

# **BRAZILIAN HIGH SPEED TRAIN - TAV**

**April 2008**

# SUMMARY

- **Context**
- **Location**
- **Bid Preparation**
- **Demand Studies**
- **Environmental and Engineering Studies' Review**
- **Economic-Financial Valuation**
- **Timetable**

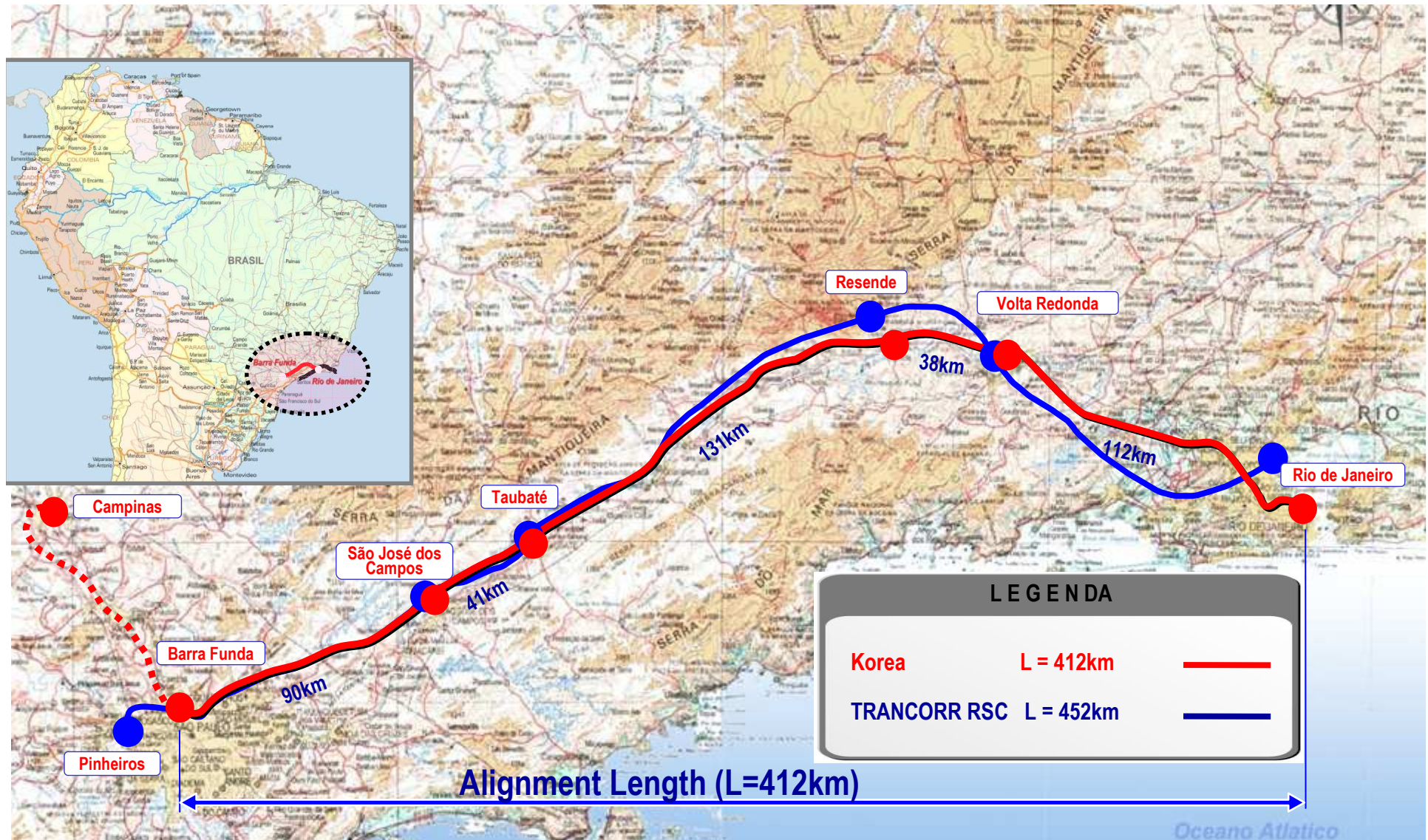
# CONTEXT

Transport solution to densely populated region where most of the Brazilian economy is concentrated

- **RELATED POPULATION: 35 million people**
  - **Sao Paulo Metropolitan Region population: 19 million people**
  - **Rio de Janeiro Metropolitan Region population: 12 million people**
  - **Campinas Metropolitan Region population: 2,5 million people**
- **APPROXIMATE DISTANCE: 550 km**
  - **Rio de Janeiro – Sao Paulo: 450 Km**
  - **Sao Paulo – Campinas: 100 Km**
- **ECONOMIC IMPORTANCE**
  - **Rio de Janeiro and Sao Paulo's GDP represents 45% of Brazil's GDP.**
  - **Foster economic growth urban development in its region of influence**
- **TRANSPORTS**
  - **TAV would relieve the Sao Paulo-Rio air transportation and highway traffic problems**

# LOCALIZATION

## CURRENT ALIGNMENTS ALTERNATIVES



# BID PREPARATION

## ➤ TECHNOLOGY

- Comparative analysis of existing technologies

- Technology transfer: Rolling Stock, Infra-Structure, Operation & Training and System Engineering

- Open, fair and competitive technology parameters for bid

## ➤ SERVICE BID will not contemplate a project defined in advance

- Bid participants should prepare their own projects in order to attend minimum performance requirements:

- speed

- capacity

- traveling time

- time between departures

- facilities

- level of comfort, etc

# DEMAND STUDIES

**Brazilian Government is conducting a complete and independent demand study**

## ➤ ANALYSIS OF EXISTING STUDIES

- Critical analysis of method and results of the existing demand studies

## ➤ SECONDARY DATA SURVEY

- Review of all existing secondary data produced by transportation agencies, local and national government bodies (ANTT, Infraero, DNIT, DER-SP, DER-RJ etc)

## ➤ PRIMARY DATA SURVEY

- Declared and revealed preference surveys (supply/demand) in airports, bus stations, highway tolls etc

## ➤ POTENTIAL DEMAND FORECAST

- TAV potential demand forecast modeled according to international experience

# **ENVIRONMENTAL AND ENGINEERING STUDIES' REVIEW**

## **➤ ALIGNMENT AND FUNCTIONAL PROJECT ANALYSIS**

- Analysis of alternatives of alignments focusing on environmental aspects and engineering costs**
- Urban restrictions analysis: intersection with existent infra-structure and expropriation**
- System operation and facilities**

## **➤ COSTS AND DEADLINES ESTIMATES**

- Implementation/Operation: preliminary equipment, materials and services parameters; project implementation plan**
- Comparative analysis with international experience**

## **➤ ENVIRONMENTAL STUDIES**

- Analysis of existing environmental studies**
- Estimate of costs arising out of environmental aspects, including mitigating factors and compliance to Brazilian environmental law**
- Actions to obtain clear guidelines for environmental licensing**

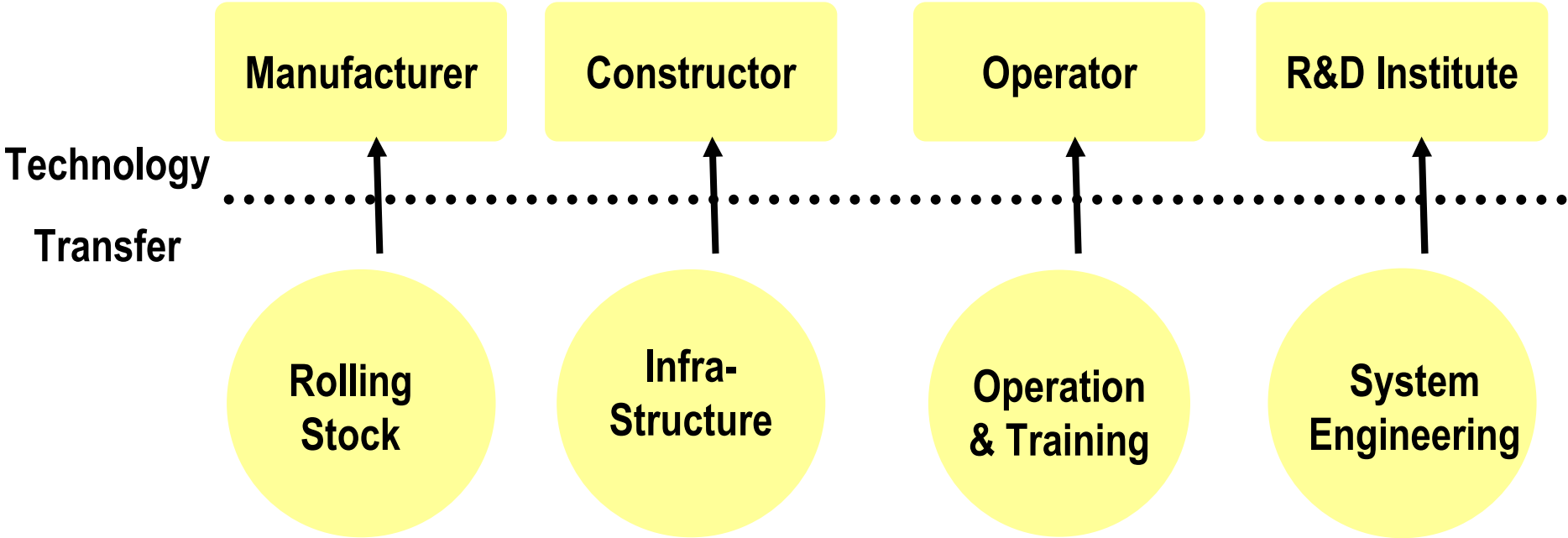
# ECONOMIC-FINANCIAL VALUATION

## ➤ ECONOMIC-FINANCIAL FEASIBILITY

- Discounted cash-flow analysis to check TAV's feasibility
- Alternative revenues emphasis, mainly on real estate related projects
- Valuation of the total economic benefits arising out of TAV

# TECHNOLOGY TRANSFER

## BRAZILIAN GROUP



## ENTREPRENEUR GROUP

