

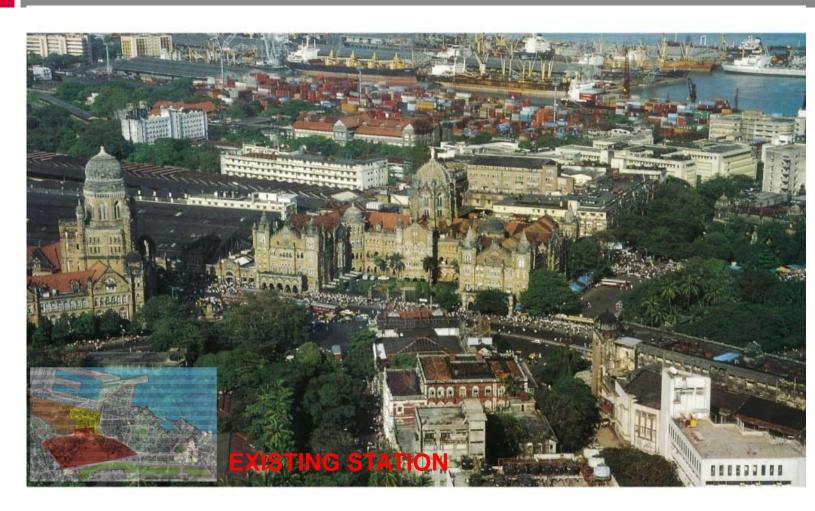
MUMBAI CST STATION MULTIMODAL STATION AND PPP APPROACH FOR A WORLD CLASS UNESCO STATION RENOVATION

Eric DUSSIOT International Director, AREP Ville, FRANCE 3A – INTERMODAL CENTER

MUMBAI CST Station



MOSCOW 2013



Existing VIEWS







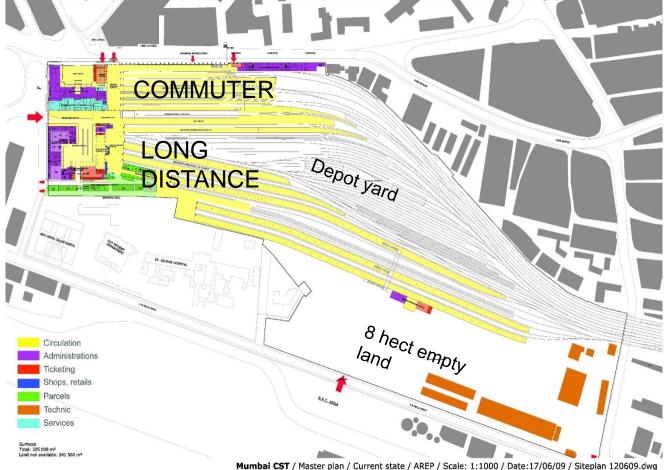






AREP

Existing PLAN of the station



Key figures Today Commuter 1,1million /day Long distance 71000 pax/day **Grand Total Station area** 292500m2

2030 Commuter 1,4million /day Long distance 97500 pax/day **Grand Total Station area** 337000m2 (excluding 46000m2 maintenance yard relocated)



MUMBAI CST STATION



-24 hectares existing site, on which:

- → The INTERMODALITY will be developed (2 new metro lines)
- → The Heritage buildings will be renovated (Steven's, Old annex, Main line)
- →New passenger facilities and RETAILS will be created (railways/private developer)
- →The depot yard currently in the middle of the site will be relocated elsewhere to use the new land created for new development

-8 hectares of empty land to be used for :

- →Improving the STATION functioning by creating a new Long Distance train station
- → Developing a new urban development project to pay for the existing station remodeling and new Long Distance station construction



Multimodal hub1

AREP

MOSCOW 2013

Connect Bus, Metro, taxi, Suburban train, long-distance train, south area on foot and commercial activities



Multimodal hub2

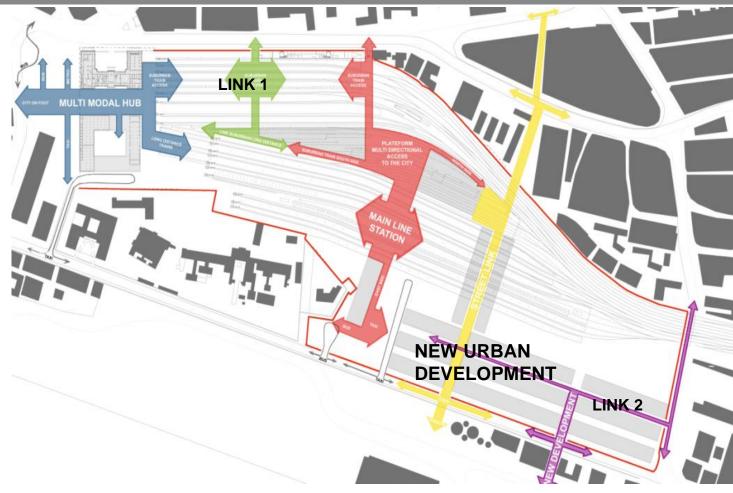
AREP

Long-distance train, Connect Bus, taxi, Suburban train, all access to the city on foot and the new development

commuter To CITY **NEW Long Distance** STATION **NEW URBAN** BUS /TAXI Future METRO DEVELOPMENT

. Link 182 Connect the new development area to the city

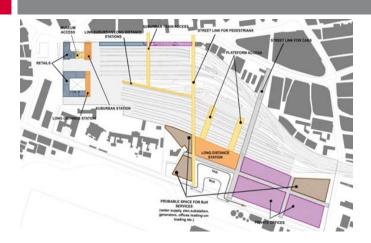
AREP

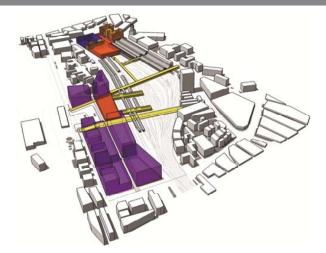


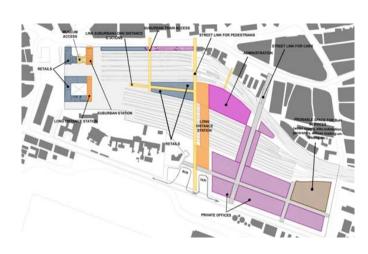


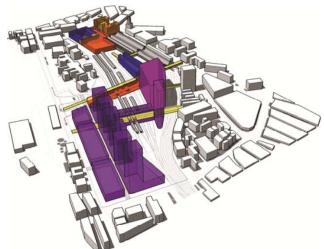
MASTER PLAN-OPTIONS









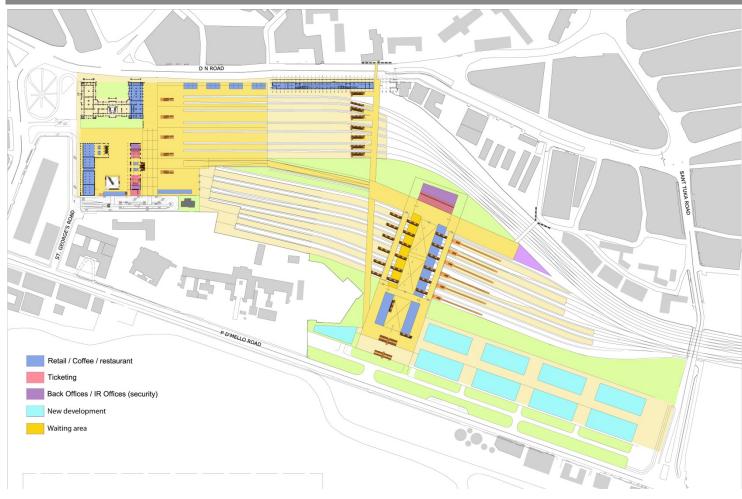


Mr. Eric DUSSIOT – AREP Ville – Intermodal centers



PPP PROJECT selected option







EXISTING Station Entrance







PPP PROJECT



MOSCOW 2013



AREP

EXISTING interior Taxi Courtyard



PPP PROJECT





EXISTING Concourse





PPP PROJECT







PPP PROJECT: Financial



INDIAN RAILWAYS RECOMMANDATION:

0% Indian Rail investment 100% private developer financing

AREP has developped a "4 steps" architectural-Developper-Financial analysis

1rst STEP: simplified feasibility: land value/station cost

2nd STEP: opportunities offered by PPP: return on investment

3rd STEP: detailed analysis: mandatory cost/planning of investments/revenues

4th STEP: the various issues will be addressed:

% of Investment between Railways and Private: Cannot be 0% railways / 100% Private Partners as initially requested % of sharing the Revenues & Expenses: Detailed matrix repartition cost/ revenues in proportion How many years? Risk issues





CONTROL/ACTIONS levers



SUCH AS:

The numbers of years of construction: the planning

The "mandatory" railways facility 's construction cost: the project

The contingency factor used: the administrative uncertainty

The Discount rate used in the simulation to calculate the global cost : the bank rate variation

The % rate of revenue increase or inflation used in the simulation : the economy fluctuation

The total duration of the Return of Investment used in the model: 30, 40, 50 years

Etc

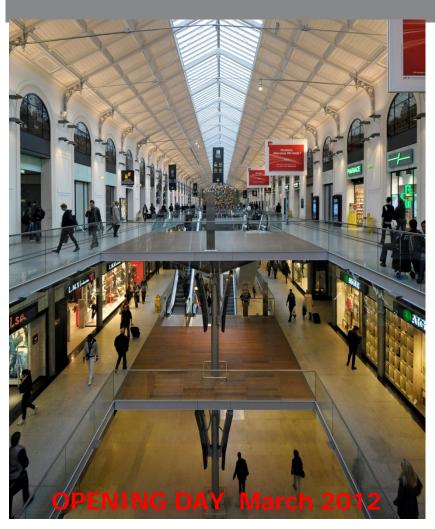
AREP experts provide all those studies for French projects and has adapted its experiences to foreign projects.



TODAY in PARIS, ST LAZARE STATION



rehabilitation in a PPP contractual arrangement





BEFORE





St LAZARE figures...



450 000 commuters/day – 1600 commuter trains/day – 100 Regional trains/day 10 000m2 of new commercial space on 3 levels, 80 shops/services/restaurants, a new parking lot under the station with 250 car spaces.

PROJECT CONSTRUCTION COST 250 M€

- → 25% paid BY SNCF
- → 75% paid by PRIVATE DEVELOPPER

FOR 40 years the private developer will

- →pay a fixed limited rent to SNCF
- →give a fixed % of retails revenue to SNCF

The project will be returned to SNCF after 40 years

The Retail financial income (CA) after one year of operation is x % better than what was estimated into the PPP Business plan. Others Paris stations (such as AUSTERLITZ Station) are being develop in an even more ambitious renovation, similar to MUMBAI CST project.

...Thank you

for your kind attention

ERIC DUSSIOT

AREP International Director

eric.dussiot@arep.fr