





METRO JEDDAH COMPANY

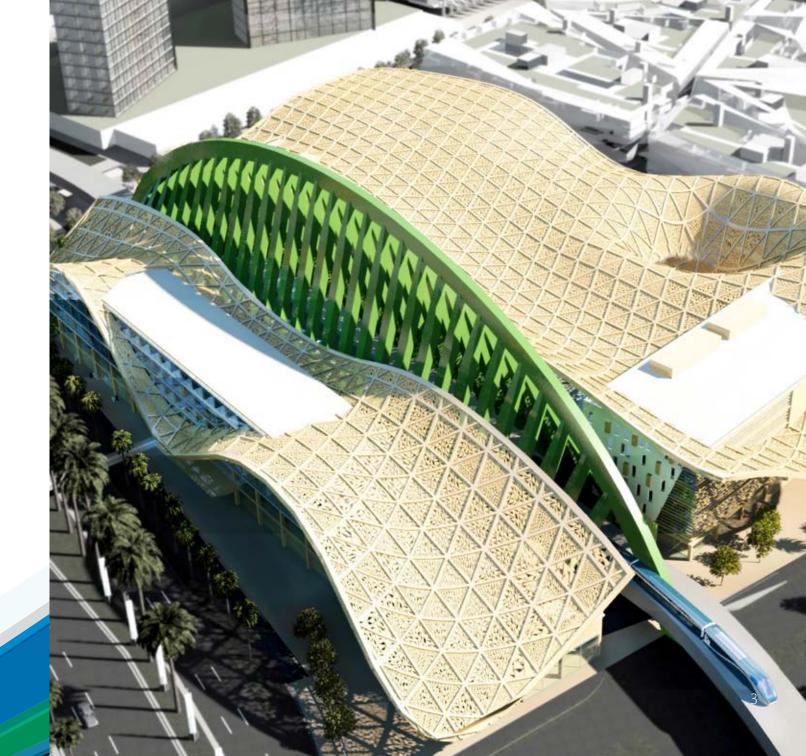
Industry Briefing Day Jeddah Public Transportation Program

Monday, 30 March 2015



Presentation Itinerary

- 1. Metro Jeddah Company
- 2. Program Scope According to Council of Ministers Decree No. 131
- 3. Program Current Status
- 4. Proposed packaging strategy (Including Master schedule)
- 5. Jeddah Public Transportation Master Plan 2033
- 6. Program Phase 1 (2020)
- 7. Program's Components Details & Phase 1 Program Packaging at a Glance
- 8. Program Packaging Strategy for Phase 1
- 9. High Level Program Master Schedule
- 10. Procurement Processes for D&B Contracts and Consultancies Contracts
- 11. Summary
- Companies Registration Process in KSA (By SAGIA/MOCI)
- Lunch + Prayer Break (I hour)
- Questions & Answers



Metro Jeddah Company

Pursuant to Council of Ministers Decree No. 131, the Metro Jeddah Company (MJC) was established to implement the Jeddah Public Transportation Program (JPTP).

- Our Vision: A Sustainable Public Transportation System for Jeddah
- Our Goal: Integrate Sustainability Across MJC to lever operational excellence
- Our Mission: Access to the Rail System will be sympathetic to "access for all" principles and shall comply with applicable laws, regulations, standards and codes.

MJC Commitment For

Safety

Our Vision: Zero Harm to Our Customers, the Public, Program Delivery Partners and Employees.

Our Goal: Safety First

Environmental

Our Vision: Meet or Exceed Applicable Environmental Laws.

Our Goal: Think Green

Quality

Our Vision: Zero Defects and No Waste Our Goal: Excellence Through Quality

Strategic Objectives

- Provide additional Transport capacity to allow economic growth
- •To improve quality of life and the environment
- Provide Mass Transit for annual events (Hajj & Umrah)
- •To scope, design and operate a transport network that will:
 - Optimise the overall economic impact of the network
 - Integrate with all modes of transport
 - Minimise whole life cycle costs
- Create business opportunities and employment for Saudi Nationals by establishing key commercial operations as part of the local rail industry



Program Scope Council of Ministers Decree No. 131

Program Scope & Completion Time

Rail Network

This will consist of the Metro Network and Light Rail Transit system

Bus Network

This will consist of a Bus Rapid Transit as feeder system for the Metro

Marine transportation line

This will consist of Marine ferry Services and water taxis

Corniche (cars) Tram

This will consist of a tram system covering the full length of the Corniche.

Obhur Suspension bridge

This will be an iconic structure facilitating both roads transport and Metro

Public transportation station Al Muntalaq.

This will form an integral part of the Al-Muntalaq development offering intermodal change facility

Program Completion Date: 2020

Program Current Status

Program Current Status

Pre Program Management Consultancy Contract awarded:

Commenced 1st May 2014 AECOM

Preliminary Engineering Design (PED) contract awarded:

Commenced 18th July 2014 Systra

Architectural Consultant signed **30th March 2015**Fosters and Partners

Obhur Creek Bridge D&B: Request for proposal issued **March 25th 2015**

Obhur Creek Bridge PM/CM: Request for proposal **to be issue in April 15th 2015**

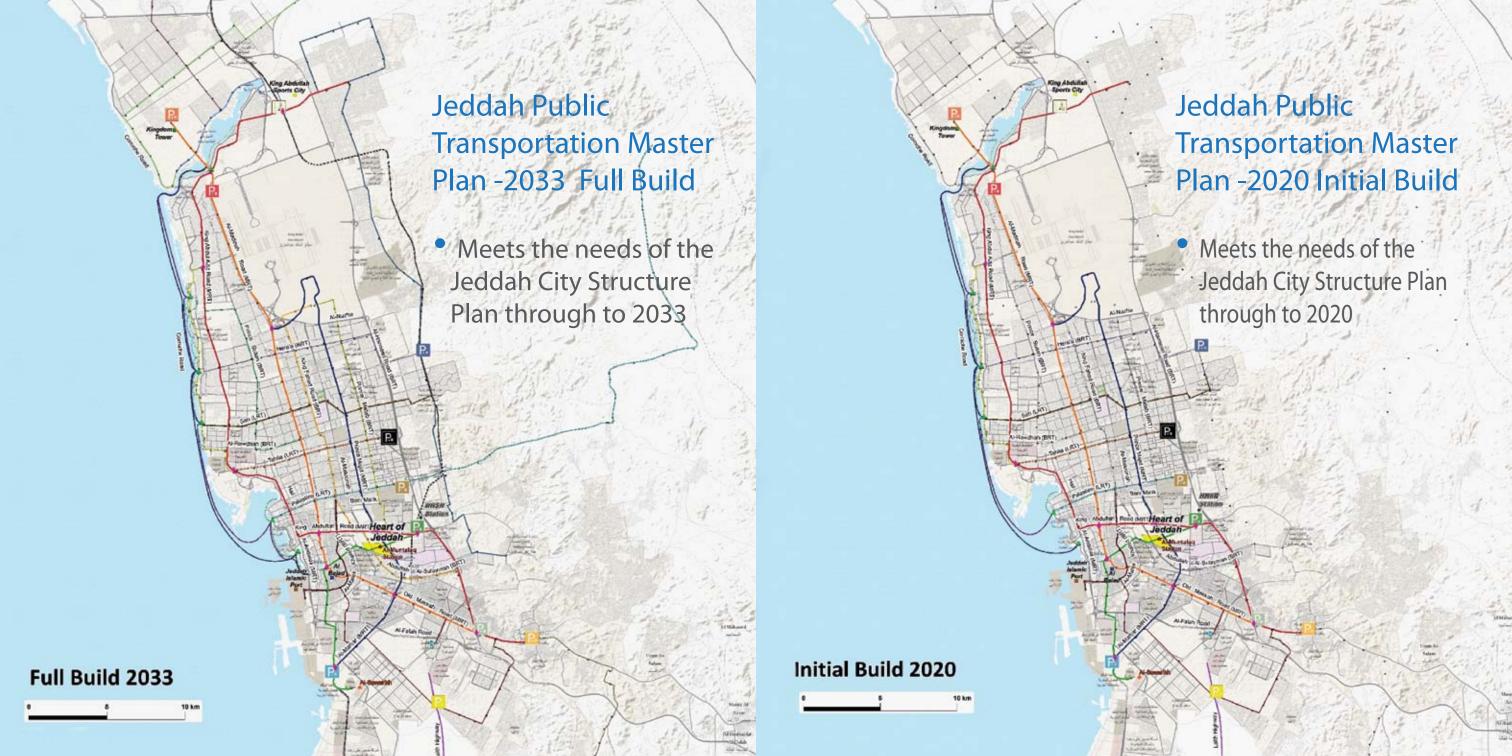
Independent Safety Assessor: Request for proposal issued March 1th 2015

Shadow Operator for: Metro, Tram and Light Rail Request for proposal issued **March 4th 2015**

Program Management Office: Request for proposal issued to be issue in April 15, 2015



Jeddah Public Transportation Master Plan



Program Components Details

Transportation Alignment Lengths

Mode	MJC Updated Master Plan 2033	MJC Proposed Master Plan 2020	
Metro	149km	149km	
LDT /Trans	74km (LRT) +	37km (LRT) +	
LRT /Tram	16KM(Tram)	16 km(Tram)	
BRT/Major Bus route	308 km(BRT) +	54km (BRT) +	
	210 km MBR	210 km MBR	
Local Bus feeder	350 km	350km	
Commuter Rail	195 km	-	
TOTAL	1356km	870km	
Metro Tunnels	~10 to 26km	~15 to 18km	

(MBR Main Bus Route) (LRT Light Rail Transit)

Metro Line characteristics

Line gauge 1435 Power-750 V Train Control (SIL) 4 -CBTC	Line length (km)	Average Interstation (mtrs)	Max Ops Speed	Commercial speed (km/h)	Operational Headway (sec)
Red Line	57,8	2515	100	57.2	155
Orange Line	42,0	1447	100	46,3	160
Blue Line	33,3	1848	100	50,8	210
Green Line	15,9	1449	100	45,0	290

Proposed Metro fleet requirements 4 car x 3 Class VIP, Family & Standard

(UTO) GoA4 Line	In Operation	Operational reserve	Mainte- nance 10 %	Total line Fleet	Total Fleet with h/way of 90s
Red Line	49	1	5	55	84
Orange Line	43	1	5	49	75
Blue Line	24	1	3	28	56
Green Line	10	1	1	12	31
Total	126	4	14	144	246

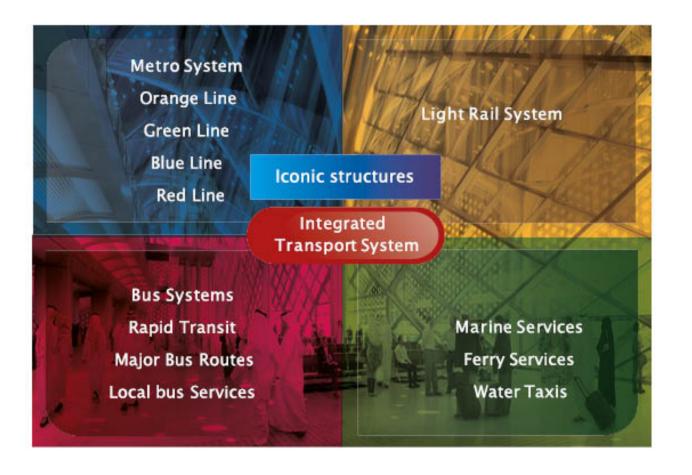
Light rail and tram line characteristics

Line gauge: UIC Power-750 V DC Train Control ATC, ATO, ATP	Line length (km)	Average Intersta- tion (mtrs)	Max Ops Speed (km/h)	Commer- cial speed (km/h)	Operation- al Head- way (sec)	Train Length
Corniche tram	15.4	1100	50	29	480	45m
Sari St	17.3	860	50	27	300	90m
Thalia St	10.0	910	50	30	270	45m
Palastine Rd	8.4	840	50	29	270	90m

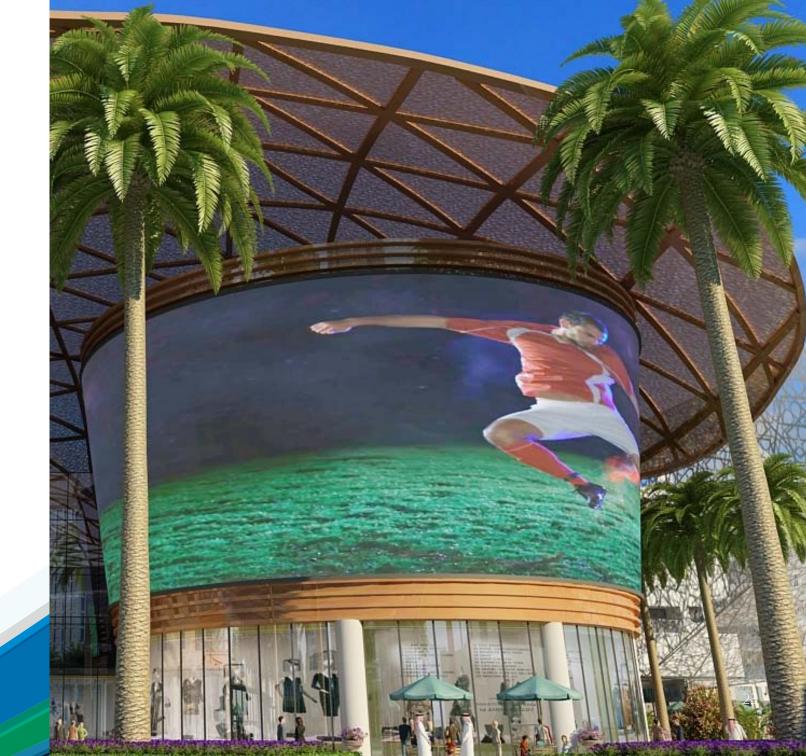
Proposed LRT & Tram fleet requirements 45m units x 2 Class (Family & Standard)

Line	In Operation	Operational reserve	Maintenance reserve	Total line Fleet
Corniche tram	9	1	1	11
Sari St	36	2	4	42
Thalia St	12	1	2	15
Palastine Rd	22	2	4	28
Total	79	6	11	96

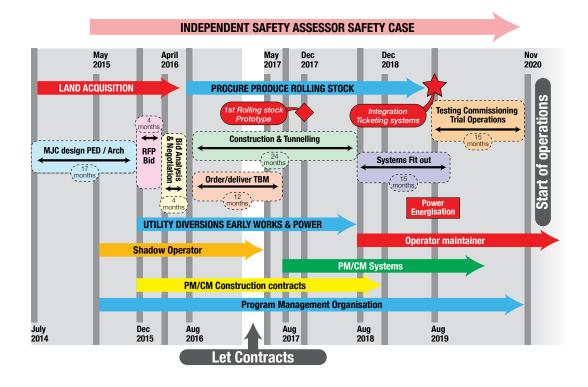
Program Packaging Strategy







Metro Completion Program



- High level program assumes let of ALL contracts within a 4 month period third 1/4 2016
- All required land must be available at contract award but complete latest date August 2016
- Operational model to be defined with Shadow operator including facilities.
- (Early works are to include Obhur bridge, utilities, traffic management, demolition/site clearance logistics and park and ride)

Metro Proposed Procurement Packages

- 1. Early Work Contracts
- Utility Relocation
- Traffic Diversion
- Logistics Support
- Early Excavations
- Park and Ride facilities
- TENDERS: ca. 1

- 2. Obhur Bridge
- All Civil &
- Architectural Works

- Site Clearance
- Noise Protection & Screen Walls
- Approach roads
- TENDERS: 1

3. Multi modal Station (Al -Muntalaq)

- Site Clearance
- Civil & Architectural Works
- HVAC & MEP
- Noise Protection

TENDERS: Incl in Green Line

- 4. Elv, Underground Stations & Line Sections
- Site Clearance
- Civil structures, viaducts, Civil Works (incl Tunnels)
- Architecural Works
- HVAC & MEP (Front of house)
- Depots, sidings & workshop structures
- Noise Protection & Screen Walls

TENDERS: 3 Orange, Red, Blue+Green

- 7. Integrated revenue Collection
- Fare collection system One system for all modes TENDERS:1
- Centre (ECC) Metro Depot & Workshops

Operations &

Maintenance

Stations & Lines

Integrated (ICC) &

Emergency Control

Rolling Stock TENDERS: 1

- 5. Railway Systems
- Signalling
- Telecommunications
- Integrated (ICC)
- & Emergency Control Centre (ECC)
- System Integration

Power

- HV/MV supply
- Station Power Supply
- Traction Power Supply
- SCADA

Permanent Way

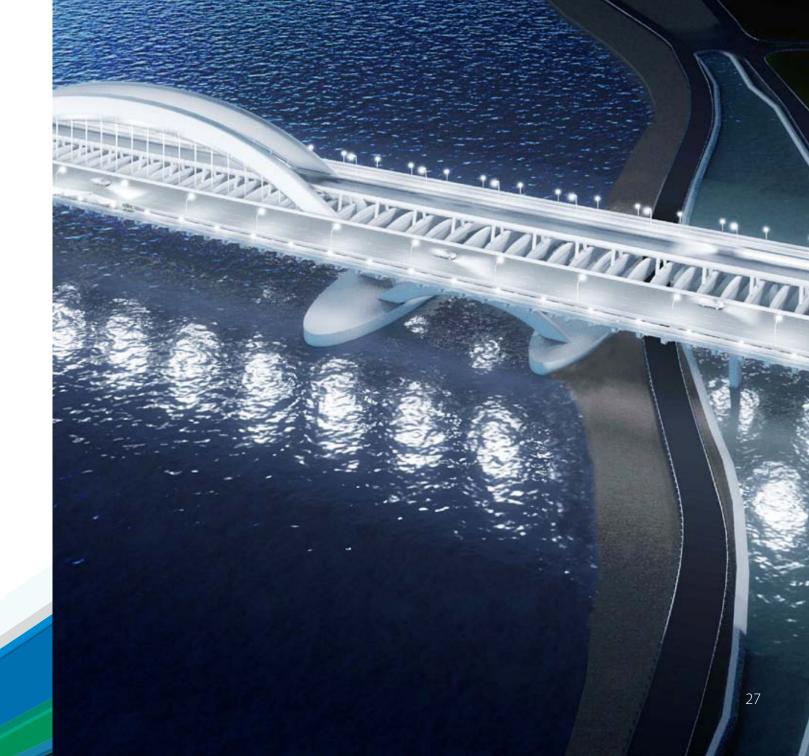
- Track Substructure
- Slab track & Track
- Track 3rd rail
- Switches/crossings
- Test track
- TENDERS: 1

- Depot & Workshop Rolling Stock
- Rolling Stock
- Metro Depot and
- Workshop fit out Stabling Facilities
- Ops & Maintenance

Obhur Creek bridge Completion program

INDEPENDENT SAFETY ASSESSOR SAFETY CASE May 2019 LAND ACQUISITION Civil Contract Handover Commissioning **Trial Operations** (11) (months) Railway Systems installation Start of operations Civil works Design & Build Power Energisation **PM/CM Construction contracts** Jan 2020

• Land Acquisition prior to contract award no later that 3rd 1/4 2015



LRT/Tram Completion program

March Jan 2017 Aug 2018 Aug 2019 2015 2015 LAND ACQUISITION PROCURE PRODUCE ROLLING STOCK 1st Rolling stoc Prototype Ticketing system Systems Fit out RFP Bid - (12)-(months)-30 % design Analysis & months, Start of operations Construction PROCURE PRODUCE ROLLING STOCK Power Energisation **Shadow Operator** April 2018 June 2014 May 2015 April 2016 2017 2020

INDEPENDENT SAFETY ASSESSOR SAFETY CASE

- High level program assumes let of ALL contracts within 1st 1/4 2016
- All required land must be available at contract award but complete latest date April 2016
- Packaging strategy to be agreed to allow early works and parallel working.
- Operational model to be defined with Shadow operator including facilities.
- Operational system integration with ICC & OCC
- Integration of ticketing strategy fare collection

LRT/Tram Proposed Procurement Packages

Early Work Contracts

- Utility Relocation
- Traffic Diversion
- Logistics Support
- Early Excavations
- Park and Ride facilities

At grade & Stations /stops& Line Sections

- Site Clearance
- Civil structures, viaducts
- Architecural Works
- HVAC & MEP (Front of house)
- Depots, sidings & workshop structures
- Interconnecting walkways with Metro

Permanent Way

- Track Substructure
- Embedded rail & Track
- Switches/crossings
- Test track

TENDERS:1

Train Control system

- Signalling
- Telecommunications
- Integration with (ICC)
 & Emergency Control Centre (ECC)
- System Integration

Energy

- High Voltage
- Medium Voltage
- Station Power Supply
- Traction Power Supply SCADA

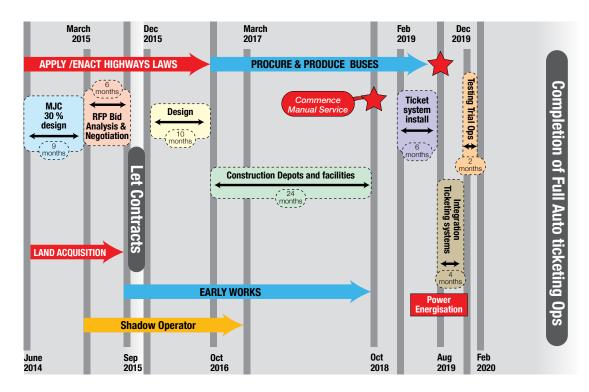
Depot & Workshop & Rolling Stock

- Metro Depot and Workshop Fit out
- Stabling Facilities
- Rolling Stock

Ops & Maintenance

- Ops & Maintenance
- Stations & Lines
- Integrated (ICC) & Emergency Control Centre (ECC)
- Metro Depot & Workshops
- Rolling Stock

BRT/Feeder Buses Completion program



- Enactment of Highways change of use and Laws
- Land Acquisition completed latest date Dec 2015
- Operational model to be defined with Shadow operator including facilities.
- Operational system integration with ICC & OCC
- Integration of ticketing strategy fare collection

BRT/Busses Proposed Procurement Packages

Early Works

- Utility Relocation
- Traffic Diversion
- Logistics Support
- Early Excavations
- Park and Ride facilities

Bus Stations /stops

- Site Clearance
- Civil structures
- Architecural Works
- HVAC & MEP (Front of house)
- Depots & garage workshop structures
- Interconnecting walkways to facilities

Traffic Control system

- Junction Signalling
- Integration with (ICC)& Emergency Control Centre (ECC)
- System Integration

Buses Depot & Workshop

- Depot and Workshop Fit out
- Bus Station Facilities
- Ops & Maintenance
- Supply of BRT/Buses

Ops & Maintenance

- All routes
- Integrated (ICC) & Emergency Control Centre (ECC)
- Depot & Workshops
- Rolling Stock

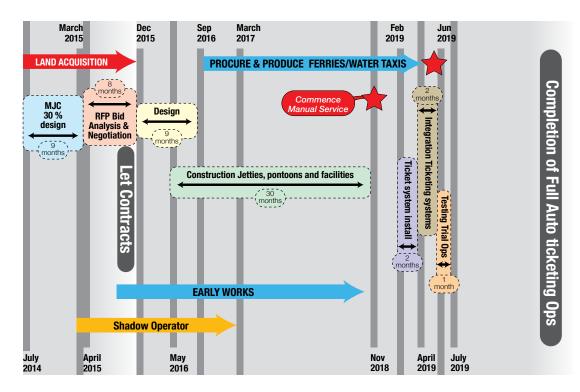
Integrated revenue Collection

- Fare collection system
- One system for all modes

TENDERS:1

TENDERS:1

Ferries/Water Taxis Completion program



- High level program assumes award of contract within a last 1/4 2015
- Land Acquisition MUST be completed prior to contract award latest date Dec 2015
- Operational model to be defined including facilities.
- Operational monitoring with system integration within ICC & OCC
- Integration of ticketing strategy fare collection

Ferries/Water taxis Proposed Procurement Packages

Ferry Stations /stops

- Site Clearance
- Civil structures (Piers, Pontoons & Jetties)
- Architecural Works
- HVAC & MEP facilities
- Dock & mooring
- Integration with Control Centre (ECC)
- System Integration
- Utility Relocation
- Logistics Support
- Early clearance
- Park and Ride facilities

Supply of Ferries and Water Taxis. Ops & Maintenance

- All routes
- Integrated (ICC) & Emergency Control Centre (ECC)
- Pontoons, Jetties & Piers & Workshops
- Ferries & Water Taxis

Integrated revenue Collection

- Fare collection system
- One system for all modes

TENDERS:1 TENDERS:1

Program Packaging At a Glance

Design and Build (Works Contractors) Packages - JPTP

#	Description	Contract/ Package (Nos)	Remarks
1	Obhur Creek Bridge	1	Including approaches+1.7km rods/ flyover etc
2	Green Line+ Blue Line+ Almuntalaq (hotel, Imax, office block etc)	1	Civil works
3	Orange Line	1	Civil works
4	Red Line	1	Civil works
5	Rolling stock + depots equipment + track work (permanent ways)+systems+ MEP+ fit outs	1	Metro Program (i.e. OL+BL+GL+RL)
6	Tramway	1	Civil works+ track works+ power+ systems+ rolling stocks+ MEP+ fit outs+ depots etc
7	Water taxis/ferries	1	Civil works+ stop piers+ jetties+ workshops + water taxis/ferries
8	BRT & Buses	2	Civil roads improvements – 1
9	BRT/Buses - 1		
10	LRT (Sari & Falestine road)	1	Civil works+ track works+ power+ systems+ rolling stocks+ MEP+ fit outs+ depots etc
	Integrated Fare System	1	Program wide
	D&B contracts/packages (Nos.)	11	

Consultancy Packages - JPTP

#	Description	Contract/Pack- age (Nos)	Remarks
1	Pre-Program Management	1	Awarded
2	Preliminary Design Engineering	1	Awarded
3	Architectural Design	1	Awarded
4	РМО	1	Program wide
5	Land Acquisition (as early works)	1	Program wide (excluding Obhur Bridge)
6	Major Utilities Diversion	1	Program wide
7	Financial Advisor	1	Program wide
8	Legal & Claims	1	Program wide
9	PR & Media	1	Program wide
10	ISA	1	Rail systems
11	Shadow operator	3	Rail systems-1 BRT & buses – 1 Marine services - 1
12	Strategic Management & Organizational Development	1	
13	PMCMs	6	Obhur Creek Bridge -1 Water taxis+ BRT+ LRT+ tramway -1 OL-1 GL+ BL+ Almuntalaq Dev. – 1 RL – 1 System wide -1

Operators and Maintainers (O&M) Packages - JPTP

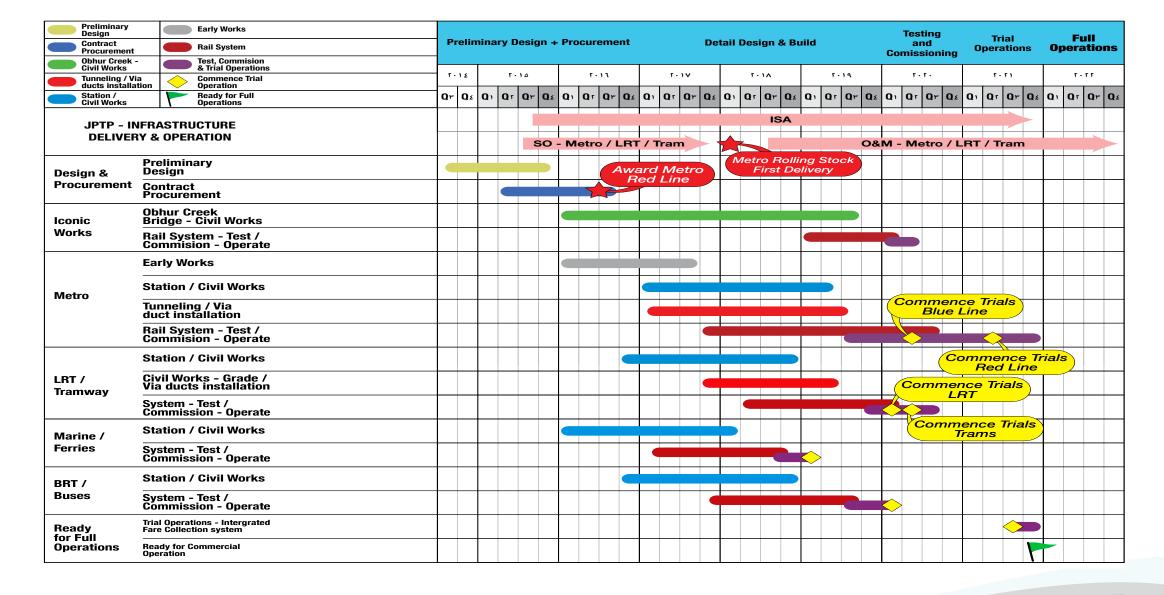
#	Description	Contract/Pack- age (Nos)	Remarks
1	Metro, LRT and Tramway	1	Awarded
2	BRT/Buses and Water Taxis/Ferries	1	Awarded
3	O&M contracts/packages (Nos.)	2	Awarded





Program Master Schedule

JPT Program Timeline



Procurement Process D&B Contracts Consultancies Contracts

Form of Contract

1. Professional Services

- FIDIC based Client / Consultant Model Services Agreement with Particular Conditions
- White Book

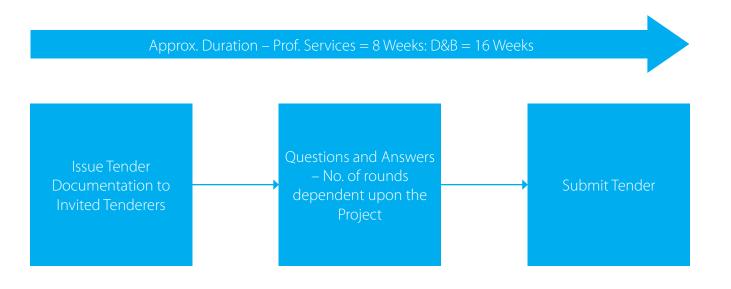
2. Design and Build Works

- FIDIC based Conditions of Contract for Plant and Design-Build with Particular Conditions
- Yellow Book

Process – Pre-Tender

Issue Pre-Qualification Review and Evaluate Qualification Pre-Qualification Documents

Process – Tender Period



Process – Technical Evaluation

Approx. Duration – Prof. Services = 4 Weeks: D&B = 8 Weeks Technical Evaluation

Process – Commercial Evaluation



Process – Pre-Award

Approximate Duration – 6 Weeks

Employer Issues Letter of Conditiona Acceptance (LoCA)

Contract Consolidation

Contractor Conclude
Requirements of the
LoCA

Contract



Summary

MJC has considered how to procure the Phase1 of the Transportation system in ways that allow:

- The overall schedule to be achieved with a realistic tolerance for delay and the impact for unforeseen events.
- Definition, acceptance, approval and acquisition of ALL land requirements
- Award of early works contracts for clearance and preparation of specific locations
- Understanding of the Market capacity and capability
- Best whole life value to be achieved across the entire program
- An appropriate allocation of responsibilities and risk between MJC and the D&B contractors appointed.
- MJC effectively managing the program and to coordinate the integration between the packages and modes of transport (package no's and interfaces).
- Phase 1 of the transportation system MUST be broken into a series of contract packages.
- MJC to maintain a competitive market and acceptable financial risk to the international JV's.
- Looking Forward to Your Active Participation in Metro Jeddah Program
- Where we will Build Together JPTP Phase 1



METRO JEDDAH COMPANY







