parties involved will be detailed in the Project Operations Manuals (POMs), that would be prepared and adopted within 30 days of Project Approval. Given the Project's framework structure, the emergency nature of the operation, and the need to familiarize UZ with World Bank processes, additional World Bank implementation support will be provided through an increased frequency of implementation support and supervision virtual missions (every 4 months).

51. ***The risk associated with the Project's Financial Management structure is assessed as "High" at Appraisal.*** This is substantially due to increased inherent risks created by war, such as AR and UZ potentially being affected in a way that would prevent them from carrying out Financial Management and disbursement functions. In addition, the emergency nature of the Project and time pressures to process payments for delivery of urgent Project interventions also contribute incremental risk. For goods contracts under the initial US\$ 50 million funding, the Project's use of UNOPS for procurement and financial management functions (see Annex 3) will help to mitigate such risks by facilitating administrative functions. The Project's financing to hire supervision consultants who will provide regular progress reports to AR, UZ, and the Bank also provides further risk mitigation. Other factors contributing to the Project's high-risk rating are the inability of the World Bank staff to carry out on-site supervision under Ukraine's present security situation. This will be partially mitigated through more frequent and comprehensive virtual missions (expected every 4 months) as well as using the services of an independent third-party consultancy firm engaged directly by the Bank that will also contribute to supervising the project's Financial Management and disbursement functions. A final factor that was considered in the Project's risk rating is the current delay in submission of the 2021 audit for the recently completed Road Sector Development Project (P149322) which has been delayed due to budgetary challenges during war.

52. ***AR and UZ will be responsible for reporting and auditing for their respective project components.*** The Project will be required to submit quarterly Interim Financial Reports (IFRs) to the World Bank within 45 days from each calendar quarter, format which will be agreed with the Bank and incorporated in the Project Operations Manuals (POMs). AR and UZ will prepare such reports with inputs from UNOPS during the Project's initial stage. Auditing of the Project's financial statements will be carried out on an annual basis by an independent private auditor acceptable to the World Bank, separately for AR and UZ components. Component C of the Project provides funding for this audit.

53. ***Disbursement:*** For the initial funding commitment of US\$ 50 million, the Project will involve support from UNOPS for procurement of its goods contracts. For those contracts, it is envisaged that UNOPS will be preparing disbursement requests that would be signed and approved by the Implementing Agencies. UNOPS will receive disbursement for its own services as well as for onward payment to suppliers that UNOPS engages under contract. In the case of Component C expenditures that the Implementing Agencies will directly procure or incur (e.g. incremental operating cost, training of PIU staff, environmental and social specialists), the Implementing Agencies will be submitting disbursement requests and receiving disbursement into Designated Accounts or requesting direct payment to service providers. The role of UNOPS and the Implementing Agencies for disbursement arrangements under the project's initial stage is described in Annex 3. For later stages of the Project's framework, regular disbursement mechanisms are expected to be used including (i) direct payments; (ii) reimbursement; (iii) advance; and (iv) special commitments. AR and UZ will be in charge of disbursements for their respective components, including submission of withdrawal applications and reporting to the Bank. AR and UZ will each open and maintain Designated Accounts, denominated in United States Dollars. The minimum application size for direct payment, reimbursement, and special commitment will be specified in the Project's Disbursement and Financial Information Letter (DFIL). Given the emergency nature of this Project, preference will be given to direct payments to contractors, to both save on the processing time and minimize fiduciary risks.



54. **Use of advance payment to accommodate uncertainty and perceived payment risks created by war.** Market research to develop the Project’s Public Procurement Strategy for Development has identified perceived payment risks amongst suppliers and service providers due to disrupted administrative processes in Ukraine. As such market perceptions could affect the pricing and availability of goods or services, the Project is accordingly expected to use advanced payments as a risk mitigation as described below, subject to the risk mitigations described:

<i>Subcomponent</i>	<i>% Advance payment allowed</i>	<i>Risk mitigation</i>
A.1 & B.4 Modular bridges (road and rail)	Up to 100% of contract value	Advance payment only available upon supplier’s delivery of Performance Bond or Bank Guarantee covering not less than 80% of contract value
B.1 Flatbed wagon construction	Up to 30% of contract value	Standard Conditions requiring repayment of any unused amounts
Component C	Up to 30% of each contract’s value	Qualification criteria considered at tendering (firms’ financial capacity or individual consultants’ track record of delivery)
Other subcomponents	Based on ongoing market assessment	As appropriate and agreed in advance with the Bank.

Procurement

55. **Procurement will follow the World Bank’s Procurement Regulations for IPF Borrowers for Goods, Works, Non-Consulting and Consulting Services, dated November 2020 (Procurement Regulations).** Due to the ongoing war on Ukraine and emergency nature of operations, procurement simplifications and flexibilities as defined in the “Guidance Note for Procurement in Situations of Urgent Need of Assistance or Capacity Constraints” dated March 2019 will apply. The specific flexibilities for Ukraine were approved by the Chief Procurement Officer in July 2022. The Project will be subject to the World Bank’s Anti-Corruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 01, 2016 (Guidelines on Preventing and Combatting Fraud and Corruption in Projects financed by IBRD Loans and IDA Credits and Grants).

56. **Use of Systematic Tracking of Exchanges in Procurement (STEP):** The Project will use STEP to plan, record and track procurement transactions and monitor milestones for contract implementation. It is mandatory for all procurement transactions for post and prior review packages under the Project to be respectively recorded in or processed through the system. STEP will be used to manage the exchange of information such as procurement documents, bid evaluation reports, and no objections between the Implementing Agencies and the Bank. The Bank’s team will provide additional training to the Implementing Agencies as may be necessary to establish respective accounts and use STEP. However, in view of disrupted electricity supply and unstable internet connections across Ukraine caused by the ongoing war, the Bank may agree on alternative secure communication channels. These communication protocols will be defined in the Project Operations Manuals. The use of STEP for all procurement-related actions is expected once basic utilities services (power supply, internet connection, etc.) are restored.

57. **A simplified Project Procurement Strategy for Development (PPSD) and initial Procurement Plan sufficient for Appraisal have been prepared by AR and UZ with support from the World Bank.** Preparation of a detailed PPCSD is deferred to the implementation stage. All selection methods and approaches defined in the Procurement Regulations can be used, but priority will be given to streamlined and simple procedures and to those which ensure expedited delivery, such as: (i) Direct Selection; (ii) Request for Quotations with increased threshold limit for this method as appropriate; and



(iii) Framework Agreements—including tapping into existing ones, provided the call-offs under the Project incorporate the requirement for compliance with the World Bank’s Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG’s Sanctions Framework. Procurement will follow either an international or national approach with increased thresholds for all market approaches for all types of procurement and no prior reviews whenever possible as determined in the detailed PPSD. Following the framework project’s initial phase that will use UNOPS on a direct selection approach, it is expected that Tender Commissions (TC) within the implementing agency would be limited to three to five essential people or, alternatively, an Authorized Procurement Person instead of full TCs. This reflects the need to accelerate procurement-related decisions as well as greater challenges / risks of convening larger groups of Implementing Agency staff while Ukraine remains subject to air alarms and bombardment. Roles and responsibility of the TCs / Authorized Procurement Person as well as their members shall be acceptable to the Bank.

58. ***AR and UZ will be responsible for tracking delivery and monitoring installation of the goods and equipment for the intended use within Ukraine but will use support from UNOPS for the framework Project’s initial phase of goods procurement.*** The Project’s interventions are urgently required for Ukraine to mitigate the impacts of destroyed or damaged logistics infrastructure and network connectivity. While the Implementing Agencies have robust capacity to implement procurement, they are affected by the ongoing war. Ukraine is suffering regular strikes on civilian infrastructure and staff within the Implementing Agencies experience continuous disruptions to utilities services such as electricity, water supply, and telecoms. These are affecting the speed and efficiency of procurement processes that the Implementing Agencies could immediately implement. Additionally, risks of delayed payment to suppliers are also high due to impacts on Ukraine’s financial services and the broader impacts of war on Ukraine’s institutional processes. The framework project’s initial US\$ 50 million phase will therefore benefit from the support of UNOPS to procure goods. The agreement with UNOPS will follow the Bank’s template agreement for Delivery of Outputs for use by World Bank Borrowers. Reliance on UNOPS for the project’s goods procurement is only planned for the framework Project’s initial stage where it is critical to mitigate the impact of disrupted administrative processes in Ukraine resulting from strikes on civilian infrastructure. The Bank and the Implementing Agencies will re-assess this arrangement for subsequent phases. It is expected that when the situation stabilizes in Ukraine and more funds become available, the Implementing Agencies will revert to more standard roles in procurement after consultations with the Bank.

59. ***The Project’s procurement approach will minimize the administrative burden on the implementing agencies and allow for rapid mobilization of investments.*** Annex 1 contains the draft Project’s Procurement Plan considered at Appraisal. This envisages between 14 and 20 contracts for the goods and services needed to deliver funded subcomponents totaling US\$ 50 million. Several of these contracts will be procured by the Implementing Agencies directly under Component C (e.g. environmental and social specialists for the PIUs and MCTID). The majority of procurement (by financial volume) under the proposed framework Project’s initial funding will be implemented via UNOPS following their procurement procedures. UNOPS and the Implementing Agencies will reference the Project Operations Manuals which details instructions, procedures and processes and provides further guidance for carrying out procurement activities. UNOPS will use emergency procurement procedures for effective and efficient procurement. The two largest contacts envisaged at Appraisal are: (i) procurement of modular bridges and rail bridge components (US\$ 32 million under subcomponents A1 and B4); and (ii) production of flatbed railway wagons (US\$ 15 million under subcomponent B1). Procurement of modular bridges and rail bridge components will entail an international supplier selected through a limited competition process. Production of flatbed wagons under subcomponent B1 will be implemented under a direct contract to a state-owned enterprise in Ukraine due to lack of effective competition and urgent need. The wagons will be constructed according to the approved state standards for production of flatbed wagons operating in Ukraine, which is a proven design. Where security conditions permit, the quality of delivered flatbed wagons will be verified through spot checks by supervision consultants hired by the Project under Component C. The Bank will perform due diligence on the contract for flatbed wagons to ensure reasonableness of price and other contract terms. This will be further elaborated



and detailed in the Project Procurement Strategy for Development (PPSD) which is being finalized and will be reviewed by the Bank.

60. ***The proposed procurement approach prioritizes fast-track emergency procurement for the Project's required goods and services.*** The use of such emergency measures will be carefully monitored and applied as and when needed. Key measures to fast-track procurement including use of Bid Securing Declaration may be required in lieu of a guarantee; Performance Security may not be required for small contracts; Advance payment may be increased to 40 and in selected cases to 100 percent and will be determined in respective agreements and contracts. The time for submission of bids/proposals can be shortened depending on the value and complexity of the requested scope of bid and capacity of local and international firms to prepare responsive bids in the proposed periods. Standstill period will not apply in any procurement under the Project. Overall, since the situation is very fragile and dynamic, the Bank will be flexible in advice and approval of the AR and UZ requests which may be provided on a case-by-case basis depending on the circumstances and risks and will be described in the detailed PPCD.

61. ***The use of Ukraine's national e-procurement system ProZorro or e-catalogue system are approved by the World Bank and are expected to be used following the Project's initial stage.*** ProZorro may be used for procurement of goods and works using Request for Quotation, National Request for Proposal methods. Irrespective of the use of ProZorro as a tool for procurement or World Bank standard procedures, all procurement-related notices will be published in ProZorro and UNDB websites to enhance competition and transparency. The national procurement law in force meets the requirements of the Procurement Regulations for national open competitive procurement, except the necessity to include the World Bank's Anti-Corruption Guidelines, including the World Bank's right to sanction and the World Bank's inspection and audit rights in the sample procurement documents.

62. ***Retroactive Financing of up to 40 percent and Advance Procurement may be considered under the Project subject to the conditions defined in Section V, 5.1 and 5.2 of the World Bank's Procurement Regulations for Borrowers.*** In accordance with the Procurement Regulations, the World Bank requires the application of, and compliance with, the World Bank's Anti-Corruption Guidelines, including without limitation the World Bank's right to sanction and the World Bank's inspection and audit rights. To ensure compliance with the above provisions of the bidding processes that have already been conducted and where the awarded/signed contracts did not include the relevant fraud and corruption provisions, the AR and UZ have agreed to amend those contracts accordingly to be signed by both parties to the contracts. The World Bank will not finance any contracts which do not include the World Bank's fraud and corruption related clauses. AR and UZ will also present to the World Bank the list of contractors/suppliers and subcontractors/sub-suppliers under these contracts to ensure that the firms chosen are not and were not at time of award or contract signing on the World Bank's List of Debarred firms. Contracts awarded to firms debarred or suspended by the World Bank or those which include debarred or suspended subcontractors/sub-suppliers will not be eligible for the World Bank's financing.

63. ***Procurement of secondhand goods may be considered under the Project where justified and needed to respond to emergency.*** Procurement processes for goods shall not mix second-hand goods with new goods. The technical requirements/specifications should describe the minimum characteristics of the items which could be offered secondhand in age and condition such as "refurbished", "like new", or "acceptable" if showing normal wear and tear. The warranty and defect liability provisions in the contract shall be written or adapted to apply to secondhand goods. Any risk mitigation measures that may be necessary in relation to the procurement and use of secondhand goods will be reflected in the PPCD.

64. ***Procurement risk is High.*** The major risks to procurement are: (i) slow procurement processing; (ii) increased security risks; (iii) disruptions in production and supply chains; (iv) logistics challenges to transport goods within Ukraine,



and (v) increased risk of fraud and corruption—theft of goods, commodities, and materials delivered for the Project. These risks are elevated by the global conditions at the time of Appraisal which include higher than average rates of inflation as well as shortages of supplies and necessary services. Risk is exacerbated by the fact that World Bank supervision in the short and medium-term may need to remain virtual. To mitigate the identified risks, the following actions are recommended: (i) maintain close collaboration with UNOPS for the framework project’s initial stage; (ii) receive procurement plan and updates, regular monitoring reports from UNOPS on procurement progress, as well as on fraud and corruption allegations and how they were handled; (iii) involve qualified engineering and / or consulting companies or individuals, acceptable to the Bank, to assist with supervision; (iv) establish monitoring for the delivery of goods which can be accessed by the Bank and other key stakeholders; (v) hold regular Anti-Corruption Guideline (ACGs) awareness raising workshops for all stakeholders; (vi) cooperate with the third party monitoring agent engaged by the Bank. The Project task team will continuously support the Borrower and will monitor the Project to flexibly adjust the mitigation actions to reduce additional or unforeseen risks. Despite the proposed mitigation measures, the overall procurement risk is high.

65. **The World Bank’s oversight of procurement will be done through implementation support and increased, and more frequent procurement post review based on a 20 percent sample.** Wartime conditions enhance risks relating to fraud and corruption. Due to suspended missions to Ukraine, the Team will rely on local consultants, third-party monitoring agents, and / or NGOs/CSOs to enhance risk mitigations while physical presence is not possible. The Bank will agree with the Implementing Agencies on a reliable tracking system of goods coming to Ukraine and/or produced in the country. The Bank’s supervision team will work closely with Integrity Vice Presidency Preventive Services for additional risk mitigation measures during implementation as the Ukraine’s evolving situation may require. The World Bank will intensify third-party / technology-based implementation support and post-reviews, including, whenever possible, intensified implementation support missions. The Bank’s prior review will not apply. The details of the implementation support and post-review arrangements will be elaborated in the detailed PPSD when it is finalized. During subsequent phases of the framework project when the project’s procurement arrangements are not envisaged to involve UNOPS, AR and UZ will report on the use of approved procurement flexibilities irrespective of value or review type of the package (ex-post and ex-ante).

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social

66. The project envisages road repair works, installation of temporary bridges and repairs to existing bridges, as well as supply of materials and equipment to rehabilitate/upgrade road/rail infrastructure. Environmental and social risks and impacts are mostly associated with project-related civil works (for construction/rehabilitation/installation of infrastructure/equipment), lack of workers’ awareness on occupational health and safety requirements such as the use of Personal Protective Equipment (PPE) and safe workplace practices. To manage these risks, the Implementing Agencies will prepare an Environmental and Social Management Framework (ESMF) that will include procedures, criteria, and responsibilities for subproject screening for identifying those which might require full Environmental and Social Management Plan (ESMP) or simplified ESMP Checklist.



67. Project-related risks may be exacerbated by potential targeted or indiscriminate aerial bombardments and other military actions which add an element of extreme uncertainty and risk of fatality or serious injury to project workers and nearby communities that cannot be entirely mitigated by environmental and social management measures. Additional threats to workers are posed by explosive remnants of war (ERW). An **Emergency Preparedness and Response Framework/Plan** will accordingly be prepared as part of project ESMF/site-specific ESMPs. Preventative measures required to be in place for the project activities under emergency conditions will be described in the project's Environmental and Social Commitment Plan (ESCP) and Project Operations Manuals (POMs).

68. In addition, the project will also finance project preparation, including the detailed designs, environmental & social instruments, and financial / economic analysis for multiple urgently needed recovery / reconstruction projects that require preparation. To assess and mitigate potential risks and impacts related to these upcoming projects, the project will also support preparation of a **sector-wide ESMF** for broad use in readying environmental and social instruments needed for donor-supported recovery and reconstruction initiatives in the transport sector.

69. **The project has prepared the Stakeholder Engagement Plan (SEP)** which identifies potential project-affected and other interested parties and outlines measures for engagement with these stakeholders. The SEP is prepared based on limited online consultations with representatives of key stakeholder groups and specified the institutional roles and responsibilities, timeline, and budget for conducting the stakeholder engagement during implementation.

70. **Using recent experience from IBRD-financed projects in Ukraine's transport sector, an accessible grievance redress mechanism (GRM) for the project will be established, publicized, maintained, and operated during implementation.** This will be housed at the central level, regional and local levels in a transparent manner that is culturally appropriate. The GRM will be accessible to all Project-affected parties, at no cost and without retribution, including concerns and grievances filed anonymously, in a manner consistent with ESS10. The grievance mechanism will be able to receive, register and address concerns and grievances related to SEA/SH in a safe and confidential manner, including through the referral of survivors to gender-based violence service providers.

71. **The project involves two implementing agencies that have different levels of ESF capacity.** The State Road Agency of Ukraine (Ukravtodor or AR) has proven track record implementing projects under ESF as well as the Bank's former safeguards policies. AR has previous experience preparing the required environmental and social instruments that the proposed Project requires. In contrast, Ukrainian Railways (Ukrzaliznytsia or UZ) does not have experience working with the World Bank Environmental and Social Standards (ESSs) and does not have the required environmental and social development personnel to oversee the preparation and implementation of the required ESSs instruments. It will be important that an experienced environmental and social staff is engaged by the PIU's to screen, assess and manage impacts associated with the infrastructure activities and design works, as well as provide ESF-related guidance to local implementing parties. AR will hire an E&S specialist to work with MCTID on coordinating the two implementing agencies on the environmental and social risk management side. In addition, AR and UZ will have one environmental expert and one social expert in their respective PIU's. This staffing commitment will be reflected in the ESCP. UN Agency-UNOPS that will serve as procurement and deliver agent for the project also has extensive experience with the Bank-financed project in FCV context both under old safeguards policies and ESF and will ensure ES capacity with the experienced staff assigned for the project.

72. **Citizen Engagement.** Considering lessons learned from other Ukraine transport projects, there is a need for additional citizen engagement to avoid delays and consider citizens' views. To address this, the project integrates citizen engagement mechanisms, which are rapid to implement as required for wartime conditions: (i) rapid and frequent consultations or need assessments with beneficiary communities and civil society. Consultations (and/or need



assessments) are crucial for engagement of local residents, help the government to better understand opinions and needs of the population and civil society regarding relinking local communities with transport access, and will enable local communities to express their opinions and needs related to road recovery and reconstruction (Component C); and (ii) an accessible project-level grievance redress mechanism (GRM) and beneficiary feedback mechanism, which will be established, publicized, maintained and operated during implementation. This will be done using recent experience from IBRD-financed projects in Ukraine’s transport sector. The feedback mechanism will be housed at the central, regional and local levels and operate in a transparent manner that is culturally appropriate. It will be accessible to every citizen, including all project-affected parties, at no cost and without retribution, including suggestions, concerns and grievances filed anonymously and, in a manner, consistent with ESS10. The feedback mechanism will be able to receive, register and address suggestions, concerns and grievances to any project-related issue in a safe and confidential manner and will include SEA/SH issues and referrals of survivors to gender-based violence service providers. Results of consultations (and/or need assessments), as well as the feedback mechanism will be disseminated and discussed publicly during follow up consultations - so citizens can see how their feedback has influenced project decision-making (closing the feedback loop).

V. GRIEVANCE REDRESS SERVICES

Grievance Redress. Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the Bank’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank’s independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank’s Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the Bank’s Accountability Mechanism, please visit <https://accountability.worldbank.org>.

VI. KEY RISKS

<i>Risk</i>	<i>Rating</i>
Political and Governance	High
Macroeconomic	High
Sector strategies and policies	Low
Technical design of project	Moderate
Institutional capacity and sustainability	Substantial
Fiduciary	High
Environmental and social	Substantial
Stakeholders	Moderate
Other (risk of war damage)	High
Overall Risk	High



73. **Overall project risks are considered “High.”** Because of the high levels of uncertainty due to war and which cannot be fully mitigated, the project involves “high” overall risk to the intended development objective. These stem primarily from the ongoing war’s impact on macroeconomic risks, ongoing risk of damage to Project assets, and ongoing “high” level of political and governance risk.

74. **Political and Governance risks are “High.”** The ongoing war and the declared state of emergency, pose a major risk to the political and governance situation in Ukraine. At the time of Appraisal, military action is concentrated in and around the eastern and southern parts of Ukraine. However, the continuing unpredictability of military actions and its potential impact on the ability of the Government to perform core functions remains highly uncertain as the war continues.

75. **Macroeconomic risks are “High.”** Russia's invasion of Ukraine has had devastating economic consequences as evidenced by severe GDP contraction, (-19.3% in Q1 of 2022), increasing inflation (21.5 % year on year in June 2022), and precipitous decline in government revenue (-45% estimated for 2022). Macroeconomic risks that may affect the Project are accordingly “high.”

76. **Sector Strategies and Policies risks are “Low.”** The proposed Project has low dependence on sector strategies and policies. The interventions being financed relate to emergency repairs to existing bridges / roads / railway lines as well as enhancement to existing railway freight services and BCPs. Bridges that the project would be procuring are modular and removable such that they can be redeployed to alternative locations should government priorities change. Similarly, flatbed rolling stock financed by the project is a mobile asset that can be easily redirected to priority routes as needed. These investments are therefore not expected to be significantly affected if transport policy or sector strategies were to change unexpectedly. The Project’s corresponding risk exposure is considered “low.”

77. **Technical Design of Project-related risks are “Moderate.”** Component C of the project concerns technical assistance and institutional development actions that are well within the capacity of government institutions. The investments envisaged under Components A & B relate to readily solvable technical challenges that do not require intensive technical preparations. Rail wagons that would be constructed will be following an approved, established design that does not require additional certification or testing for network compatibility. The use of modular bridge systems simplifies technical challenges as they can be assembled quickly, are highly adaptable to site-specific technical challenges, and can be removed from sites when needed. It will however be important that modular bridges are properly deployed. Similarly, disrupted supply chains may affect the production process of flatbed wagons. While manageable even amidst wartime disruptions, these factors suggest a “moderate” level of residual risk in the Project’s technical design.

78. **Institutional Capacity and Sustainability risks are “Substantial.”** While the proposed Project is well within the delivery capacity of UZ and AR, it has been designed to minimize the administrative burden on government considering the combination of war-related disruptions and elevated needs affecting transport sector institutions. This has an additional effect of mitigating risks relating to institutional capacity. A large part of the Project’s initial funding will be deployed via an arrangement with UNOPS which provides a partial risk mitigation. However, uncertainties created by strikes on civilian utilities infrastructure as well as road and rail infrastructure result in a “moderate” level of residual institutional capacity risks as the Implementing Agencies will need to manage installation of Project assets and operation of flatbed wagons. Ongoing strikes against civilian infrastructure carry a potential to increase the breadth and quantity of needs that UZ and AR may be asked to manage simultaneously while at the same time being affected themselves by disruption to basic utilities services (power, water supply, telecoms, etc.).



79. **Fiduciary risks are “High.”** The project’s fiduciary processes will be taking place during a time when basic administrative functions can be affected by unpredictable events. There are inherent financial risks related to disrupted access to financial services due to the war preventing the implementing agencies to make payments to suppliers, corruption and misuse of funds, logistics challenges due to security for transporting goods within Ukraine, and theft of goods and materials during delivery. A contributing factor to “high” risk is also the inability of the Bank team to carry out on-site supervision visits. The Project’s initial arrangements with UNOPS to support procurement of goods will partially mitigate these risks. However, this structure also introduces counterparty and other risks that require mitigation. While the design of the project’s fiduciary structure has identified mitigations, a high level of residual risk remains because of broader context. For these reasons, the project’s fiduciary risks remain “high.” As further mitigation measures, the Bank team will conduct more frequent and larger scope virtual team missions and will engage an independent third-party monitoring agency to supervise Financial Management and disbursement function. In addition, a supervision and monitoring consultants hired under Component C will assist in providing regular progress reports and in verification of goods delivery to the implementing agencies as well as to the Bank. UNOPS will also take additional actions as risk mitigation mechanisms, such as: (i) provide to the Bank and the Implementing Agencies the procurement plan and regular monitoring reports on procurement progress; (ii) report on fraud and corruption allegations and how they have been handled; (iii) establish monitoring for procurement tracking and the delivery of goods, which can be accessed by the Bank and the government counterparts; and (iv) hold regular Anti-Corruption Guideline (ACGs) awareness raising workshops for all stakeholders. The Project task team will continuously support the Borrower and will monitor the Project to flexibly adjust the mitigation actions to reduce additional or unforeseen risks. The Project will be subject to the World Bank’s Anti-Corruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 01, 2016 (Guidelines on Preventing and Combatting Fraud and Corruption in Projects financed by IBRD Loans and IDA Credits and Grants).

80. **Social and Environmental risks are “Substantial.”** The Project does not require land acquisition and envisaged physical works would be taking place on existing road / rail lines, within existing rights of way, and with the primary aim of restoring or sustaining transport services. The Project’s interventions are not expected to result in significant environmental or social impacts. However, there are additional risks present because of ongoing war in Ukraine, including unexploded ordinance, potential challenges to supervising worksites because of security concerns, and risk of future military strikes on worksites and workers which cannot be fully mitigated. Because of these additional factors, the Project has a “substantial” residual social and environmental risk.

81. **Stakeholders risks are “Moderate.”** The project relates to repairing existing transport links and enhancing the technical performance of existing services (i.e. not new alignments or services). The Project will also be supporting stakeholder engagement techniques to encourage two-way information flow with beneficiary communities and members of the public. These have proven effective in Ukraine under prior Bank-supported projects which generated valuable lessons and developed Government capacity. However, while stakeholders are presently aligned regarding project interventions, wartime conditions do imply residual risk relating to unpredictability of stakeholder actions. The residual stakeholder risk facing the project is therefore considered “moderate.”

82. **Other – continued “high” risk of damage due to war.** Throughout the war transport infrastructure objects such as bridges, railway lines, power supply equipment, roads, and others have been deliberately targeted by military strikes or subject to collateral damage from nearby fighting. There is a high risk that the repairs, rolling stock, materials, and modular bridges financed under the project could be further damaged or destroyed by the ongoing war. This risk is partially mitigated by the nature of modular bridges which allows for damaged components to be isolated and replaced or for undamaged components to be disassembled and salvaged. Flatbed wagons offer a similar advantage in that damaged components can be replaced (or possibly repaired) if needed. While there is an inherent risk of damage due to



ongoing war, the nature of assets and materials financed under the Project provide mitigation regarding the extent of loss should damage occur.



VII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Ukraine

Repairing Essential Logistics Infrastructure & Network Connectivity (RELINC) Project

Project Development Objectives(s)

The Project Development Objective is to provide the means for mitigating the immediate impact that disrupted transport networks have on Ukraine’s population and economy.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	Intermediate Targets	End Target
			1	
Provide the means to relink communities with transport access				
Means to relink communities with transport access (Number)		0.00	80.00	250.00
Provide capacity to increase the resilience of critical logistics chains				
Capacity to increase the resilience of critical logistics chains (Tons/year)		0.00	300,000.00	2,940,000.00

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets	End Target
			1	
Component A: Lifeline road connections				



Indicator Name	PBC	Baseline	Intermediate Targets	End Target
			1	
Means to repair bridge access (Number)		0.00	27.00	75.00
Additional annual cargo capacity supplied at road BCPs (Metric tons/year)		0.00	0.00	2,640,000.00
Component B: Lifeline rail connections				
Additional annual containerized railway cargo capacity (Metric tons/year)		0.00	300,000.00	300,000.00
Means to repair rail lines (Kilometers)		0.00	0.00	124.00
Component C: Readiness for urgent reconstruction initiatives and project management				
Sector-wide ESMF (Yes/No)		No	Yes	Yes
Cost estimation reform (adoption & demonstrated implementation) (Yes/No)		No		Yes

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Means to relink communities with transport access	Estimated # of communities that can be reconnected using Project supplied materials and equipment (roads and rail)	Every 6 months	Engineering estimates performed by supervision consultancy and / or MCTID	GIS based assessment	AR (roads), UZ (Rail)



Capacity to increase the resilience of critical logistics chains	Estimated additional annual tonnage capacity on westward transport linkages enabled by equipment that the Project finances (road and rail)	every 6 months	UZ and State Customs Service	Calculation based on project supplied rolling stock & statistics from State Customs Service	UZ and MCTID
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Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Means to repair bridge access	Number of damaged bridges (road or rail) that can be repaired during the project using modular bridges, bridge members, and equipment financed by the project	6 months	AR and UZ	Calculated estimate based on assumed length of 40 meters per bridge in the case of modular bridges and the repair capacity provided by equipment.	MCTID
Additional annual cargo capacity supplied at road BCPs	Estimated additional metric tonnes / year of road and rail freight capacity potential at western Border Crossing Points (BCPs)	every 6 months	Engineer's estimate	Based on calculated additional throughput enabled by Project supplied equipment	AR
Additional annual containerized railway cargo capacity	Estimated additional metric tonnes / year of containerized freight capacity of UZ's rolling stock fleet per year	6 months	UZ	Calculation based on number of Project supplied flatbeds in service	UZ
Means to repair rail lines	km of railway lines that can be repaired / restored using	6 months	UZ	Engineering estimate (supervision)	UZ



	materials financed by the Project			consultancy and / or MCTID)	
Sector-wide ESMF	Sector wide ESMF developed and approved by MCTID for use.				
Cost estimation reform (adoption & demonstrated implementation)	Adoption of cost estimation reform by the Ministry of Communities, Territories and Infrastructure Development and demonstrated implementation reformed procedures on project preparation activities financed by the Project (Comp. C).	One time	Outputs (i.e. engineer's calculations) from project preparation activities	Review of project preparation activities under Component C	MCTID



ANNEX 1: Draft Project Procurement Plan (funded amounts at Appraisal)

Activity	# of contracts	Sub comp.	Procuring entity	Selection method	Review type	Category	Est. amount (US\$)	Est. contact signing	Est. end date
AR – Components A & C (AR part)							\$25,055,000		
Modular bridges needed to restore damaged bridge connections	1-2	A.1	UNOPS	RFB	Post	Goods	\$23,555,000	Feb-23	Aug-23
Project audit	1	C	AR	DS/CQS/LCS	Post	Services	\$40,000	Oct-23	Dec-23
Supervision consultant services	2-3	C	AR	Selection of ICs	Post	Services	\$40,000	Apr-23	Nov-23
Services to develop sector wide ESMF	1	C	AR	DS/CQS	Post	Services	\$50,000	Feb-23	Oct-23
Services for technical, social, environmental preparation of urgent reconstruction projects	5-10	C	AR	QCBS/CQS/Selection of ICs	Post	Services	\$300,000	Mar-23	Nov-23
Services for AR PIU (incl. E&S)	3	C	AR	Selection of ICs	Post	Services	\$70,000	Feb-23	Dec-24
UNOPS Output Agreement	1	C	AR	UN Agency	Post	Services	\$1,000,000	Feb-23	Oct-23
UZ – Components B & C (UZ part)							\$24,945,000		
Flatbed wagon construction	1	B.1	UNOPS	DS (SOE, private)	Post	Goods	\$15,000,000	Feb-23	Oct-23
Materials, equipment, and modular bridges for damaged rail bridge repairs	2-6	B.4	UNOPS	RFB / RFQ	Post	Goods	\$8,555,000	Mar-23	Aug-23
Supervision consultant services	2-3	C	UZ	Selection of ICs	Post	Services	\$40,000	Apr-23	Nov-23
Services for technical, social, environmental preparation of urgent reconstruction projects	1-3	C	UZ	QCBS/CQS/Selection of ICs	Post	Services	\$300,000	Apr-23	Oct-23
Services for UZ PIU (incl. E&S)	2	C	UZ	Selection of ICs	Post	Services	\$50,000	Feb-23	Dec-24
UNOPS Output Agreement	1	C	UZ	UN Agency	Post	Services	\$1,000,000	Feb-23	Oct-23
Total							\$50,000,000		



ANNEX 2: RELINC Project Financing Table

#	Description	Total Needs (UZ+AR)	AR (funded)	UZ (funded)	Total Funded (UZ+AR)	Expected funds (UZ+AR)	% funded at Appraisal
A	Lifeline Road Connections	289,000,000	23,555,000	0	23,555,000	(265,445,000)	8%
A.1	Modular bridges needed to restore damaged bridge connections	60,000,000	23,555,000	-	23,555,000	(36,445,000)	39%
A.2	Materials required for urgent road and artificial structures repairs and winter access	200,600,000	-	-	-	(200,600,000)	0%
A.3	Enhancement to western road Border Crossing Points (BCPs) to mitigate impacts of Black Sea disruption	28,400,000	-	-	-	(28,400,000)	0%
B	Lifeline Rail Connections	289,000,000	0	23,555,000	23,555,000	(265,445,000)	8%
B.1	Flatbed wagon production to increase containerized transport capacity	15,000,000	-	15,000,000	15,000,000	0	100%
B.2	Materials, components, and equipment for repair of vital rail lines	124,000,000	-	-	-	(124,000,000)	0%
B.3	Rolling stock for operational efficiency	100,000,000	-	-	-	(100,000,000)	0%
B.4	Materials, equipment, and modular bridges for damaged rail bridge repairs	50,000,000	-	8,555,000	8,555,000	(41,445,000)	17%
C	Readiness for Urgent Reconstruction Initiatives and Project Management	7,000,000	1,500,000	1,390,000	2,890,000	(4,110,000)	41%
	Project audit, supervision resources, and UNOPS support for initial funding	2,900,000	1,080,000	1,040,000	2,120,000	(780,000)	73%
	Preparation of urgent reconstruction projects & ESMF	2,700,000	350,000	300,000	650,000	(2,050,000)	24%
	PIU support	1,400,000	70,000	50,000	120,000	(1,280,000)	9%
	TOTAL	585,000,000	25,055,000	24,945,000	50,000,000	(535,000,000)	9%

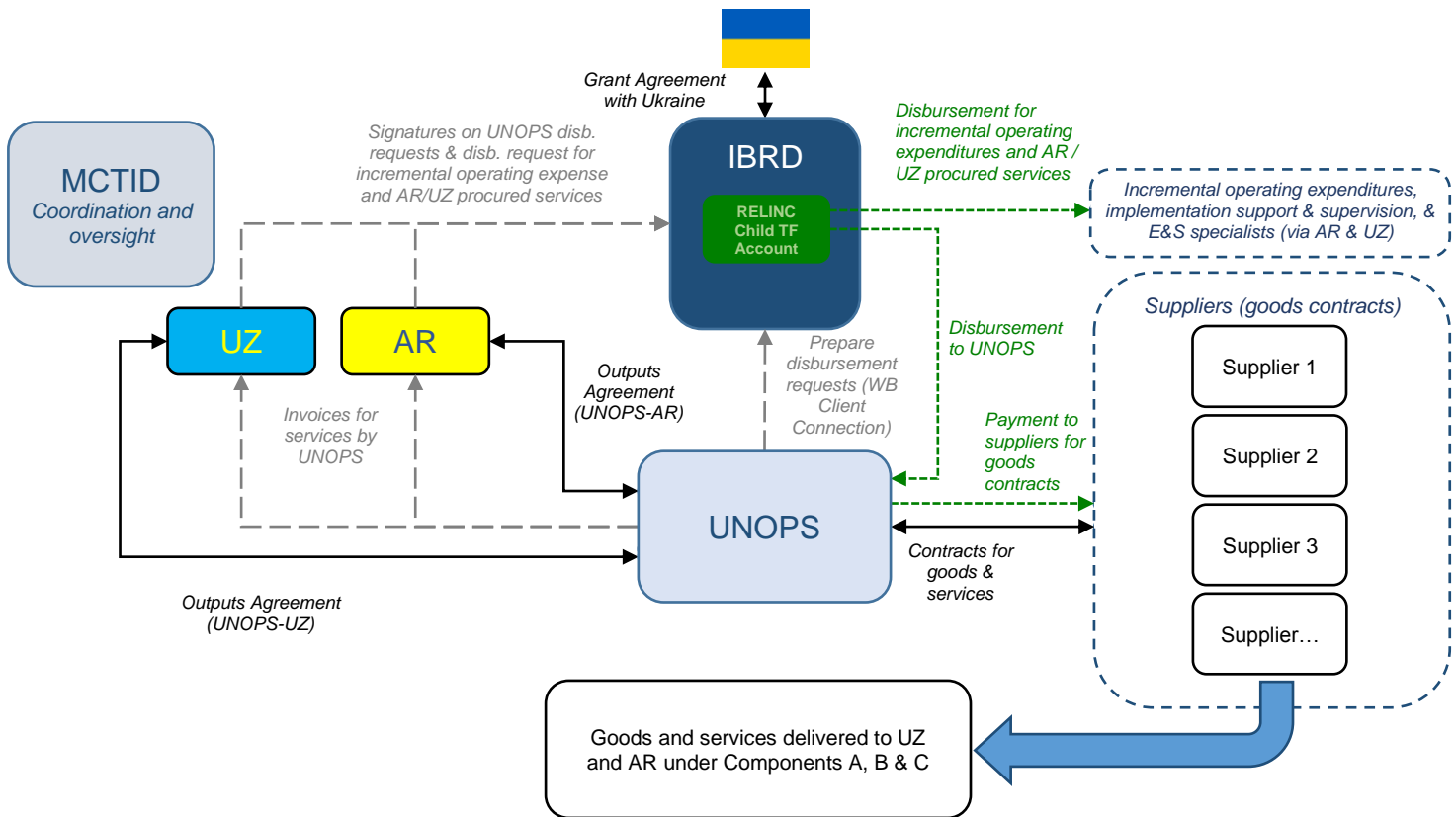


ANNEX 3: Implementation Arrangements and Support Plan

COUNTRY: Ukraine

Ukraine Repairing Essential Logistics Infrastructure and Network Connectivity (RELINC) Project

83. The Project’s implementation arrangements are summarized graphically below and include the roles of each Implementing Agency (UZ and AR), the MoCTID, the Bank, and UNOPS. Key activities are explained further in the bullets that follow. Summary tables of roles and responsibilities pertaining to this arrangement are below.



Procurement & contracting

- The Grant Agreement stipulates that AR and UZ will each engage UNOPS according to separate Outputs Agreements on terms and conditions that are acceptable to the Bank. This will be done following the Bank’s standard template for engaging UNOPS for delivery of outputs;
- UNOPS conducts procurement and enters into contracts with goods suppliers following UN procedures and the Project’s Procurement Plan as agreed by the Implementing Agencies and the World Bank; and
- UZ and AR will directly procure implementation support and supervision services such as supervision consultants, environmental and social specialists, and the project audit (i.e. not via UNOPS).



Funds flow and disbursement for suppliers of goods (via UNOPS)

- Standard UN Advance method will be applied for processing flow of funds from the Bank to UNOPS, starting with blanket withdrawal applications from the Implementing Agencies;
- UNOPS will prepare disbursement requests in the World Bank's Client Connections system;
- The Implementing Agencies will review and sign Disbursement Requests;
- World Bank will disburse funds to UNOPS;
- Suppliers will invoice UNOPS according to their respective contracts;
- UNOPS will pay to suppliers according to their contracts;
- UNOPS will monitor all payments and receipt of payments and report back to the Implementing Agencies, MCTID, and the World Bank; and

Funds flow and disbursement for service providers and incremental operating expenses (via Implementing Agencies)

- AR and UZ will prepare and sign disbursement requests in the World Bank's Client Connections system;
- World Bank will disburse funds to the Designated Account of each Implementing Agency; and
- The Implementing Agencies will pay service providers and incremental operating expense.

Funds flow and disbursement for payments to UNOPS

- UNOPS will submit invoices to the Implementing Agencies for services in accordance with the Outputs Agreements they sign with UNOPS;
- The Implementing Agencies will submit disbursement requests to the World Bank for direct payment to UNOPS based on invoices received; and
- WB will disburse directly to UNOPS.

Fiduciary risk mitigation measures under Outputs Agreements with UNOPS:

- The Bank will maintain close collaboration with UNOPS and the Implementing Agencies to monitor progress and implementation of the Outputs Agreements;
- UNOPS and the Implementing Agencies will execute procurement according to the Project's Procurement Plan and will provide and regular monitoring reports on procurement progress to the Bank;
- Structured cash management approach will be applied for the flow of funds to UNOPS, with smaller and more frequent cash advances made in installments determined by cash projection requirements in the Procurement Plan that will be pre-reviewed and approved by the Government and the Bank;
- UNOPS will report to the Bank on any fraud and corruption allegations and how they have been handled;
- The Project will involve qualified supervision consultants, acceptable to the Bank, to assist with monitoring, supervision, and reporting;
- Monitoring will be established in consultation with the Implementing Agencies for the delivery of goods;
- Regular Anti-Corruption Guideline (ACGs) awareness raising workshops will be held for all stakeholders; and
- A third-party monitoring agent will be engaged by the Bank to monitor financial management and disbursement functions.



Summary of Fiduciary Roles and Responsibilities

Task	MCTID and Implementing Agencies (UZ or AR)	UNOPS	World Bank
Procurement Tasks			
Procurement Plans	<ul style="list-style-type: none"> AR and UZ to submit procurement plans in STEP for WB no-objection 	<ul style="list-style-type: none"> Draft any revisions to procurement plan (beyond plan approved at Appraisal) 	<ul style="list-style-type: none"> WB to provide reviews and no-objections to procurement plans in STEP
Outputs Agreement	<ul style="list-style-type: none"> AR and UZ to each sign separate Outputs Agreements with UNOPS in accordance with the Grant Agreement. 	<ul style="list-style-type: none"> Sign separate Outputs Agreements with AR and UZ 	<ul style="list-style-type: none"> Provides template for Outputs Agreements Review and provide “no objection” to final Outputs Agreements before signing by Implementing Agencies
Procure goods under Components A, & B	<ul style="list-style-type: none"> AR and UZ to provide inputs to the TOR and final specifications 	<ul style="list-style-type: none"> Management of procurement processes for suppliers Sign contracts with suppliers 	<ul style="list-style-type: none"> World Bank to provide technical inputs to specifications and TOR as appropriate Spot checks under regular implementation support and supervision
Procure services under Component C	<ul style="list-style-type: none"> Management of procurement processes for service providers Sign contracts with service providers. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> World Bank to provide technical inputs to specifications and TOR as appropriate Spot checks under regular implementation support and supervision



Task	MCTID and Implementing Agencies (UZ or AR)	UNOPS	World Bank
FM & Disb.			
Receive, validate, and pay invoices to suppliers and service providers	<ul style="list-style-type: none"> ▪ Provide information to UNOPS on delivery of goods ▪ AR and UZ to receive and pay invoices relating to implementation support and supervision services under Component C 	<ul style="list-style-type: none"> ▪ Receives all invoices from suppliers ▪ Validates invoices relative to contract terms and delivery confirmation from AR, UZ 	<ul style="list-style-type: none"> ▪ Spot checks under regular implementation support and supervision
Disbursement request for direct payment to suppliers and service providers	<ul style="list-style-type: none"> ▪ Review and sign disbursement requests to UNOPS ▪ Submit disbursement requests for incremental operating expense, and services ▪ Receive disbursement from World Bank (services and incremental operating expense) 	<ul style="list-style-type: none"> ▪ Prepare documentation package for disbursement requests in WB Client Connections ▪ Receive disbursement from World Bank (goods and UNOPs services) 	<ul style="list-style-type: none"> ▪ Receive and process Disbursement Requests to make payment to UNOPS (in the case of goods and UNOPS services) or Designated Accounts of AR and UZ in the case of services and incremental operating expense.
Payment to suppliers / service providers	<ul style="list-style-type: none"> ▪ Pay service providers engaged by AR and UZ ▪ Payment for incremental operating expense and services required for implementation support, and supervision related costs 	<ul style="list-style-type: none"> ▪ Pay suppliers according to terms of contract ▪ Monitors payments and receipt of payments by suppliers reports back to AR/UZ/MCTID and World Bank 	<ul style="list-style-type: none"> ▪ Regular spot checks and monitoring
Invoicing by UNOPS and disbursement to UNOPS	<ul style="list-style-type: none"> ▪ Review and sign disbursement requests 	<ul style="list-style-type: none"> ▪ Invoice to AR and UZ under terms of Output Agreements ▪ Prepare documentation package for disbursement requests in WB Client Connections ▪ Receive disbursement as payment for services rendered 	<ul style="list-style-type: none"> ▪ Disburse to UNOPS



<i>Task</i>	<i>MCTID and Implementing Agencies (UZ or AR)</i>	<i>UNOPS</i>	<i>World Bank</i>
Compiling and submitting interim unaudited financial reports to IBRD	<ul style="list-style-type: none"> AR and UZ compile and submit to WB 	<ul style="list-style-type: none"> Provision of expenditure and contract data to AR and UZ 	<ul style="list-style-type: none"> Receipt and “no objection”

Supervision

84. The Project’s implementation arrangements provide for field level supervision of activities under Components A and B. Specifically, this includes: (i) supervision consultants hired by the Implementing Agencies; (ii) environmental and social specialists hired by the Implementing Agencies; and (iii) third party monitoring engaged directly by the Bank (under the Bank’s own budget). For the project’s initial funding of US\$ 50 million, these elements will provide the supervision structure for modular bridges, rail bridge repair materials, and flatbed wagon production. While it is expected that field visits by the entities noted above will be possible for the purpose of supervision, the Bank and the Implementing Agencies will monitor Ukraine’s actual security situation closely with consideration for managing sensitive information (e.g. location data) as well as the security of project personnel. Where physical visits may not be possible due to security considerations the Bank and the Implementing Agencies will agree alternative workarounds.

Implementation support plan

85. The project’s implementation support plan focuses on sub-components of the Project framework that are funded at the time of Appraisal. This would be adjusted accordingly as the timing of funding for additional sub-components is confirmed.

<i>Topic</i>	<i>Timing</i>	<i>Needs</i>	<i>Estimated amount</i>
Third party monitoring	Approval – month 9	<ul style="list-style-type: none"> Support to WB supervision Spot checks and monitoring of key Project tasks Spot check of goods delivery / deployment where security situation allows 	<ul style="list-style-type: none"> US\$ 75,000
Modular bridges sourcing	Approval – month 3	<ul style="list-style-type: none"> Technical inputs to specifications and qualification requirements pertaining to modular bridge supply from international markets Support to Implementing Agencies with market outreach 	<ul style="list-style-type: none"> US\$ 65,000



<i>Topic</i>	<i>Timing</i>	<i>Needs</i>	<i>Estimated amount</i>
Fiduciary trainings for new staff: STEP, F&C workshop, ProZorro	Month 1	<ul style="list-style-type: none"> ▪ Training / refresher on use of STEP ▪ Anti-Fraud and Corruption workshop ▪ Training on ProZorro 	<ul style="list-style-type: none"> ▪ US\$ 10,000
Flatbed wagons contract	Approval – month 1	<ul style="list-style-type: none"> ▪ Due diligence (incl. cost and supply chain) and technical inputs to contract document for flatbed wagon procurement 	<ul style="list-style-type: none"> ▪ US\$50,000
Guidance and supervision of ESMF drafting	Approval – month 3	<ul style="list-style-type: none"> ▪ Inputs / review of TOR and qualification requirements ▪ Specialists to review and provide feedback on ESMF drafting and 	<ul style="list-style-type: none"> ▪ US\$ 15,000
ESF capacity building support for UZ and general ESF support / supervision	Month 1	<ul style="list-style-type: none"> ▪ Additional specialists support to increase UZ familiarity with ESF implementation and associated requirements ▪ Review of ESF instruments and their implementation in practice ▪ Support to Implementing Agencies on stakeholder engagement 	<ul style="list-style-type: none"> ▪ US\$ 30,000
Technical supervision and implementation support (bridges, flatbeds & engineering studies)	Month 3 - 9	<ul style="list-style-type: none"> ▪ Ad hoc technical guidance on bridging, feasibility study, engaging engineering services, and overall engineering aspects of project tasks ▪ Technical inputs to TORs for feasibility study and engineering services ▪ Review of outputs from feasibility study, and engineering work 	<ul style="list-style-type: none"> ▪ US\$ 40,000
Fiduciary preparations to develop additional phases of funding & spot checks on project fiduciary functions	Approval – month 9	<ul style="list-style-type: none"> ▪ Development of oversight and monitoring of funds flow, disbursement, implementation of WB procurement procedures, Project Procurement Plan, and PPSD ▪ Spot checks on fiduciary processes (including post review of procurement) 	<ul style="list-style-type: none"> ▪ US\$ 25,000



<i>Topic</i>	<i>Timing</i>	<i>Needs</i>	<i>Estimated amount</i>
General project management support and regular supervision missions (virtual if physical not possible)	Approval – month 9	▪ Support with all project activities as needed	▪ US\$40,000

Total (initial 9 months for funded components) US\$ 350,000