



Bogotá's First Metro Line Deal structure

Clemente del Valle

London, United Kingdom

April 9th 2018



DISCLAIMER

This is a presentation of general background information about Empresa Metro de Bogotá S.A. ("EMB") and Financiera de Desarrollo Nacional (FDN), as of the date of the presentation. It is information in summary form and does not purport to be complete. No representation or warranty or undertaking, express or implied, is made concerning, and no reliance should be placed on, the accuracy, fairness or completeness of this information.

It is solely for use at this roadshow presentation and is provided for information purposes only. This presentation does not contain all the information that is material to an investor or participant. No part of this presentation, nor the fact of its distribution, should form the basis of, or be relied on in connection with, any contract or commitment or investment decision whatsoever. This presentation is not financial, legal, tax or other product advice.

This presentation may contain certain forward-looking statements and information relating to EMB that reflects the current views and/or expectations of EMB and its management with respect to its performance, business and future events. Forward-looking statements include, without limitation, any statement that may predict, forecast, indicate or imply future results, performance or achievements, and may contain words like "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect" or any other words or phrases of similar meaning. Such statements are subject to a number of risks, uncertainties and assumptions.

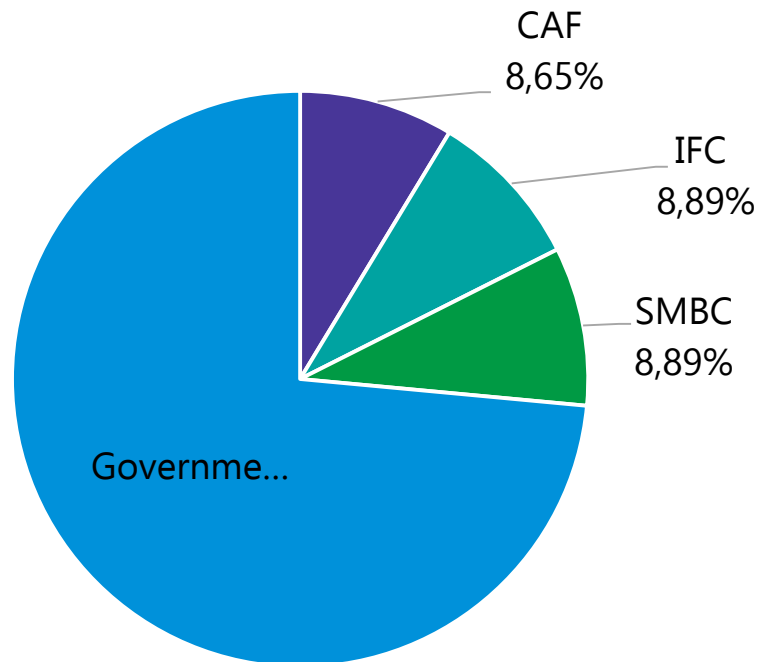
Any forward-looking statement contained in this presentation reflects the current views of EMB with respect to future events, and EMB assume no obligation to publicly update or revise these forward-looking statements for any reason, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future, except as otherwise required by applicable law.

Although we have no reason to believe that any of this information or these reports are inaccurate in any material respect, EMB and FDN do not make any representation as to the accuracy of such information.

FDN – A new type of Development Bank

- Partially public sector owned, linked to Ministry of Finance and Public Credit.
- NBFi license that allows FDN to invest in debt and equity, and to offer investment banking and trust services.

Shareholder Structure



Strengths

Strong and independent governance

- Independent board members majority
- CEO appointed by the board
- Multilaterals veto for critical decisions

Private Regime

- High quality staff
- Efficient procurement process

Specialization:

- Infrastructure
- Project Finance
- Project Structuring

FDN – dual role in the development of infrastructure

Advisory services

- **9 projects under structuring worth USD 8.1 BN**
- **Sectorial Plans: PMTI; PER**

Bogota's Metro:
USD 4.6 BN



Light rail transit calle 80
Medellín: USD 966 MN



Hospital Infrastructure
Bogota's Program: USD
500 MN



Educational infrastructure
Program: USD 90 MN



Financial services

- **4G road infrastructure program: supporting 16 projects with USD 1.58 BN**

Senior Debt
USD 1,070 MN

Liquidity Line
USD 296 MN

Equity Guarantees
USD 193 MN

Capital markets
USD 21 MN

- **Other sectors: USD 439.4 MN committed**

- Urban mobility: USD 21,7 MN
- Social projects: USD 100 MN
- Airports: USD 63.3 MN
- Oil & Gas projects: USD 20.1 MN
- Roads different from 4G program: USD 100 MN
- Energy: USD 134.3 MN

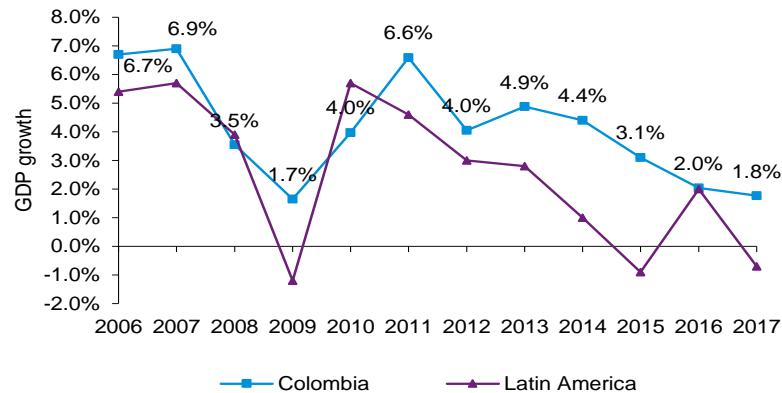
INTRODUCTION

Colombia as an investment destination

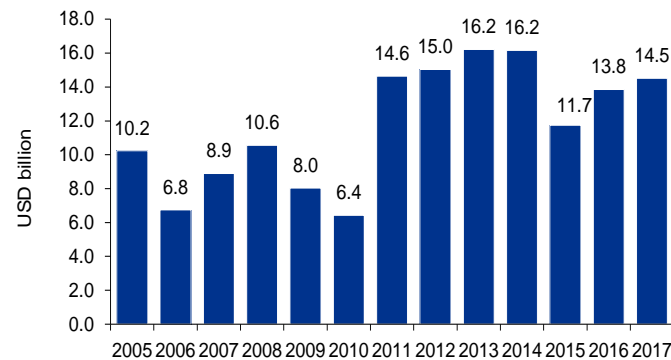
- Controlled, one digit inflation since 1999 near Central Bank target rate
- Balanced GDP growth, above the region's average
- FDI recovery after a 2015 low point (commodities crisis), currently 126% above 2010 level
- Doing Business Report ranks Colombia as the 59th best country for doing business and third in LATAM

Latin America - Best countries to do business	
Country	World ranking 2017
Mexico	49
Peru	58
Colom bia	59
Costa Rica	61
Puerto Rico (U.S.)	64
Jam aica	70
El Salvador	73
Panam a	79
St. Lucia	91
Uruguay	94
Guatem ala	97
Dom inica	98
Republica Docim inicana	99
Trinidad y Tobago	102
Antigua y Barbuda	107
Paraguay	108
Honduras	115

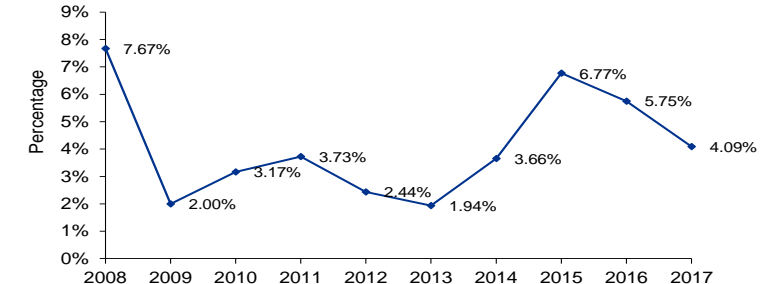
GDP



FDI



Inflation



Source: Colombian Central Bank, 2017 Doing Business Report

INTRODUCTION

Infrastructure in Colombia

Existing national concessions

50 **2**

National road concessions Railroad concessions

48 **18**

Port concessions Airport concessions

In addition:

31

Road concessions awarded in the last 5 years worth

USD 18 billion

Future investment plans (Estimated investment up to 2035)



USD 139
billion

USD 61 billion

Road network intervention

USD 5.3 billion

31 Airport projects

USD 3.6 billion

Railway rehabilitation

USD 18 billion

Investment in healthcare

USD 34 billion

Investment in education, justice and housing

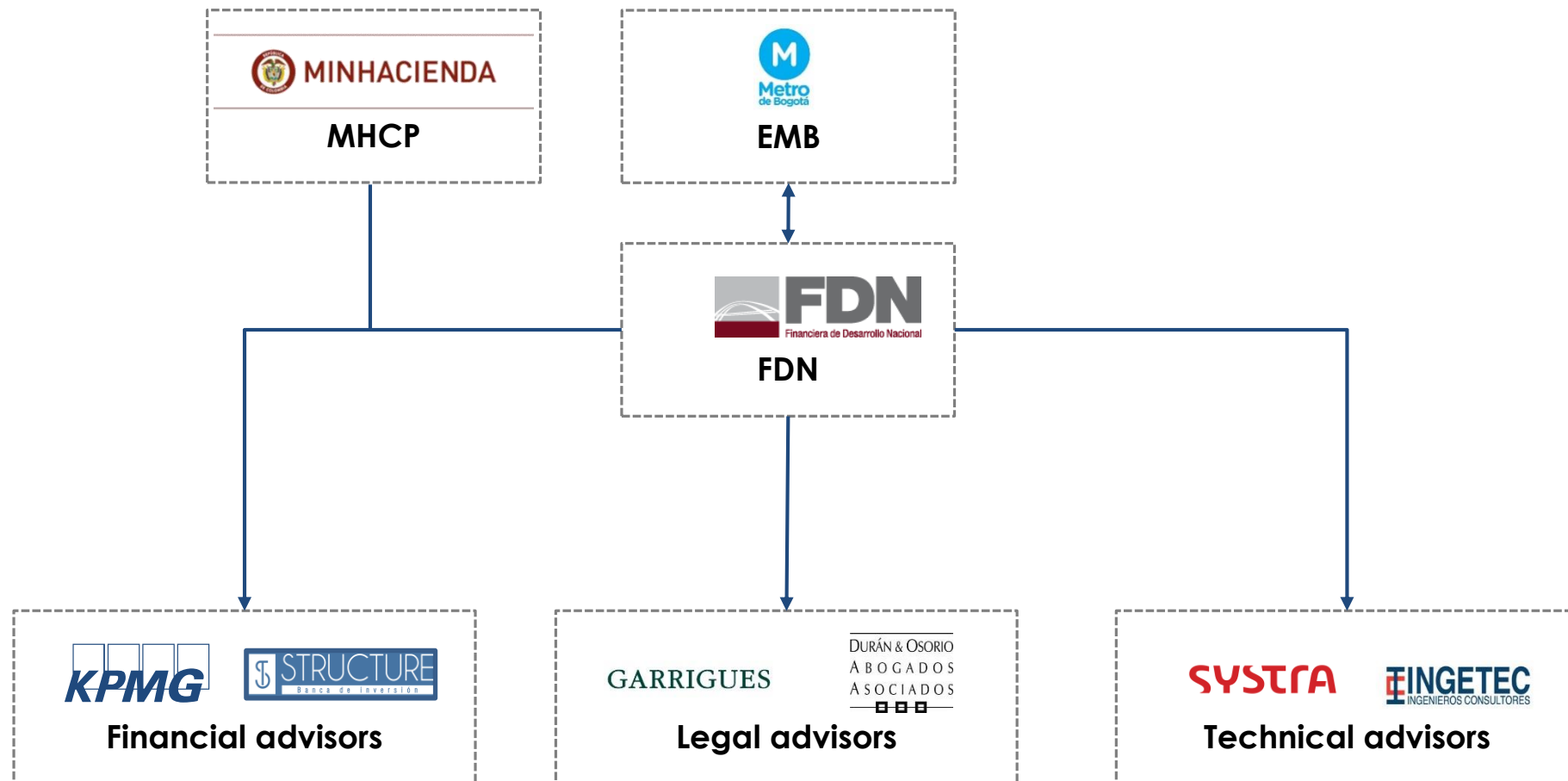
USD 20 billion

Investment in other sectors (water, waste treatment, energy, fluvial)

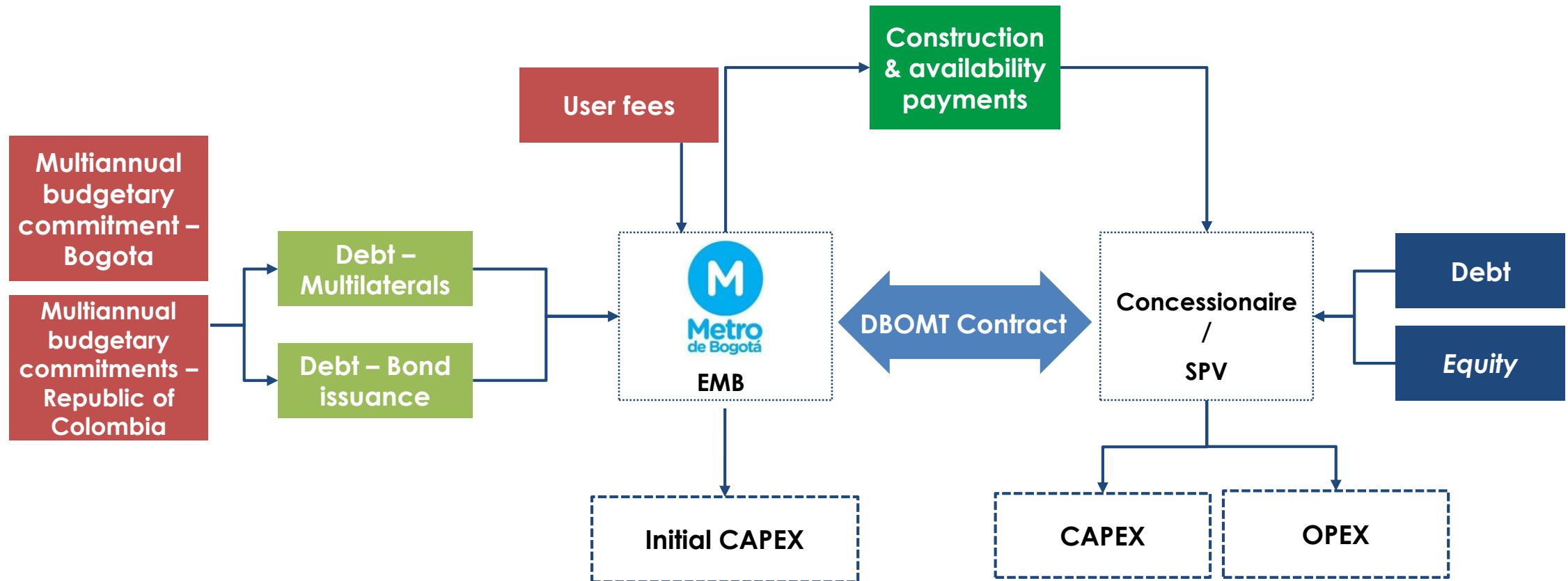
INTRODUCTION

Project team

EMB and FDN signed an agreement to perform the project's structuring.



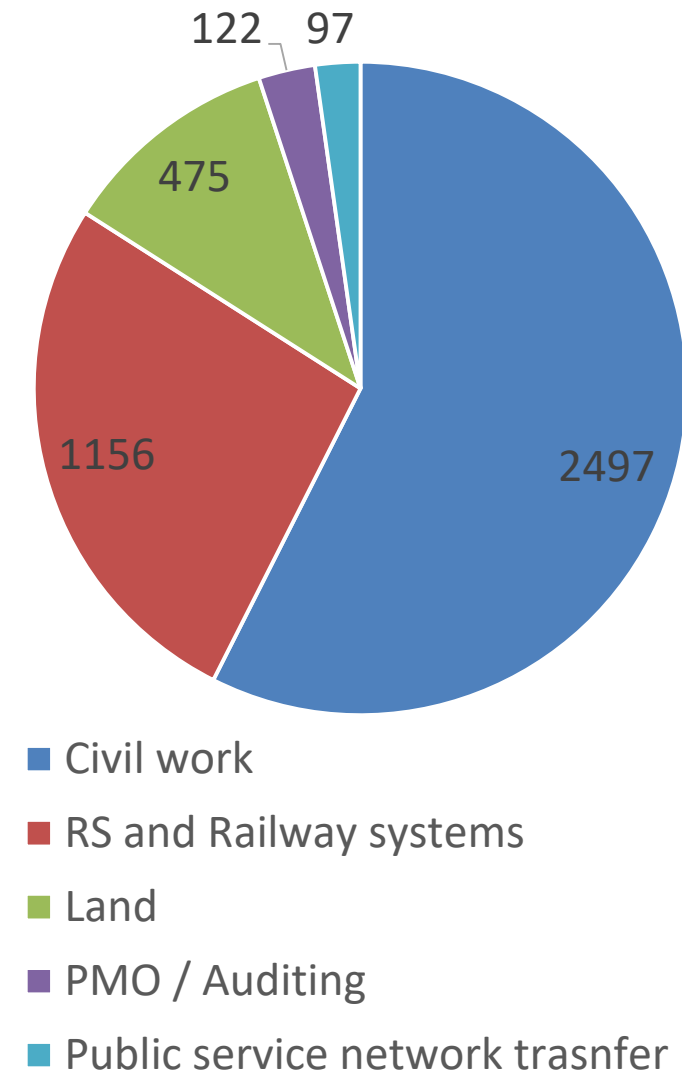
RECOMMENDED DEAL STRUCTURE



- Multiannual budgetary commitments from the Republic of Colombia also have a sovereign guarantee
- Given the project's CAPEX requirements in its initial years and the long term schedule of the future commitments, the Nation's budgetary commitments will be used to raise debt assumed by EMB

TOTAL CAPEX OF THE PROJECT

CAPEX summary	USD million
Direct investments executed by EMB	
Land	475
Public service network transfer	97
PMO/Auditing	122
Total direct investments EMB	694
Investments executed by the concessionaire	
Civil work	2.497
Rolling stock and railway systems	1.156
Total investments Concessionaire	3653
Total CAPEX	4.347



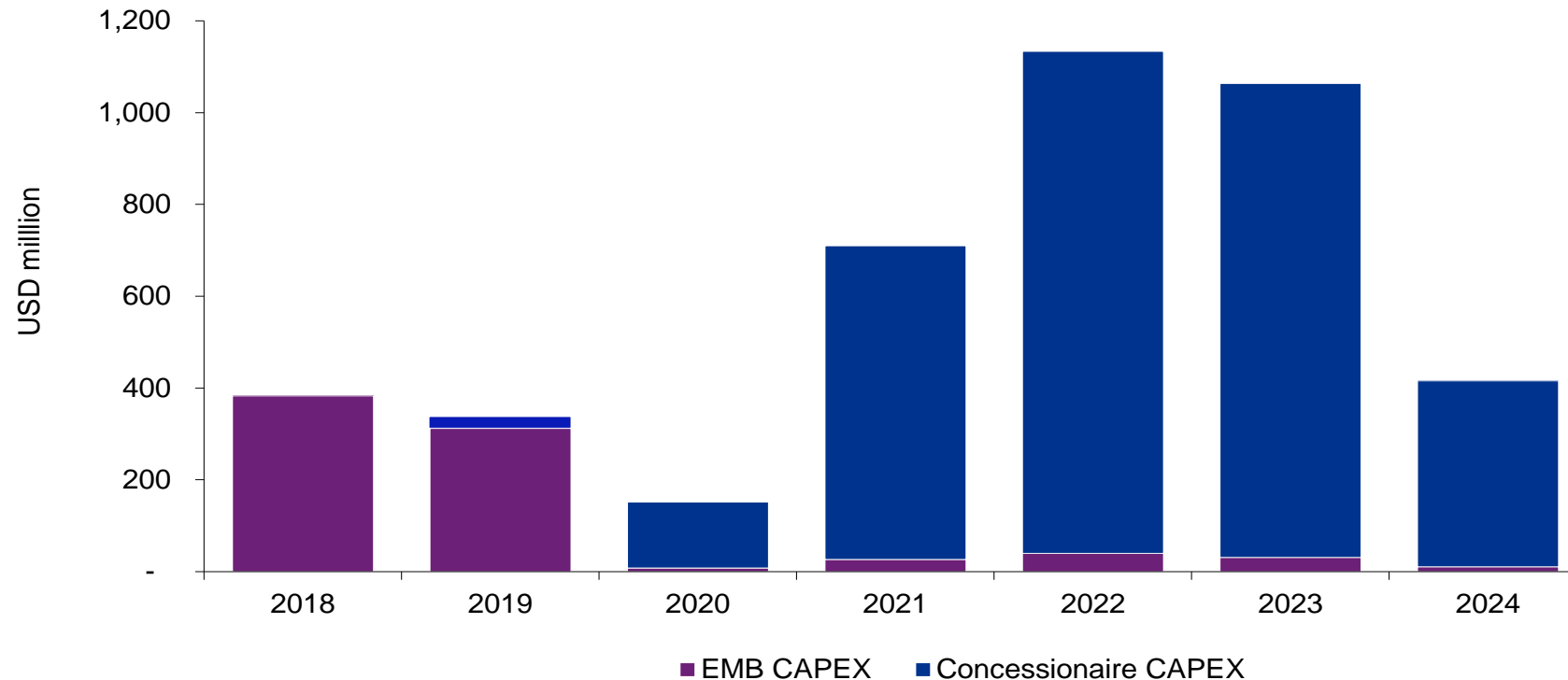
Note: estimated constant values of December 2017

PROJECT INVESTMENT FLOW

Estimated investment

- Initial investments will be made by EMB - land acquisition and public utilities networks relocation- in accordance with a predefined schedule done by EMB
- Remaining investments will be made by the Concessionaire

CAPEX - S Curve



Source: Systra/Ingetec
*Values in constant 2017 prices
**COP/USD rate: 3.000

FUNDING OF THE CAPEX

Summary of referenced items

Name	Ref.	Estimated value (USD billion)
Total CAPEX		4.3
CAPEX by EMB	1	(0.7)
CAPEX to be executed by the concessionaire		3.6
Cash payments by EMB	2	(2.5)
CAPEX to be covered by the concessionaire after cash payments		1.1
Concessionaire's debt	3	(0.8)
Concessionaire equity	4	0.3

1. CAPEX by EMB: includes land acquisition, public utilities networks relocation, PMO and works supervision.

2. Cash payments by EMB for USD 2.5 billion:

Represent an estimated 70% of the concessionaire's CAPEX:

- Multilaterals (IADB, BIRF, EIB): USD 1.7 billion
- Bonds, other multilateral loans, bilateral loans, local development bank loans: USD 0.8 billion

3. Concessionaire's debt: represents an estimated 22% of the concessionaire's CAPEX

4. Concessionaire's equity: represents an estimated 8% of the concessionaire's CAPEX

Note: approximate values; December 2017 constant values; COP/USD rate: 3.000

Each concessionaire should develop its own capital structure

EMB's role

- EMB receives resources from the Government of Colombia for USD 5.0 billion and USD 2.4 billion from the city of Bogotá D.C between 2018 and 2048
- EMB will perform the following:
 - Debt raising, backed by the Republic of Colombia's multiannual budgetary commitment:
 - Multilaterals (IADB, BIRF, EIB) for USD 1.7 billion
 - Bonds, other multilateral loans, bilateral loans, local development bank loans: USD 0.8 billion
 - Bogotá's multiannual budgetary commitment will be used for direct investments for USD 0.78 billion, payment of certificates (TPE, *Título de Pago por Ejecución*) and availability payments.
 - Concessionaire payments:
 - Construction phase: EMB will make cash payments and issue TPEs
 - During the O&M stage, EMB will compensate through availability payments

Concessionaire's role

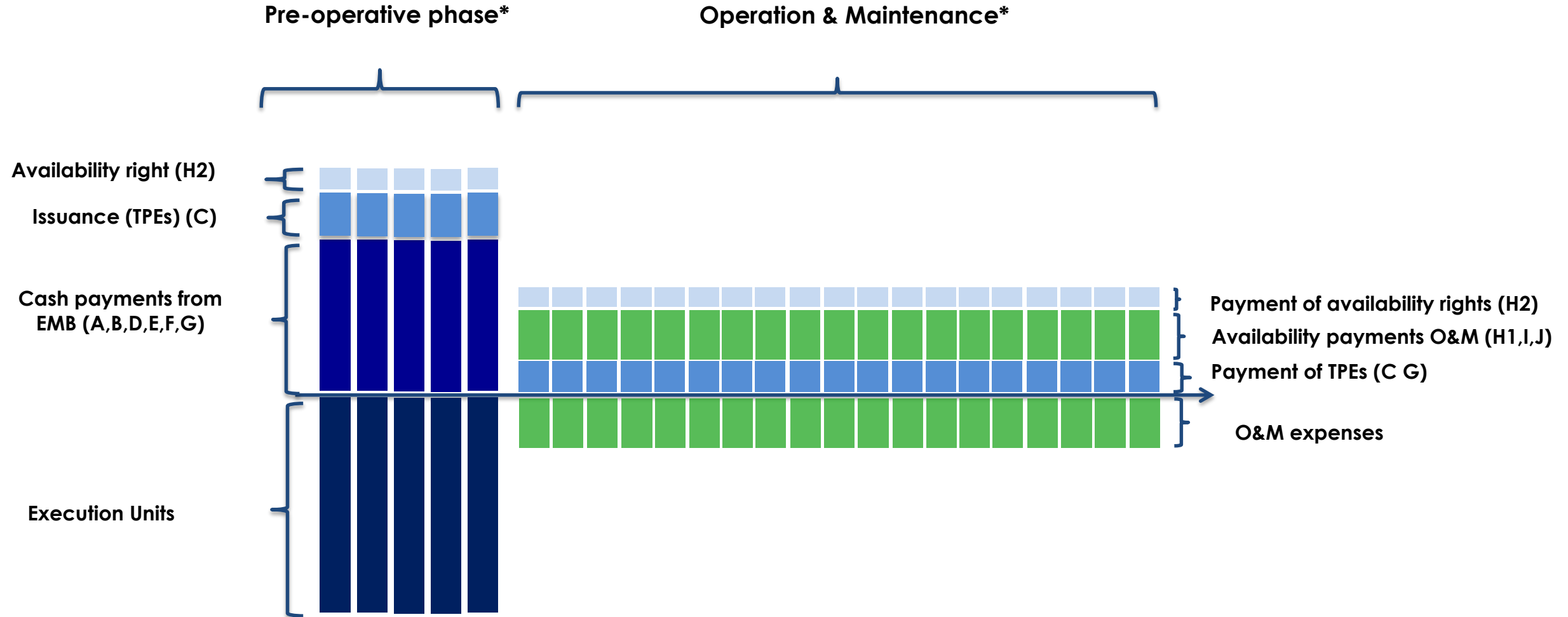
- The concessionaire will execute an approx. CAPEX of:
 - Civil works: USD 2.5 billion
 - Rolling stock and railway systems: USD 1.1 billion
- The concessionaire will need to raise around USD 1.1 billion in equity and debt.
- The concessionaire will perform the operation and maintenance activities, which represent an average annual OPEX of around USD 90 million
- The concessionaire will receive an annuity during O&M, subject to discounts for availability and performance (quality indicators)
- The concessionaire will not undertake demand risk nor will be responsible for the ticketing

CONTRACT CHARACTERISTICS

Payments to the concessionaire

- The design, construction, provision of rolling stock and installation of equipment will be divided into execution units (EU)
- Payments will be performed after the concessionaire proves that the EU is completed
- The following activities will be paid in cash
 - 1) An approval of an EU will generate a cash payment **(A) (USD 1,5 billion)**
 - 2) Some EU, such as rolling stock and electromechanic systems will be paid directly in US dollars /Euro to the concessionaire **(B) (760 million)**
 - 3) Traffic Management, Signaling and Detour Plan will be accordingly distributed in cash to the progress of the works during the pre-operative phase **(F) (USD 15 million)**
 - 4) For the following activities the payment will be made as fixed unit prices multiplied by the quantities of work effectively executed
 - Minor utilities networks relocation works, roads repair to be used during traffic management and building demolitions **(D) (USD 90 million)**
 - Buildings construction that will serve as access to the stations of the PLMB **(E) (USD 120 million)**
- An EU approval will also generate a payment with a certificate to be paid from 2025-2048 with an annuity TPE, independent from the operation performance **(C and G) (USD 780 million)**
- During operation, availability payments to the concessionaire will be made in cash (COP) subject to performance indicators **(H1, H2,I,J)**

CONTRACT CHARACTERISTICS



* This is an indicative structure, this does not mean that the total value of the CAPEX or OPEX is going to be the same during all years

Characteristics

- **Autonomous:** Without deductions or withholdings
- **Unconditional:** Semiannual payments, February 2025 - 2046 (44 payments)
- **Irrevocable:** Irrespective of early terminations, suspensions, illegality or administrative resolution or any other circumstance related to it

Payment of TPE is, therefore, not conditioned to completion of construction or performance of the concessionaire.

MAIN PROJECT RISK ALLOCATION

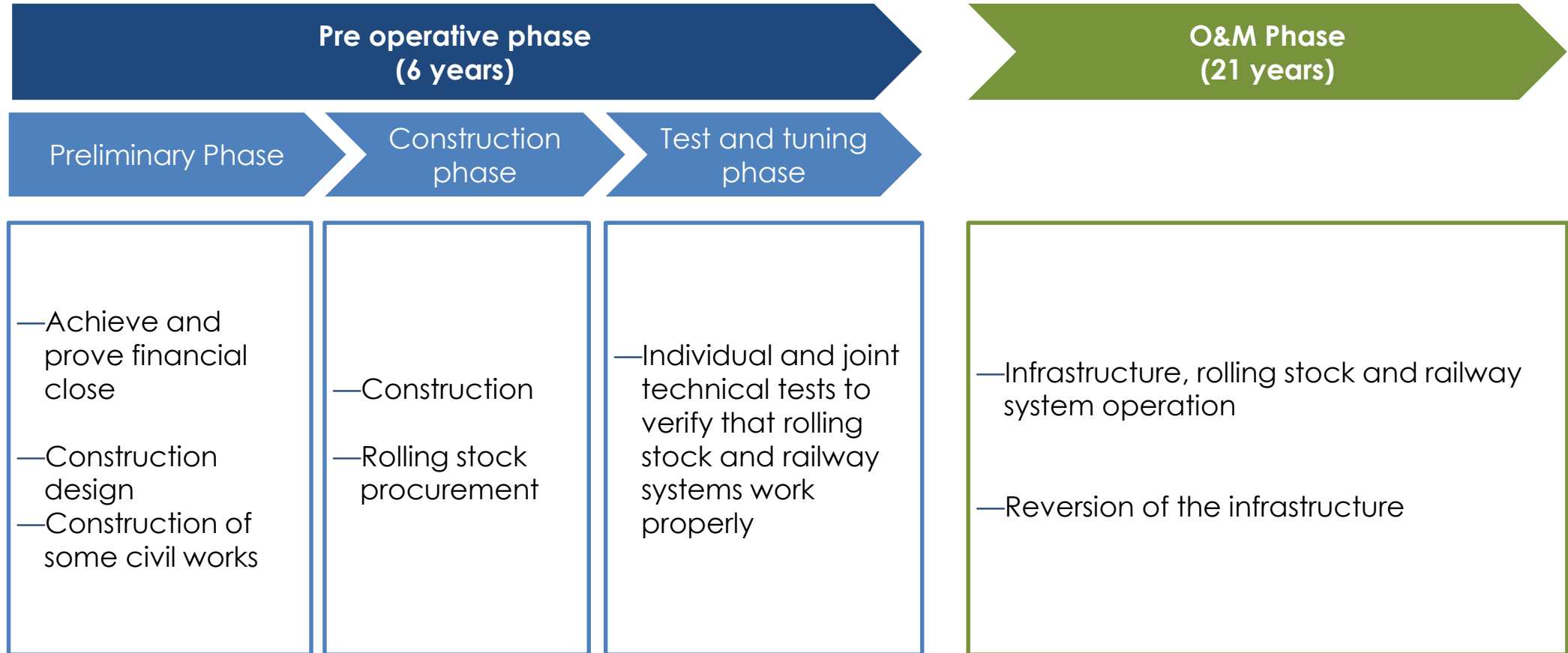
- From a total of 24 risk, the main project risks are:

Risk	EMB	Concessionaire
Financing risks	X	X
Design risk		X
General construction risk		X
Construction risk related with access buildings**	X	
Costs associated to construction stand by*	X	X
Commercial risk	X	
Variations in user's fares	X	
Land availability and acquisition risk	X	
Construction risk associated to the intervention and maintenance of the roads required for the detour plan **	X	
Construction risk related to the relocation of public utility networks**	X	

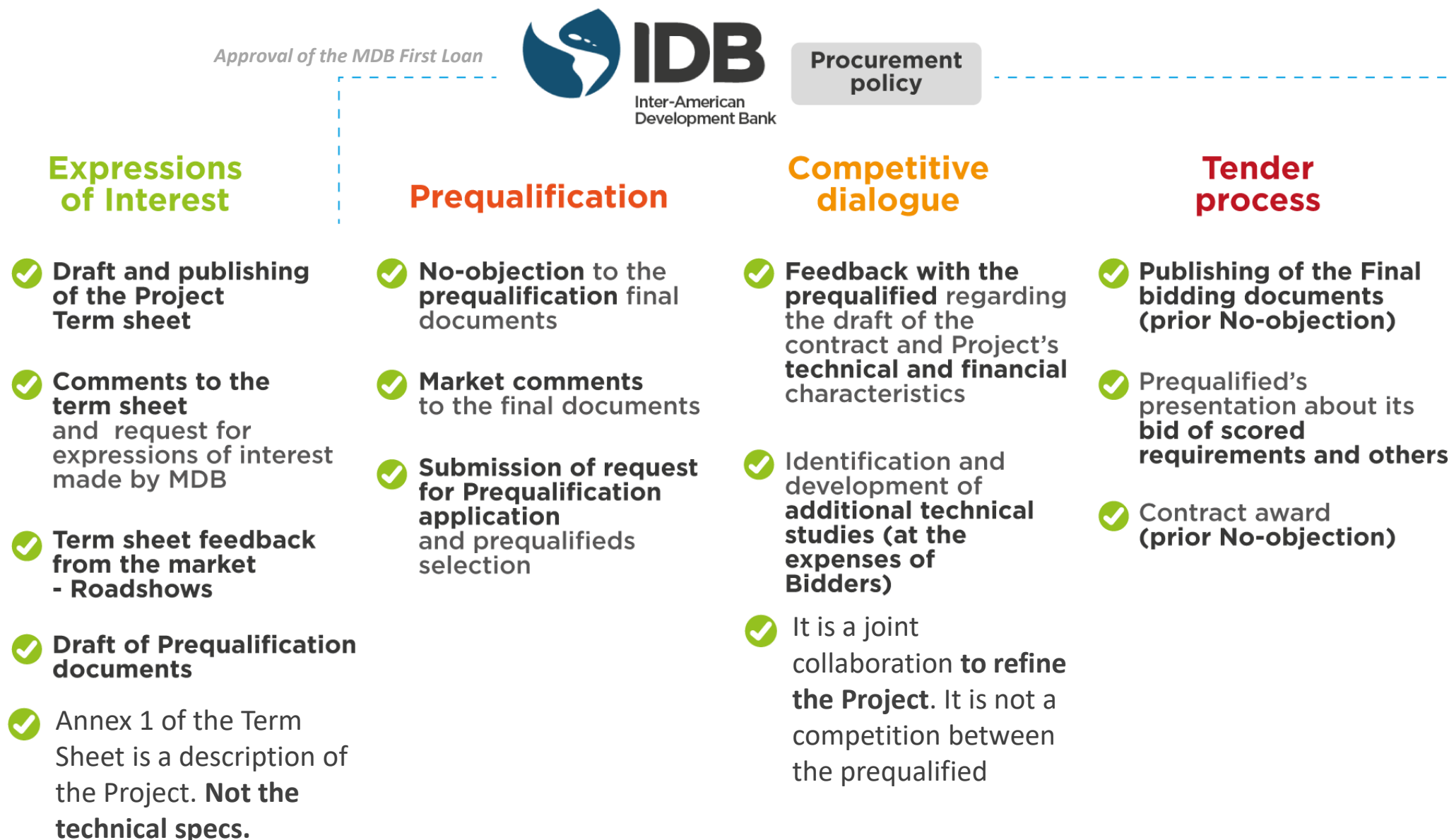
*Stand by event due to force majeure. Does not include lost profit.

**In particular, variations on quantities of each predefined item. Predefined prices of each item are in charge of the concessionaire

CONTRACT PHASES



Tender process activities



BIDDING PROCESS

Schedule

←----- 2018 -----→----- 2019 -----→

Actividad	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Term Sheet																
Request for Interest (RFI)																
RFQ process																
Prequalification selection process																
Competitive dialog																
Request and preparation of prequalified offers																
Evaluation of received offers																
Award and subscription of the contract																
Multilateral Banks operation																

Publication notice of prequalification call

Authorization of the guarantee of the Nation by the CICP

Authorization of the Board of Multilateral Banking to sign the credit agreement

Subscription of credit agreements and guarantees

BIDDING PROCESS – FINANCIAL AND TECHNICAL REQUIREMENTS FOR THE RFQ

Only “Leaders” can certify experience for the RFQ Process, except for the experience related to rolling stock, operation and signaling systems

A Leader/s is a member of the bidder that has a minimum participation of 25%. There could be more than one Leader

Financial requirements

Equity Indicators

- Simple sum of the equity value from leaders (USD 1,750 million)
- Minimum equity value for at least one leader (USD 834 million)

Financing Indicators

- Simple sum of financing values for maximum 4 PPP/concession projects (Project Finance modality) (USD 1,467 million)
- Minimum amount raised for one PPP/Concession project (Project Finance modality) (USD 1,095 million)

Technical requirements*

Experience in:

- Integration of components of metro systems
- Detailed engineering
- Metro-type viaduct construction
- Manufacturing and commissioning Rolling Stock
- Signaling system and automatic train control (CBTC - Communication Based Train Control)
- Operation experience

*Technical experience must be in two projects executed in two different cities after June 1 2003 , For detail engineering requirement, the projects can be in the same city



Thank you!

Clemente del Valle