



Date of Cover Sheet: **03/11/2009**

Contribution Request nr **E3** to be presented to the Board's operational meeting of **17/11/2009**

Type of Contribution	<b>Grant and technical assistance co-financing</b>
Amount requested (€)	<b>EUR 8.5 million</b>
Eligible Sector	<b>Infrastructure</b>

NIF decision sought      Final Approval            Provisional Approval\*     

Title of the Operation: **Tbilisi Railway Bypass – Environmental and Land Components**

Geographical coverage: **Georgia**

**Project objective:**

The EBRD, in cooperation with EIB, is involved in the preparation of the Tbilisi Railway Bypass project. The project, undertaken by Georgian Railway LLC, the state-owned railway company of Georgia, concerns the construction of a new railway route bypassing the central area of the city of Tbilisi. The IFIs (EBRD and EIB) have been requested to consider financing the project on non-sovereign basis.

The project will ultimately improve the efficiency and safety of rail operations through relocation and consolidation of the existing rail facilities presently located in the city centre of Tbilisi. The project will also provide an impetus to regeneration and urban redevelopment projects, as a result of railway infrastructure relocation. It presents an opportunity to reconnect two halves of the city and increase land values in its vicinity, as well as to create a high quality mixed use district and an exemplar of sustainable development.

The urban redevelopment itself is not part of the Tbilisi Railway Bypass Project, it is presented for the completeness purposes and as an early indication of potential projects in the municipal and real estate sector that will be implemented once the railway relocation takes place. It is highly likely that IFIs will be approached to co-finance these future projects in due time. At the same time, the land development component (ie the land owned by Georgian Railway to be freed up) is assessed as part of the Project and is an integral part of project justification as to viability (including economic assessment) and bankability. It is also important to stress that the land development process and the use of revenues from land sale proceeds will be covenanted in the loan agreement with clear conditionalities attached.

Within the general framework of the Tbilisi Railway Bypass project, the project submitted to NIF aims at enhancing environmental and social management, including assessing environmental liabilities associated with potentially contaminated sites in Central Tbilisi, and assisting Georgian Railway to meet regulatory requirements and best practice in the environmental and social management of the project.

The project is strongly supported by the Tbilisi municipality and the Government of Georgia.

\* subject to the finalisation of the approval procedures of the corresponding financial institutions



Project description :  
(see also page 2 for the  
financing plan and the project  
chronology)

The project entails the construction of a new 27 km long railway track line, some 10 km north of the city through open land which for the most part is sparsely populated, starting at Zahesi in the north-west where it branches off from the present mainline. At the eastern end the new track joins the Kakheti line. From the new junction points towards Tbilisi, the Kakheti line will be upgraded to double track on a length of 10 km by refurbishment of the existing single track and adding a second new track. Near the junction of the new bypass route with the Kakheti line, the new freight station Lilo 1 is planned to be built. It is expected that detailed design will be finalised in November 2009. The IFIs will co-finance with Georgian Railway the construction works (including environmental requirements as incorporated in the design documents), goods and supervision. Any further expenditures including environmental clean up, resettlement and any other issues arising as a result on ongoing disclosure of Environmental and Social Impact Report will need to be covered by Georgian Railway in addition to any VAT payments associated with the Project.

Tbilisi, the capital of Georgia, is a long thin city stretching about 30 kilometres along both sides of the Mtkvari river. Two roads run along each bank of the river and the railway currently runs along the northern slope. The traffic now carried by the railway is substantially transit oil traffic (both crude oil and refined product from Azerbaijan, Kazakhstan and Turkmenistan to ports on the Black Sea), a hazardous good which should not be transported through such a densely populated area. Urban development now surrounds a number of the rail terminals and yards, many of which are now either obsolete or derelict. The railway, which has few existing crossing points, also acts as a major barrier to development on the northern bank (in some cases requiring a detour of up to 20 kilometres) as well as depressing land values in its vicinity.

Passenger traffic accounts for a small proportion of Georgian Railway's overall business only, representing just 5 per cent of total revenues. The passenger transit traffic (for examples summer time trains Erevan-Batumi or any other transit passenger trains), which represents only a fraction of passenger traffic in Georgia, will use the newly built bypass with no impact on the passengers. As part of the project, the current passenger stations Didube (west Tbilisi) and Navtlughi (east Tbilisi) will be rehabilitated and will serve as dead-end stations for passenger trains serving east and west of the country. This is a relatively minor issue since a direct metro connection is readily available between these stations.

Conformity with the NIF  
Strategic Orientations  
(cf. list in Annex)

The proposed project conforms with NIF Strategic Orientations objectives by

- improving the efficiency and safety of rail infrastructure and operations on the key east-west corridor within Georgia, which forms part of the extended major trans-European transport axes;
- facilitating better connectivity with neighbouring countries (including the EU) and – as the project is mainly used for transit oil traffic – contributing to the security of energy supply in Europe,
- addressing environmental issues through adherence to the European Principles for the Environment, in areas such as waste management and soil pollution, as well as occupational health and safety, and
- promoting socio economic development and job creation through removal of rail infrastructure from the city centre and redevelopment of freed up land with the objective of building a new modern city district.

The project will also enhance the capabilities of Georgia, an ENP country with an ENP Action Plan in force.



Grant request justification:  
(Why NIF contribution is needed for the Project completion + What are the parameters used to calculate the NIF contribution)

Subject to the completion of detailed design, the construction of the new railway bypass is expected to take up to 3 years with estimated costs of around EUR 250 million excluding VAT (to be finalised upon completion of detailed design and environmental and social impact assessment).

Given the Project implementation timing, the following components are proposed for NIF financing approval for a total of EUR 8.5 million, namely:

1. environmental mitigation measures – NIF grant (EUR 6 million, of which EUR 1.5 million is estimated for sanitary protection zone of the Tbilisi Sea and EUR 4.5 million is estimated for noise mitigation measures),
2. environmental ‘clean up’ – NIF technical assistance (EUR 1 million), and
3. land development assistance – NIF technical assistance (EUR 1.5 million).

In addition, as explained below, a follow up grant request to the NIF Board will be submitted in the future to finance the ‘clean-up’ activities, the scope and cost of which will be identified upon the completion of investigations financed by the above NIF technical assistance.

Subject to final detailed design and completion of environmental disclosure period, there could be further adjustments to the project costs, therefore, minor reallocation between the proposed components are possible.

## 1. Environmental mitigation measures

The Environmental and Social Impact Assessment (ESIA) is currently ongoing, with the disclosure period to be completed by the end of 2009. Based on the outcome of initial assessments, it appears that there are a number of key environmental mitigation measures that would be necessary to incorporate in the project.

### i) the Sanitary Protection Zone (SPZ) of the Tbilisi Sea.

The lake (Tbilisi Sea) is used for Tbilisi drinking water supply and for recreational purposes. Water intakes are located towards the northern end of the lake. The proposed route intersects the lake catchment area. Potential impacts would be associated with hydrocarbon spills from derailed carriages (surface or groundwater pathways). The closest distance between the proposed track and the lake shore is about 900m. Water intakes used for Tbilisi water supply are located about 2km north to the point where surface water flow contaminated in the event of a spill would reach the lake. Mitigations will include emergency response measures, including, but not limited to, physical structures such as catchment drains/facilities with oil separators, emergency response equipment (booms, pumps, consumables) and training (basics of emergency response, inter service coordination and drills). Tentative estimate EUR 1.5 million.

### ii) Noise impact

Noise experts have identified the most sensitive receptors in the Project area, such as close residential areas, schools and medical facilities and have helped to establish sections of the railtrack that should be protected specifically where noise walls will be needed to protect settlement areas. Mitigations include noise absorbent cladding of tunnel portals, noise screens or reduction of noise at the source (welded rails). Such mitigations will be included in the final design. Tentative estimate EUR 4.5 million.

## 2. Environmental clean up component

Significant parts of the area to be freed up once the bypass line is operational are currently occupied by locomotive and carriage maintenance depots. Initial examination indicates that there is a high likelihood of hazardous



contamination of demolition debris, soil, sub-soil and groundwater, thereby potentially imposing a considerable liability upon Georgian Railway in the perspective of redevelopment of these areas for housing or commercial developments.

Potential contaminants include:

- Hydrocarbons (fuel and lubricants)
- Halogenated solvents (painting, part cleansing)
- Heavy metals (paints, lubricants)
- Asbestos in construction debris.

In-country capabilities to handle such soil and groundwater contamination issues are limited. Local consulting and engineering capabilities to assess contamination and related risks and to prepare action plans are virtually non-existent. Facilities intended for handling of hazardous waste are insufficient or obsolete. Significant technical assistance is therefore required to help GR handle soil and groundwater contamination and hazardous material in a manner that satisfies EU and IFI requirements.

The NIF technical assistance would be used for consulting services to investigate the contamination of the soil, subsoil, groundwater and demolition materials: in conformance with EU regulations and best practice (estimated EUR 1 million), this would include:

- "Phase 1" investigations (initial delineation of contamination and identification of potential contaminants),
- "Phase 2" investigations intended at delineating the exact limits of contaminated soil and water, quantifying the volumes of contaminated material, assessing the risks, prioritising clean-up works according to potential risks, and preparing a clean-up plan, including decontamination and disposal methods, health and safety provisions and environmental impact assessment of the clean-up and decontamination activities.

Subject to the outcome of the technical assistance (methods, processes and costs to be confirmed by the investigations described above), the clean-up activities are likely to include (i) disposal of contaminated demolition material, (ii) on-site decontamination of groundwater, (iii) on-site decontamination of soil, (iv) off-site decontamination of soil, and (v) supervision and environmental monitoring.

Therefore, a follow up request for grant financing of the clean-up activities (works) is expected to be submitted to the NIF Board in the future (in around 2 years upon completion of TA investigations). In the meantime, in order to finalise the structure and enable the signing of a loan agreement, Georgian Railway will undertake to commit to finance these works knowing that these works may be financed through the NIF grant.

At the same time, if there are any savings as a result of implementing the above listed mitigation measures (as described in points 1 and 2 above), and subject to funds reallocation, the above clean-up activities could be financed in part by Georgian Railway and in part by NIF grant. It is therefore proposed to include the clean up activities as an eligible component of the NIF grant request.

In addition to solving an issue with potential health consequences to the local population, this project would enhance capacities in Georgia in an area where there are huge needs as derelict and contaminated industrial facilities inherited from the Soviet era are numerous. It would also have a demonstration effect in Georgia and potentially in the Caucasus region to new



techniques and processes.

### **3. Land development component**

The development site that will be released, once the bypass construction is completed, is of strategic importance to the city of Tbilisi and as a consequence of a national importance too. It presents a unique opportunity, not only for the creation of a vibrant new city district but also for the continued growth and development of Tbilisi as a capital city capable of meeting the challenges and opportunities of the 21<sup>st</sup> century. It is therefore essential that adequate measures are put in place to ensure that land development of this size follows best international practice and from the start involves the assistance of international consultants to assist Georgian Railway to develop the masterplan to ensure the feasibility and bankability of the railway project as a whole.

It is, therefore, a key to a successful project preparation to contract an experienced international consultant who will elaborate the vision and strategy for this site and prepare a detailed masterplan including site investigation, consultation, analysis and design. The quality of such a masterplanner and subsequent deliverables will be essential to support the financial viability and bankability of the proposed railway bypass project. It will be a pre-requisite for the IFIs financing of the project that Georgian Railway follows a strict competitive tendering process for the appointment of a masterplan consultant as well as an open tender for the freed up land sale – specific conditionalities will be introduced in the IFIs respective loan agreements, including the use of the land sale proceeds either for the loan repayment or Georgian Railway capital expenditure, to be decided at the discretion of IFIs.

Therefore, the NIF technical assistance is requested to hire an experienced consultant to prepare the site development vision and masterplan (estimated EUR 1.5 million).

Beneficiary:

Georgian Railway LLC, 100 % State owned railway company reporting to the Ministry of Economic Development (through Enterprise Management Agency).

# NEIGHBOURHOOD INVESTMENT FACILITY (NIF)



Title of the Operation:

**Tbilisi Railway Bypass – Environmental and Land Components**

	EUR equivalent	Amount in Project Currency	Curr.
<b>Project total cost</b>	253,500,000	N/A	

**Indicative Financing Plan**

<i>Finance Institution</i>	<i>Total (€ M)</i>		<i>Remarks</i>
EIB	100	39,45 %	
EBRD	100	39,45 %	
EU / NIP		%	
NIF Contribution	8.5	3,35 %	
Beneficiary Contribution (Georgian Railway)	45	17,75 %	In addition Georgian Railway will finance all costs associated with VAT and any other expenditure in excess of loan amounts.
<b>Total Financing (€)</b>	<b>253.5</b>	<b>100 %</b>	

## Eligible Finance Institution Consortium

Lead Finance Institution <i>EBRD</i> .....	Contact person Elena Gordeeva Frederic Giovannetti	Phone + 44 207338 7125 + 44 207338 6803	email <a href="mailto:gordeeva@ebrd.com">gordeeva@ebrd.com</a> <a href="mailto:giovannf@ebrd.com">giovannf@ebrd.com</a>
Other Eligible FI (EFI) member of the consortium <i>EIB</i> ..... .....	Contact person Markus Pfeffer	Phone +352 43 79 82711	email <a href="mailto:m.pfeffer@eib.org">m.pfeffer@eib.org</a>

**Project Chronology**

appraisal mission	Fourth quarter 2009
EFI approvals	First quarter 2010
date of signature of the loans foreseen with the beneficiary	First quarter 2010
start of project	Mid 2010
end of project	2013 – 2014

**Date and Signature**

for the Leading Finance Institution	<i>[Name]</i>
date of signature	



## FIG Technical Advice and Proposal

Title of the Operation:

**Tbilisi Railway Bypass – Environmental and Land Components**

Technical Advice

This project was first submitted by the EBRD to the members of the FIG on 20 October 2009. EBRD presented the project and the different components they wish to finance through the NIF (amounting to a total of €18.5 M). Considering the limited resources and the fact that some parts of the component to be financed by the NIF would only need disbursement in the next two to three years, EBRD was requested to modify their initial proposal in order to take into account the different timelines.

Therefore the NIF contribution request is now based on the amount of each component to be disbursed in 2010-2011. After re-circulating the fiche among the members of the FIG and no objections being raised, the technical advice of the FIG is positive for a request of € 8.5 M. EBRD announced that other parts of each component (contracted as from 2012) could be submitted in 2011.

Compliance with NIF objectives and priorities

The proposed project is fully in conformity with the Strategic Objectives: Especially it aims at supporting trans-European transport axes by improving rail infrastructure and facilitating inter-connection: in particular the Railway corridor connecting Caspian and Black Sea. Moreover it will contribute to facilitate oil traffic – contributing to the security of energy supply in Europe. (Objective 1). Objective 2 will be also addressed since the NIF contribution will support addressing environmental mitigation measures and other areas such as waste management and soil pollution. Finally Objective 3 will also indirectly be addressed by promoting socio economic development and job creation through rehabilitation of certain areas of the city centre following the freed up of the railways.

Leverage and impact

The NIF contribution is critical for a successful implementation of the project. The TA components are important but also the grant to the Georgian Government considering the situation of the country. It contributes to leverage € 200M of loans from two eligible finance institutions, which gives a favourable leverage ratio as the NIF contribution element would represent approximately 3% of total lending to the project. The project is jointly **co-financed by EBRD as Lead and the EIB**. This cooperation between European Finance Institutions is in line with NIF objectives.

Added Value for Beneficiary

For the beneficiary, Georgian Railway LLC, 100 % State owned railway company; the immediate added value will be the capacity to finance the TA to successfully implement the project and tackle, amongst other, the necessary environmental mitigation measures for appropriate implementation of such infrastructure project. In the long run, the project will contribute to a better transport interconnection of Georgia with its EU neighbours also will contribute to increase energy supply security.

Distribution of Financing

70.5% from EC budget and 29.5% from NIF Trust Fund

Timing

The appraisal of the project is taking place in the last quarter of 2009 and approval of the EBRD loan is foreseen for the beginning of 2010. Therefore, final approval by the NIF Board in November is required to proceed with the preparation and implementation of the project.

Conclusion

Positive opinion of the FIG for a **final approval of € 8.5 M for TA and grant**

### FIG Proposal

NIF Contribution:	<i>from EC Budget</i>	<b>6 €</b>	<i>from NIF Trust Fund</i>	<b>2.5 €</b>
		<b>70.5 %</b>		<b>29.5 %</b>

Type of Intervention : **TA and grant**

### Date and Signature

for the Commission Chair:  
03/09/2009

**Richard Weber**

for the Commission Secretariat:  
03/09/2009

**Jorge de la Caballeria**



## Comparison by the Lead Finance Institution of the proposed project's main characteristics with the NIF Strategic Orientations

### Annex

#### MAIN REQUIREMENTS:

	Yes	No
1 Operations covered by the NIF shall benefit the following countries: -ENP countries with an ENP Action Plan in force -Other ENPI countries (and exceptionally other third countries) in particular in case of projects of cross-border and regional nature to which the Union attaches particular interest and following a unanimous decision of the Board	X	
2 Concern the objectives identified in the NIF Strategic Orientations	X	
3 Fall within the sectors identified in the NIF Strategic Orientations	X	
4 Contribute to the implementation of the ENP Action Plans or related thematic policy priorities	X	
5 Be complementary to corresponding regional, national and local strategy and measures	X	
6 Be fully consistent with Community principles in particular concerning the Environment (i.e. the European Principles for Environment), Public Procurement and State Aid	X	
7 Be ODA eligible		
8 Avoid replacing private financing or introducing distortions to the financial market (additionality)	X	
9 Help leverage loans (leverage)	X	
10 Not duplicate or overlap with EC-funded operations supporting the FEMIP; be technically and financially sound (value for money)	X	
11 Provide a clear justification for the size as well as the use of the NIF contribution requested	X	

#### PRIORITY CRITERIA (Under all objectives)

1 Operations presented by Eligible Finance Institutions in a consortium	X	
2 Operations promoting substantial social returns or global public goods returns	X	
3 Operations having regional or sub-regional effects		
4 Investments in sectors with limited borrowing capacity	X	
5 Operations with a clearly demonstrated catalyst effect on specific sector reforms of the ENP Action Plans	X	
6 Operations contributing to the implementation of the Eastern Partnership		
7 Operations in line with relevant EU directives, i.a. on combustion, waste water and solid waste management	X	