

# Successful Implementation of Hairatan to Mazar-e-Sharif Railway Project in Afghanistan

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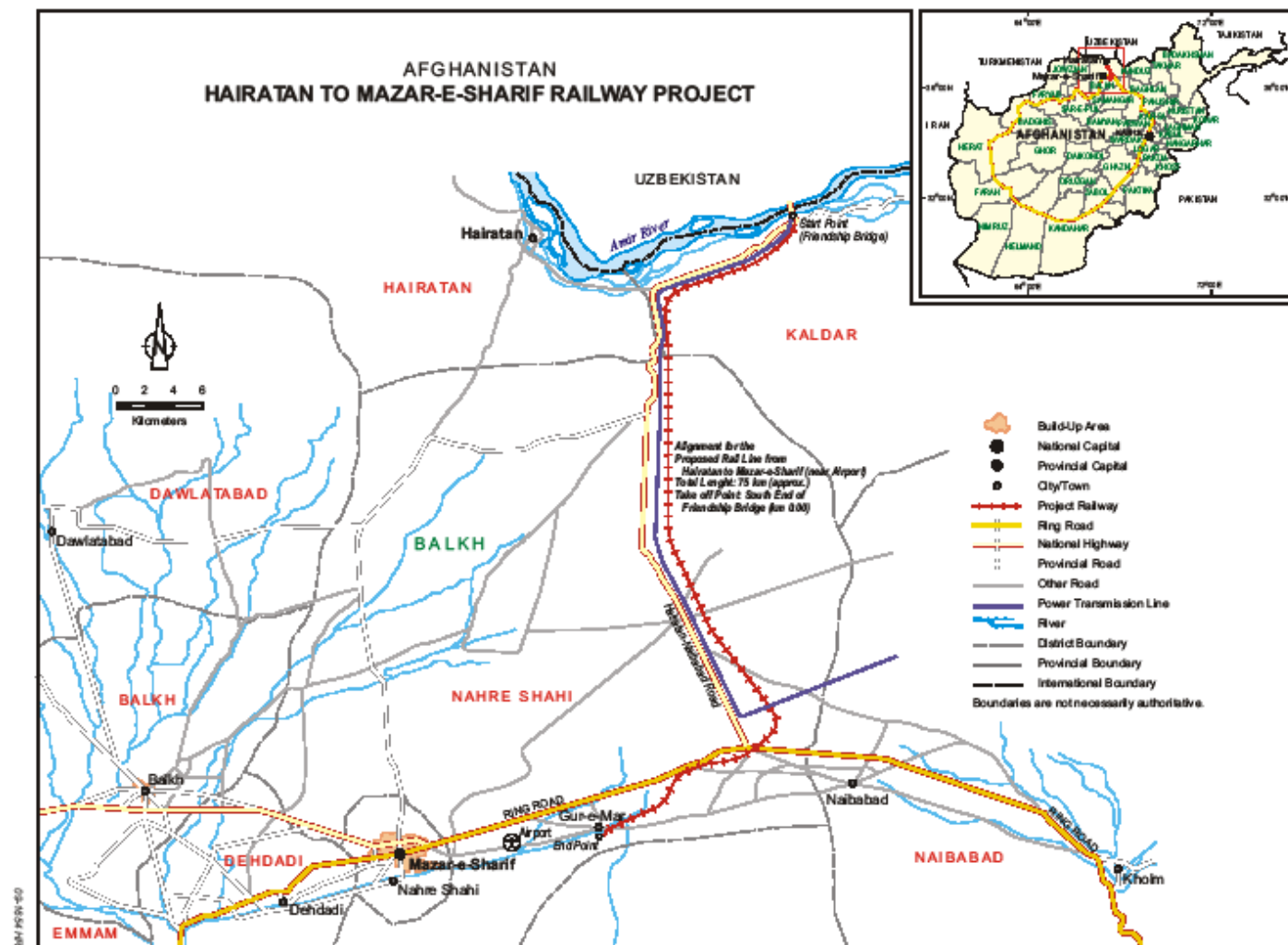
12th CAREC Transport Sector Coordinating Committee Meeting  
Astana, Kazakhstan  
5-7 June 2013



# Project Map



# Project - Route



# Hairatan to Mazar-e-Sharif Railway Line

- Improve regional connectivity with neighboring countries
- Expand the national transport network
- Increase the reliability of supply routes through provision of alternative modes of transport
- Initiate Afghanistan's railway network which will be expanded and used to support extractive industries and eventually provide greater transitivity through Afghanistan.

# Project Development

- Strategic Priority
- Immediate need
- Procurement
- Implementation
- Economic Benefits
- Financial Sustainability
- Regional Cooperation

# Brief Project Details

- **Objective:** To develop railway infrastructure connecting Hairatan to Mazar-e-Sharif
- **Output:**
  - 75 km railway on Central Asian gauge from Hairatan to Mazar-e-Sharif
  - Consulting services for supervision and project management
- **Components:**
  - Railway line and associated infrastructure
  - Stations
  - Rail yard, equipment, and repair facilities
  - Trans-shipment terminal
- **Cost:** US\$165M
- **Financing plan:** ADB through Asian Development Fund

# Baseline Project Development Problems

- Inadequate tertiary infrastructure and facilities
- Low in-country capacity
- Lack of customs facilities
- Uncertainty about security
- Project rationale

# Project Processing Challenges & Risks

- TA consultant mobilization in time
- Study and design schedule fast tracked
- Weather and security at project area
- Tight processing schedule
- Single source selection of contractor
- Land acquisition & resettlement extent



# Project Results

- **Impact**

- Promote economic development, trade and job creation
- Expand regional cooperation and integration
- Reliable transportation
- Revenues to Afghanistan

- **Outputs**

- 75 km single railway line from Hairatan to Mazar-e-Sharif
- Create railway support facilities - stations, change loops
- Establish a trans-shipment terminal
- Create institutional capacity

# Project Schedule

- Board approval : 30 September 2009
- Grant Signing : 30 September 2009
  
- Contract award : October 2009
- Supervision team : October 2009
- Start of works : January 2010
- Scheduled completion : June 2011

# Project Implementation Challenges & Risks

- Start up and implementation delays
- Security situation in the project area
- Interdepartmental coordination
- Project site (context and customs)

# Project Implementation Risks

## Mitigation Measures

- **Security**
  - Planned extensive cover
  - Budget envisaged engagement of teams
- **Project implementation schedule & interventions**
  - Regular visits to project site
  - Regular dialogue with Government of Uzbekistan
  - Regular dialogue with Governments in Kabul and Mazar
  - ADB representative – implementation consultant at site
  - Regular and close coordination and monitoring

# Existing Hairatan Yard



- Topography

# Starting Point of Project



## Tracks from Friendship Bridge



# Justification for Selecting Uzbekistan Temir Yullari (UTY) as Contractor

- Uzbek specifications
- UTY involved railway line to and yard at Hairatan
- UTY O&M the existing line and marshalling yard
- UTY satisfactory performance in ADB's railway projects in the region
- UTY to operate trains to Mazar in future
- UTY did the preliminary assessment project area
- Cost effective proposal and completion of works in one year

# EPC Contractor

- Uzbekistan Temir Yullari (UTY)
- New railway based on Uzbek system – no investment in rolling stock
- UTY had experience to design, build and operate system
  - built the railway line to Hairatan, including a yard
  - operates and maintains existing line and marshalling yard at Hairatan
  - had shown satisfactory performance on past ADB funded rail projects
  - had the necessary equipment and financial capacity to build and operate
  - was familiar with the terrain and country conditions
  - was committed to delivering the project on time and within budget
- Government of Uzbekistan committed to project at highest level
- Afghanistan signed an EPC contract with UTY: fixed price and time
- An independent engineering team supervised the work
- ADB teams in Kabul and HQ administered the project and reported
- Governments in Kabul and Mazar were fully committed to the project



# Joint Discussions - Design



- **Contractor, Consultant, Executing Agency (MPW), and ADB**
- **Design Basis**
- **Investigations**
- **Specifications**
- **Materials**
- **Security Considerations**

# Safeguards

- Environment -IEE
- Involuntary Resettlement - Land Acquisition and Resettlement Plan
- Indigenous People - None

# Consultation before Construction



- **Contractor to finalize alignment**
- **Right of Way defined**
- **Updating of LARP**
- **Implementation of LARP**



# Salient Features

- Total track length constructed over 100 km
- Gauge : 1520 mm CIS
- Rail – Long welded rails
- Automatic level crossing at National Ring Road
- Control center at Hairatan
- Connection to reconstructed Airport and National Ring Road
- Customs integration at Hairatan and at Naibabad

# Implementation

- New railway based on Central Asian system – no investment in rolling stock
- Governments of Afghanistan and Uzbekistan committed to project
- EPC contract : fixed price and time with penalties and premiums
- Turnkey contractor and independent supervision consultant team mobilized quickly
- Project site cleared from mines and handed over to contractor
- Construction of camps, site surveying and design progress made simultaneously
- Security teams mobilized at site
- ADB teams in Kabul and HQ closely monitored the project

# Permanent way works



# Project Security

- Project Security Plan
- Site and mobile teams



- Around 350 Police involved
- 11 Check posts established

# Inspection and Testing

- Inspection and Testing
- Quality Plan
- Consultant team witnessed inspection and testing
- Consultant conducted independent tests





# Engineer's Laboratory and Independent Tests

## Engineer's Laboratory



## Independent Verification Tests



# Construction progress

## Earthworks



## Stations being built



## Track ballast stabilization and leveling



## Test Run

# Operation and Maintenance

- Performance based O&M Contract
- Initial 3 year contract to the Uzbek Operator
- First train to Afghanistan in December 2011
- O&M facilities improved
- O&M is ongoing
- Afghanistan is generating revenue, which pays for O&M
- Cargo and revenue realized is greater than forecasted forecast in the first year

# Project Benefits

- Freight operators and traders have increased options
- Businesses and local communities
- Job opportunities to Afghans
- Increased and reliable transportation options
- Transportation costs reduced through alternative mode
- Increased access for humanitarian relief to conflict-affected areas

# Factors for Successful Implementation

- ADB responded swiftly and successfully to the client
- Security concerns were addressed
- Cooperation & coordination btw all parties
- Creative planning and processes
- Processing and implementation expedited through emergency projects
- Demanded project (unclogged transport artery crucial to Afghanistan & key transit link)

# Goods moving to Afghanistan



# Next Steps

- Proposed expansion of the railway west and east from the railhead at Mazar-e-Sharif
- Undertake feasibility study, and if positive, assist MPW in procurement process to fast-track
- Consultant proposals currently under evaluation and expect consultant to be fielded by 31 July 2013