



# PERMANENT STEEL TRUSS BRIDGES PROJECT

Ministry of Highways  
Road Development Authority

FOR  
POST TSUNAMI REHABILITATION OF  
NATIONAL ROADS & BRIDGES  
ON  
TRINCOMALEE TO PULMODAI ROAD AT CHAINAGE 21+000,  
41+000 and 51+000  
AND  
BATTICALOA TO TRINCOMALEE ROAD AT CHAINAGE 35+000  
Tsunami affected areas of Sri Lanka

**FACT SHEET**

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**PERMANENT STEEL TRUSS BRIDGES**  
**FOR**  
**POST TSUNAMI REHABILITATION ON NATIONAL ROADS & BRIDGES**

**Project Number: SL08/50544.**

UNOPS LKOC completed the preparation of the design for the Permanent steel bridges with the partnership with Spanish Consultant-CENTUNION with the Ministry's Partner Road Development Authority in Sri Lanka.

The following table is the current project information working in Sri Lanka:

Total Budget	: Euro 21,627,267.00
UNOPS	: Euro 14,647,267.00 (67%)
CENTUNION	: Euro 6,980,000.00 (33%)
Partner Ministry	: Ministry of Highways/ Road Development Authority (RDA)
Donor	: Spanish Government Soft Loan
Partner Spanish Company	: CENTUNION
Duration	: 28 months
Start date	: 4 <sup>th</sup> September 2006 (Design Phase)
End date	: 18 months for implementation (July 2007 to December 2008); extended until June 2009.

**Overview:**

Following the 26 December 2004 tsunami disaster in the Indian Ocean region, Asian Development Bank (ADB) took a lead role in supporting the Government of Sri Lanka (GOSL) in emergency response and recovery programming to restore the major roads infrastructure in flood affected coastal areas of the country. The reconstruction programme includes 3 (three) major bridges along the Trincomalee to Pulmodai road in Irrakkakandi, Pudavakattu & Yan Oya and 1 (one) major bridge along Trincomalle to Ballicaloa road. The total length of these bridges shall be 1,000 meter.

The Spanish Government offered soft loan funding to the Government of Sri Lanka to address Tsunami reconstruction needs. In this context, CENTUNION, a Spanish Prefabricated Steel Bridge supplier requested the UN Office for Project Services (UNOPS), to develop relationship with Road Development Authority and ADB for engineering and procurement services to enable quick restoration of bridge infrastructure in the disaster/flood affected areas. The both roads shall be funded separately and implemented by different agencies.



This project covers major 2 (Two) individual components:

- Component-1: Complete supply of super-structures of steel bridge parts by CENTUNION-Spain.
- Component-2: Engineering and procurement services for the works by UNOPS-Sri Lanka. The services shall include:
  - Topographical & geotechnical survey,
  - Detail design and preparation of Bid documents
  - National/International Competitive bidding process
  - Award the contract
  - Transportation and installation of steel bridges
  - Construction supervision
  - Quality assurance/ quality control
  - Implementation and
  - Hand over the 4 (Four) bridges to RDA.

**Implementation methods:**

UNOPS shall design all the bridges by in-house team by using professional softwares, pre-qualify national and equivalent international contractors available in Sri Lanka for sub-structures and launch the steel super-structures. Utilize national competitive bidding (NCB) and International Competitive bidding (ICB) process to procure the civil works services of highest grade of national contractor or equivalent international contractor. CENTUNION shall be delivered the steel parts at Colombo or Trincomalle Sea Port, while UNOPS shall transport these to site and issue to the contractor for launching.

**Expected Out put:**

- Implementation of 3 (Three) bridge sub-projects along the Trincomalle to Pulmudai road shall open the LTTE unclear area for economic growth in north of Sri Lanka.
- Replacement railway cum highway 1 (One) bridge sub-projects along Trincomalle to Batticalao shall reduce highway/railway traffic accident.
- Local employment generation shall inject the cash flow

**Activities:**

The following activities accomplished to-date:

1. Topographical survey completed 100% by external consultant's firm
2. Bridge Hydrology analysis completed 100% by short term consultant
3. Detail Engineering Design for 4 (four) bridges-approved by RDA after review
  - RCC Abutments with Bored piling
  - RCC Drilled Shaft Piers, Pier caps, bridge bearings
  - Approach road design
  - Foundation design
  - Superstructure design completed 100% by CENTUNION
4. Engineers Estimate completed
5. International/national competitive Bidding process completed and contract awarded
6. Construction work completed 75%

**Budget Allocation for implementation:**

The following table represents the budget allocation to implement the subprojects including construction cost, staffs, project operation and service charges etc.

Location of Bridge	Cost in USD
Irrakakandi	4,017,071
Pudduakattu	4,950,421
Yan Oya	3,752,912
Oddamavadai	4,856,316
<b>Total:</b>	<b>17,576,720</b>

#### Physical VS Financial progress January 2009:

To date UNOPS received Euro **8,304,055.21** (Equivalent to USD **11,932,265.24**) from Government of Spain and spend USD **6,468,836.39** for the staff salary, operation cost, equipments procurements, mobilization advances for the contractor and interim payments to the contractors.

Location of Bridge	% Physical Progress	Contract amount in USD	Payment to Contractor in USD
Irrakakandi	90.0%	3,053,701	1,670,736.58
Pudduakattu	40.0%	4,078,207	1,401,168.05
Yan Oya	55%	2,962,207	817,651.39
Oddamavadai	75.5%	3,547,983	913,264.29
	<b>Total:</b>	<b>13,642,098</b>	<b>4,802,820.31</b>

**Proposed Pictures of the Bridges in Sri Lanka**



Before Construction



Work in Progress

**Irrakakandi Bridge**



Before Construction



Work in Progress

**Puddukattu Bridge**





Before Construction



Work in Progress

**Yan Oya Bridge**



Before Construction



Work in Progress

**Oddamavadai Bridge**