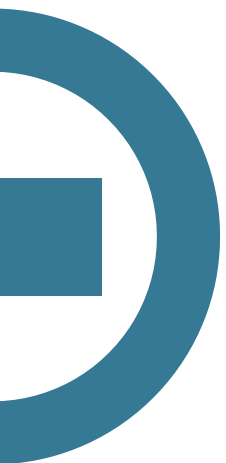


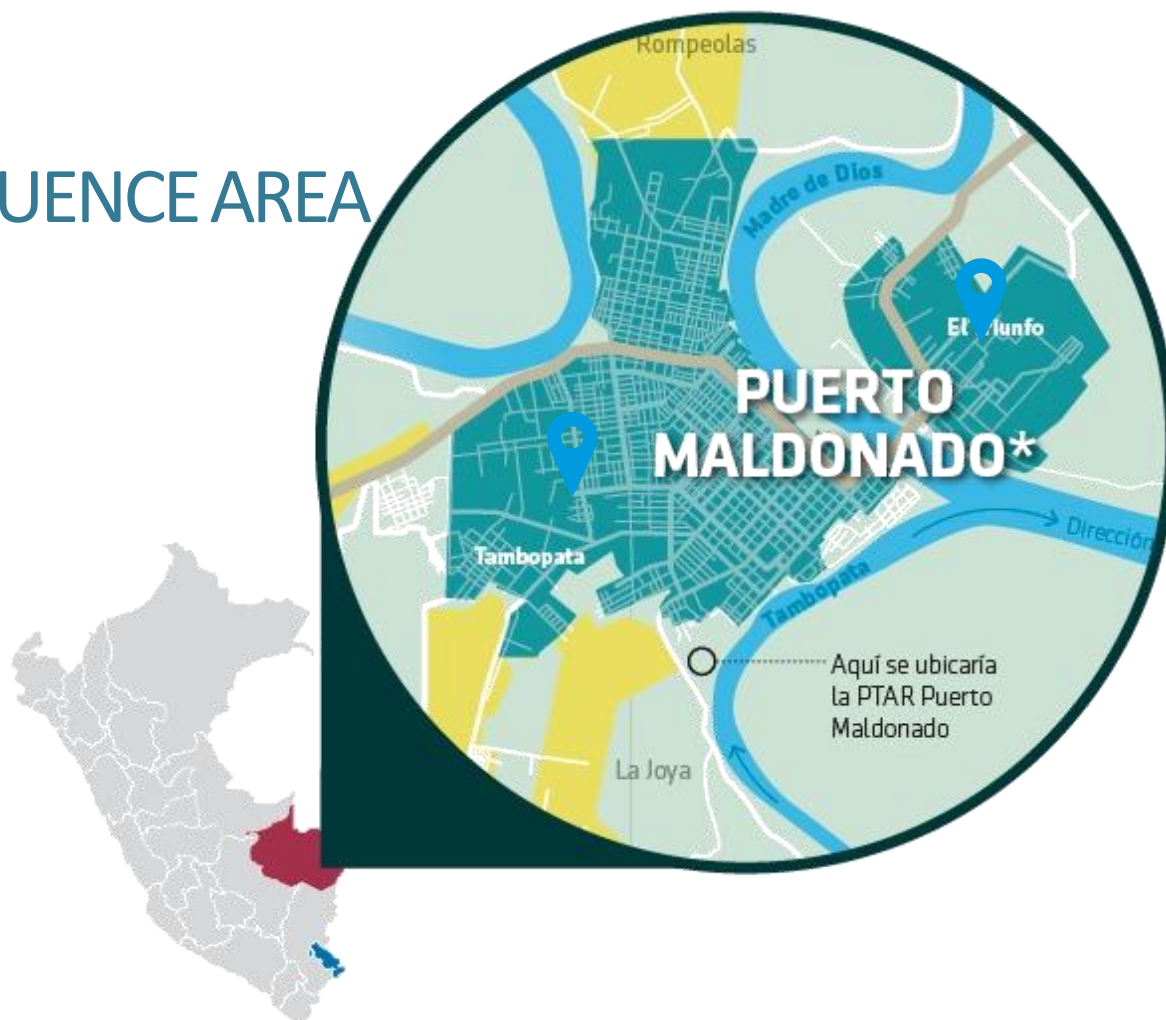
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IMPROVEMENT OF THE SEWAGE AND WASTEWATER TREATMENT SYSTEM OF PUERTO MALDONADO CITY

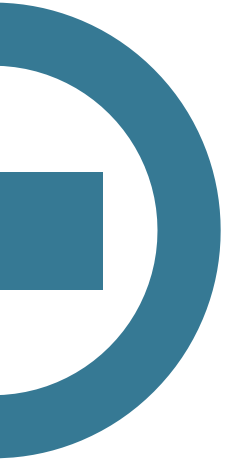




INFLUENCE AREA

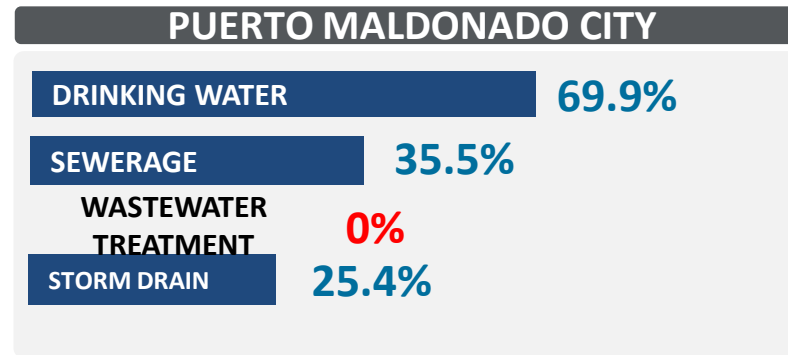


- **City of Puerto Maldonado**, province of Tambopata, department of Madre de Dios.
 - ✓ Tambopata (District of Tambopata)
 - ✓ El Triunfo (District of Las Piedras)
- **Estimated population**
 - ✓ 103,296 inhab. (2019)
 - ✓ 197,170 inhab. (2043) – Horizon
- **Weather conditions**
 - ✓ Average altitude: 180 meters above sea level
 - ✓ Rainfall: 40 – 294 mm/day
 - ✓ Water average temperature: 28-29°C

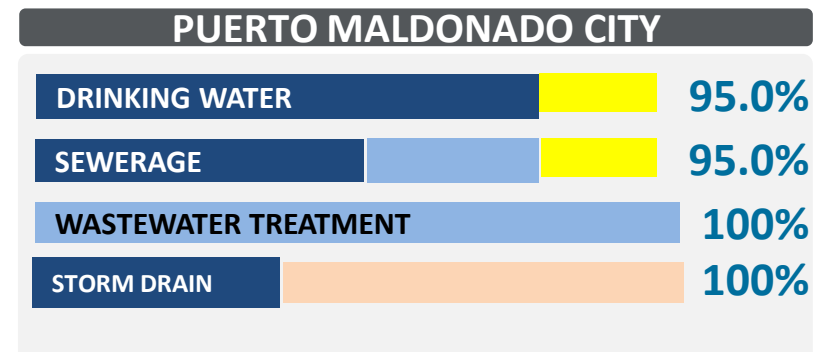


CURRENT DIAGNOSIS OF SERVICES

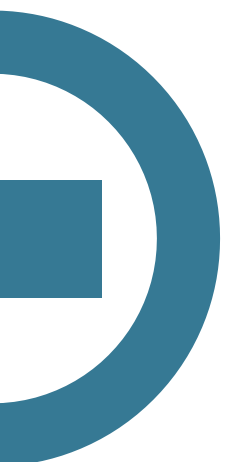
TOTAL COVERAGE - 2019



TOTAL COVERAGE - 2024/2026



OBJECTIVES GAPS CLOSURE



INVESTMENT STRATEGY (2021-2026)

PPP

- ✓ Level sewer coverage
- ✓ Wastewater treatment

(2021-2024)
PEN 180 M*



Public work (BIG CITIES program)

(2023-2026)
PEN 173 M*

- ✓ Drinking Water and Sewerage in Expansion Zones

Public work (Comprehensive Storm Drainage Program)

(2023-2026)
PEN 150 M*

- ✓ Storm drainage

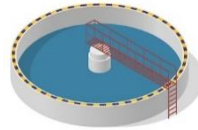
* Reference amounts without VAT



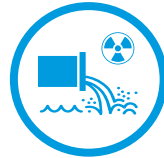
**OBJECTIVES OF
THE PPP
PROJECT –
WASTEWATER
TREATMENT
PLANT (PTAR)
PUERTO
MALDONADO**



Level the Sanitary Sewer Coverage with Drinking Water



Provide an efficient and sustainable service for the treatment and final disposal of wastewater



Contribute to the decontamination of the Tambopata and Madre de Dios rivers



Reduce the incidence of EDAS and parasites to preserve health and improve the quality of life of the population

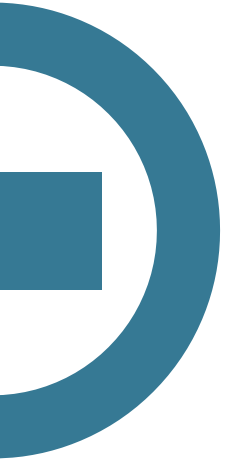
SCOPES OF THE PPP PROJECTS

COMPONENTS	SCOPE (estimated physical goals)
COMPONENT 1: DFBT (O&M: In charge of PSS*)	<ul style="list-style-type: none"> ✓ Sewer connections (12,170 units) ✓ Secondary collectors (156.4 km)
COMPONENT 2: DFBOT	<ul style="list-style-type: none"> ✓ Primary collectors (25.3 km) ✓ Pumping stations (5 units) ✓ Drive lines (3.7 km) ✓ Wastewater treatment plant (Qp:400 L/s)
Complementary service	<ul style="list-style-type: none"> ✓ Technical support to the PSS* for the monitoring and control of discharges (VMA**) from non-domestic users to the sanitary sewer system.

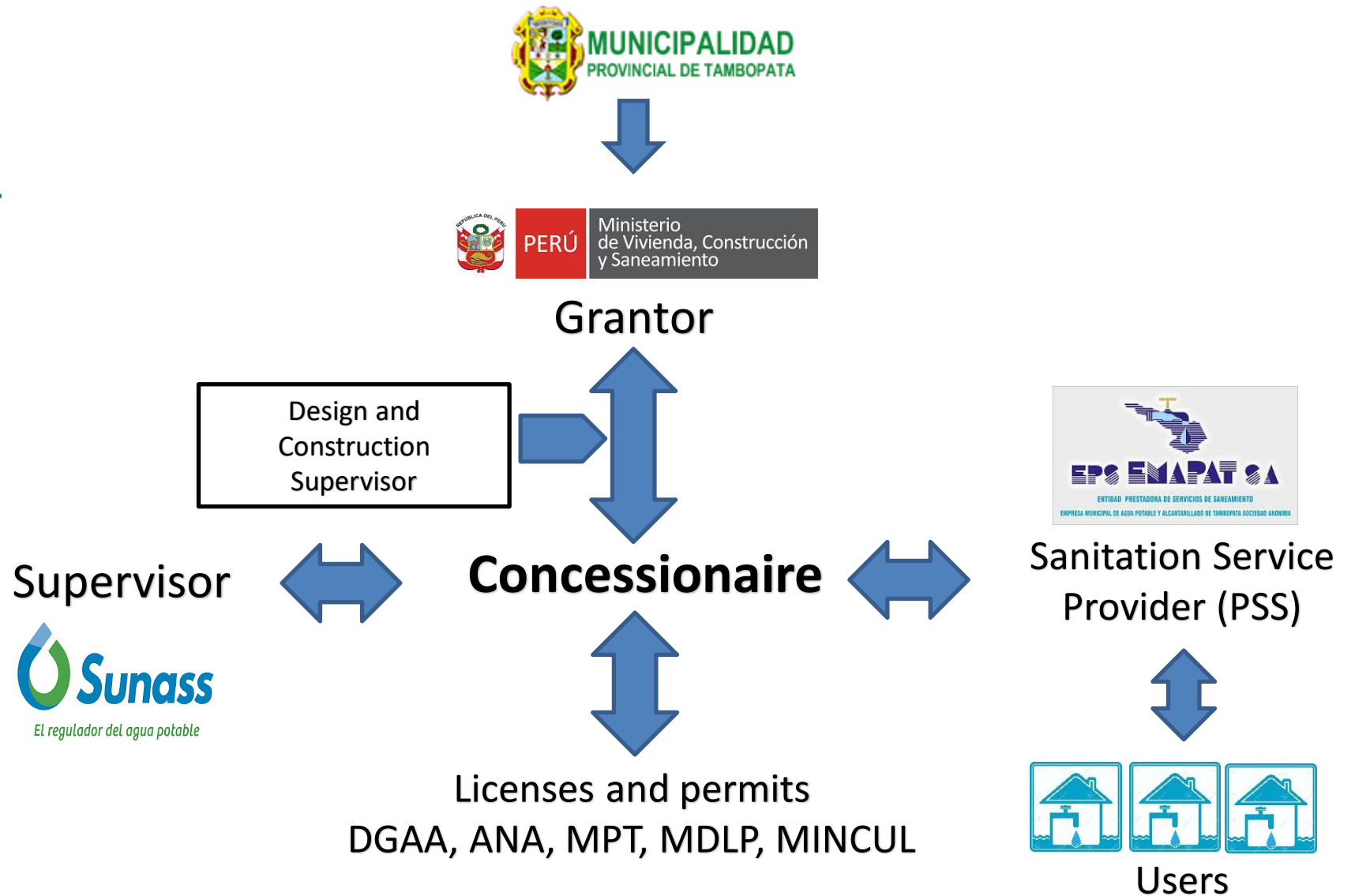


* Sanitation Service Provider. For this project, the PSS is EMAPAT.

** Maximum Admissible Values of the parameters that constitute wastewater.



COMPETENT ENTITIES





KEY ASPECTS OF THE PPP PROJECT

- 1. CONTRACTUAL MODALITY: CONCESSION**
- 2. CONCESSION TERM: 22.5 YEARS**
- 3. REFERENTIAL AMOUNT OF INVESTMENT IN WORKS: S/ 180 MILLION (without VAT).**
- 4. REMUNERATION: AVAILABILITY PAYMENT MECHANISM (PPD) + PERFORMANCE DEDUCTIONS**
- 5. CO-FINANCING: 100% TO THE RETRIBUTION OF THE INVESTMENT (MVCS)**
- 6. MINIMUM NET EQUITY OF THE CONCESSIONAIRE: S/ 90 MILLION**
- 7. MINIMUM SHARE CAPITAL REQUIRED FROM THE CONCESSIONAIRE: S/ 57,471,826.00**
- 8. GUARANTEE OF COMPLETE FULFILLMENT OF THE CONTRACT:**
 - **DESIGN AND CONSTRUCTION PERIOD + 2 YEARS: S/ 18,045,148.00**
 - **OPERATION AND MAINTENANCE PERIOD + 2 YEARS: S/ 9,022,574.00**
- 9. COMPETITION FACTOR: LOWER AMOUNT OF MAXIMUM ANNUAL PPD OFFERED**

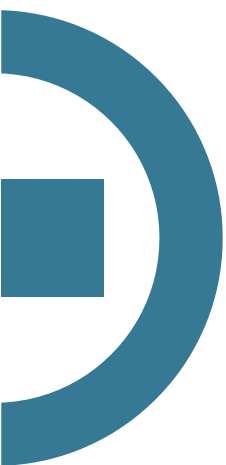


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SERVICE LEVELS – PERFORMANCE DEDUCTIONS

- On the quality of the treated wastewater
- Of the quality of the surface water of the receiving body
- On the quality of the mud
- Organoleptic quality (odors)



SERVICE LEVELS

1 **CATEGORY** Treated wastewater

BASE LMP of effluents PTAR (MVCS)

Parameters	Unit	Value
DBO5	mg/l	≤ 100
DQO	mg/l	≤ 200
SST	mg/l	≤ 150
CTermo	NMP/100 ml	≤ 10000
A&G	mg/l	≤ 20
pH	pH	6.5-8.5
Tº	°C	≤ 35

2 **CATEGORY** Surface water

BASE ECA WATER – Category 4 (MINAM)

Parameters	Unit	Value
DBO5	mg/l	≤ 10
DQO	mg/l	N.A.
SST	mg/l	≤ 400
CTermo	NMP/100 ml	≤ 2 000
A&G	mg/l	≤ 5
pH	pH	6.5-9.0
Tº	°C	≤ Δ 3

3 **CATEGORY** Sludge

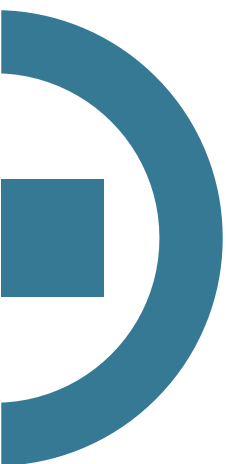
BASE LMP of sludges (MVCS)

Parameters	Unit	Value
Humidity (1- kg ST/Kg sludge)	%	≤ 80
Stability (Kg SV/ Kg ST)	%	≤ 60

4 **CATEGORY** Organoleptic (Odors)

BASE LMP in H₂S (aqueous)

Parameter	Unit	Value
H ₂ S in wastewater	mg/l	≤ 2



PERFORMANCE DEDUCTIONS

PARAMETERS		
i	DESCRIPTION	Wi
QUALITY OF TREATED WASTEWATER		
1	Biochemical Oxygen Demand (DBO ₅)	0.1%/ (1 mg/l)
2	Chemical Oxygen Demand (DQO)	0.1%/ (1 mg/l)
3	Total Suspended Solids (SST)	0.1%/ (1 mg/l)
4	Thermotolerant Coliforms (Ct)	0.4%/ (1 Log ¹⁰)
5	Oils and fats (A&G)	0.1%/ (1 mg/l)
SURFACE WATER QUALITY OF THE RECEIVING BODY		
6	Biochemical Oxygen Demand (DBO ₅) *	0.1%/ (1 mg/l)
7	Total Suspended Solids (SST)	0.1%/ (1 mg/l)
8	Thermotolerant Coliforms (Ct)	0.4%/ (1 Log ¹⁰)
10	Oils and fats (A&G)	0.1%/ (1 mg/l)
OF SLUDGE QUALITY		
11	Humidity	0.5%/ (1 percentage unit)
12	Stability	1%/ (1 percentage unit)
ORGANOLEPTIC QUALITY		
13	H ₂ S(aq)	0.1%/ (1 mg/l)

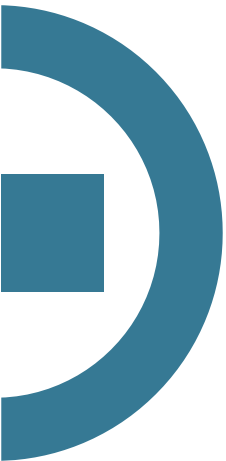


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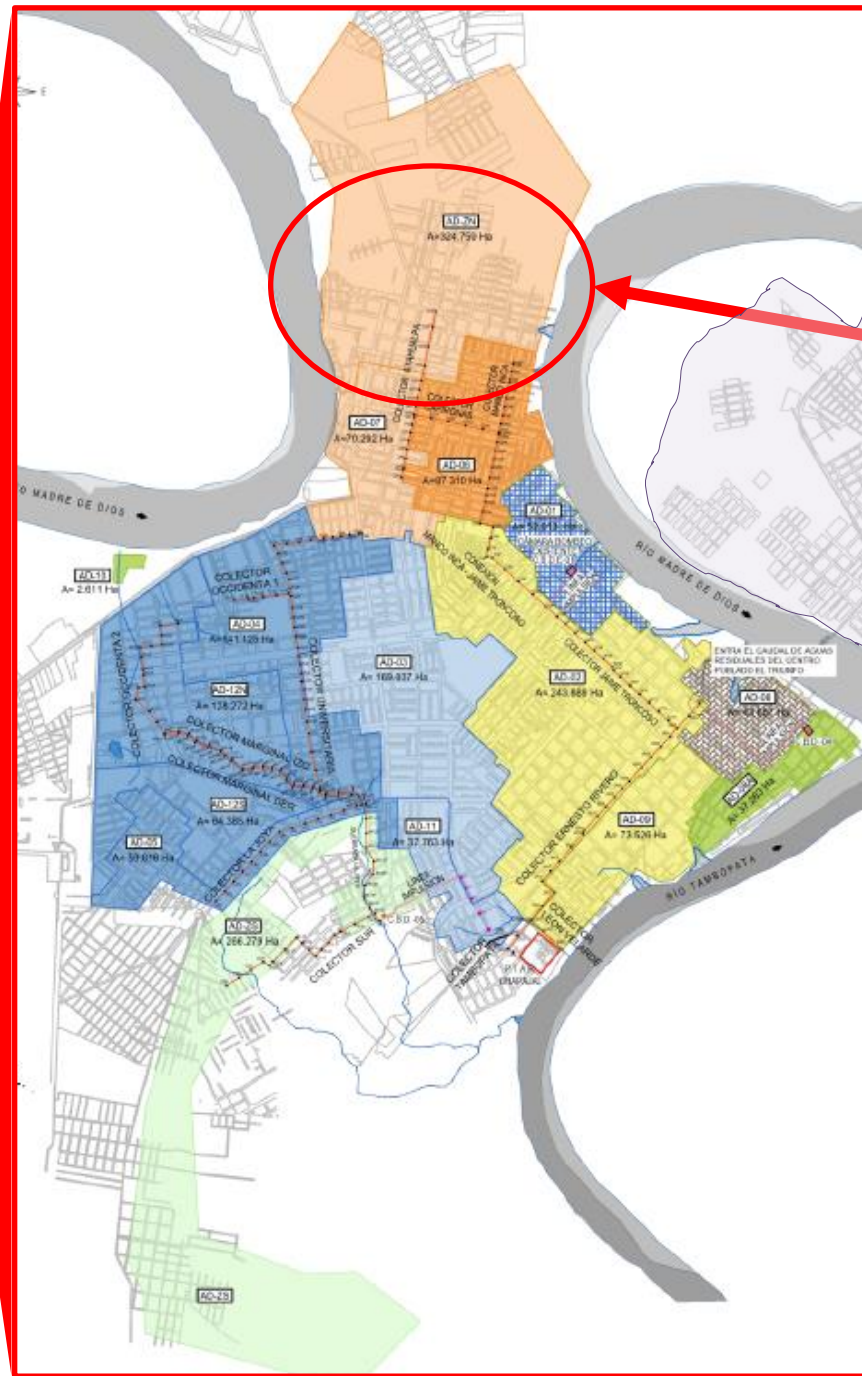
TECHNICAL FILES AND MAXIMUM DEADLINES FOR DESIGN AND WORKS

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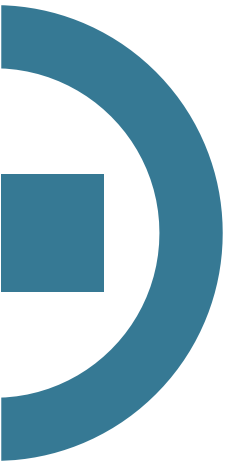


TECHNICAL FILES

Technical File 2: All other Works of Component 1 and 2 aimed at fulfilling the scope of the Project.



Technical File 1: Component 1 and 2 works aimed at increasing sewerage coverage in the Northern Area of Lima.



DESIGN AND WORKS DEADLINES

SCHEDULE	2021				2022				2023				2024				n...				2043				2044			
	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4
TECHNICAL FILE 1				D	A	O+F+RC1				FC2																		
TECHNICAL FILE 2		Ad	FC	D				A+CF		O+F+RC1				PMC2				O&MC2+VMA										

- Ad* : Project Award
- FC* : Contractual Closing Date
- D* : Design (Preparation of Technical File)
ET1: Maximum 5 months from FC.
ET2: Maximum 12 months from FC.
- A* : Approval of Technical File and Environmental Management Instrument.
ET1: Maximum 8 months from FC.
ET2: Maximum 18 months from FC (includes CF).
- CF* : Financial closing.
- O+F+RC1* : Works + Functionality of the Works + Reversal of functional milestones C1.
- F* : Functionality of the Works
- PMC2* : Commissioning of Component 2.
- O&MC2+VMA* : Operation and Maintenance of Component 2 + VMA Technical Support



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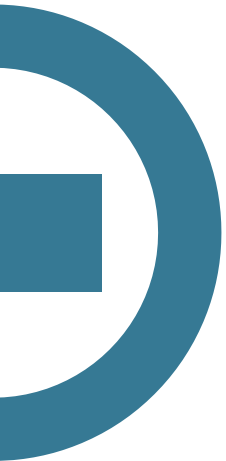
PAYMENT MECHANISM AVAILABILITY PAYMENT (PPD)

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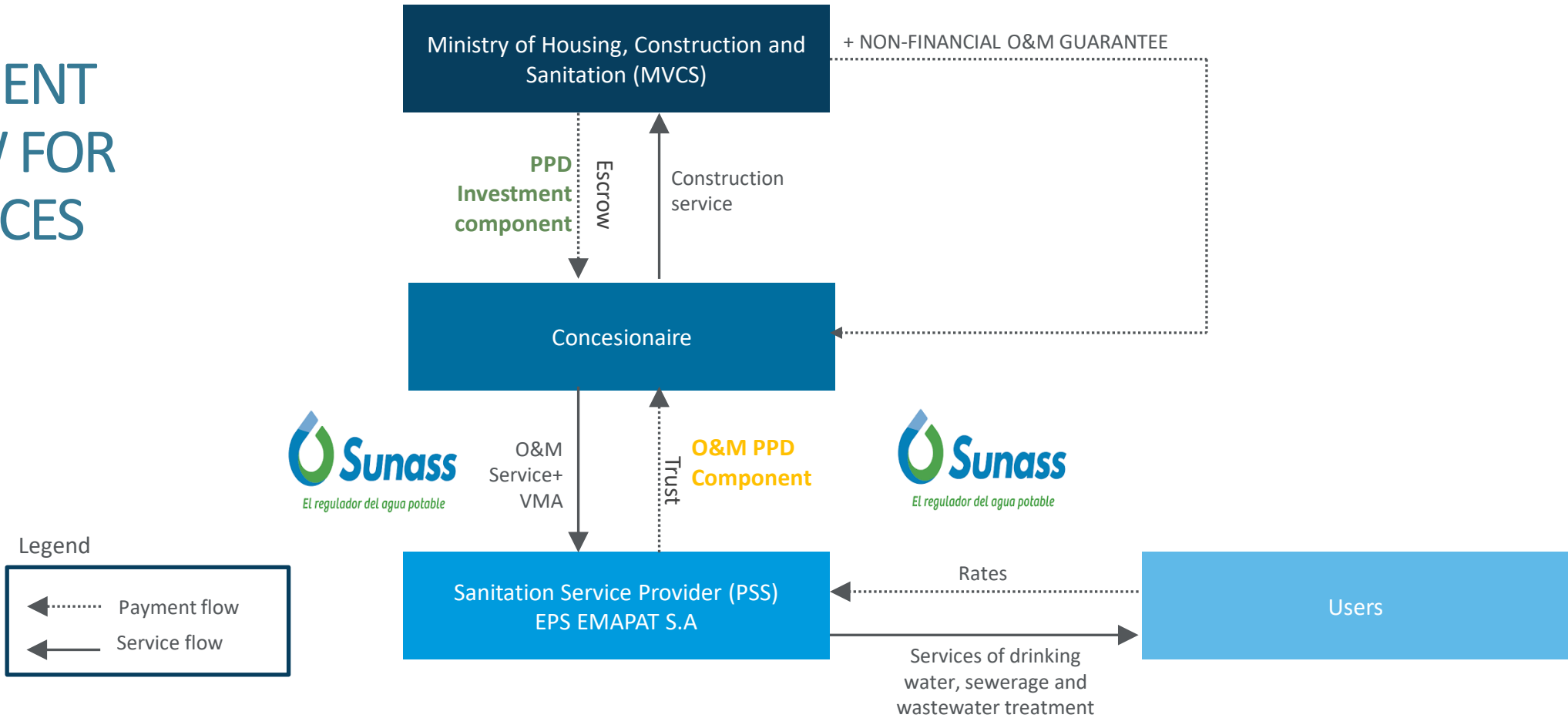


AVAILABILITY PAYMENT (PPD)

- The Concessionaire maintains the risks of **Design, Financing, Construction, Operation and Maintenance**.
- The State retains the risks of **Demand, Land and Commercial Income** since the PSS continues to present the sanitation service directly to the end users.
- Payment to the Concessionaire is triggered from the **service availability**, mitigating the risk of **Early Termination**.
- Generates incentives for the **beginning and timely completion of the Works** and the **Operation Startup**.
- Payment to the Concessionaire is subject to **deductions for performance**, discouraging non-compliance with **service levels**.
- Any deductions that exceed the maximum level established are deferred, **not affecting the lenders**.
- The service is **pre-paid monthly** and paid **quarterly**.
- **SUNASS supervises** the provision of the service and agrees to the monthly pre-settlement. It also approves the PSS **Rate**.

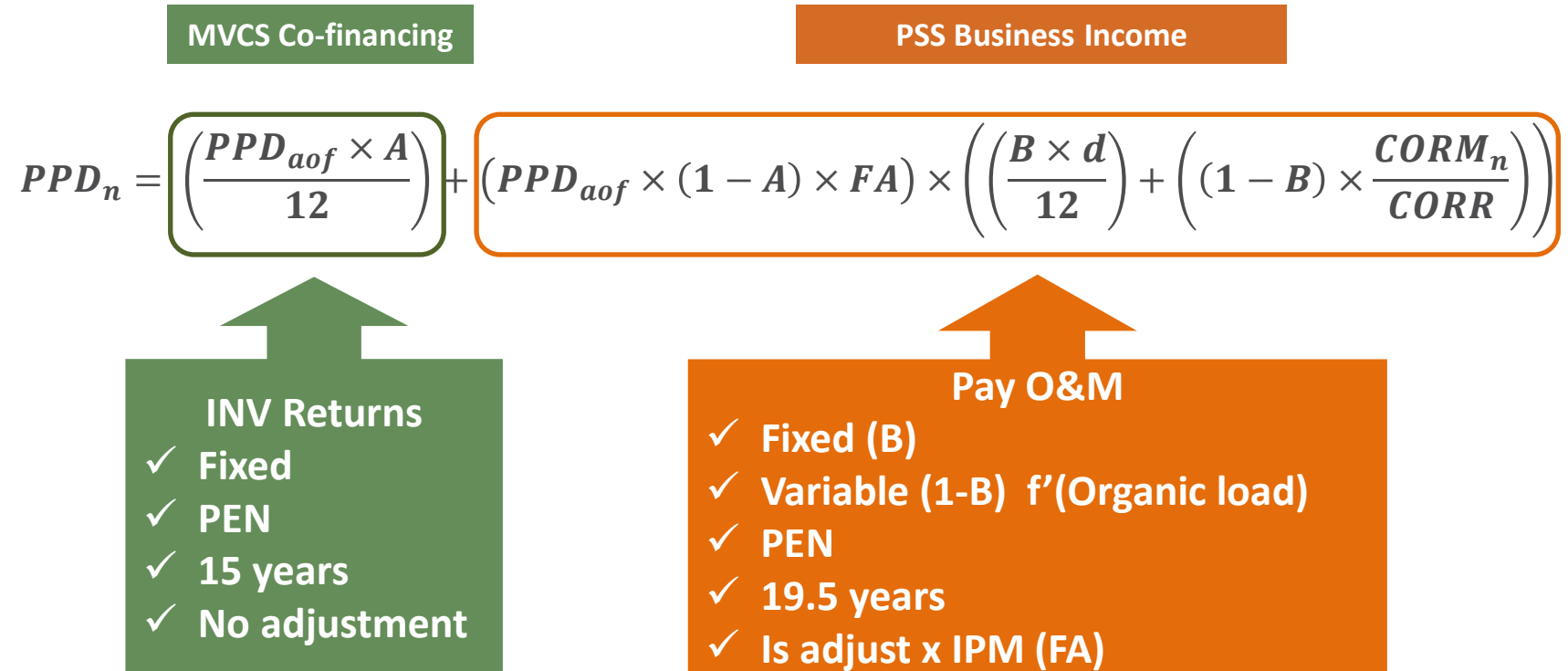


PAYMENT FLOW FOR SERVICES



$$PPD_T = \sum_{n=1}^3 PPD_n - DINS_T$$

FORMULA OF SETTLEMENT OF THE PPD



Contractual factors (Not bidding):

- **Factor A** Proportion of PPD that remunerates the investment component (0.8145).
- **Factor B** Proportion of the PPD of the O&M Component that remunerates costs (0.6330).
- **CORR** Reference Removed Organic Load equivalent to 4'099,680 kg DBO₅ per year (81.5% removal)



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KEY ASPECTS OF THE INITIAL DRAFT OF THE CONTRACT (VIC)

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KEY ASPECTS OF THE VIC

1. **CONCESSION:**
 - ✓ 22.5 years (3 years design and work + 19.5 years of operation)
2. **EXTENSION OF THE CONCESSION TERM:**
 - ✓ 2 Before the due date.
3. **STRATEGIC PARTNER / MINIMUM PARTICIPATION** The Operator with 35% minimum participation and favorable vote.
4. **SUSPENSION OF THE TERM:**
 - ✓ Only if it affects the critical path.
 - ✓ Force majeure or unforeseeable circumstances
 - ✓ Agreement of Parties for causes not attributable to the Concessionaire.
 - ✓ Greater than 180 calendar days, authorizes termination.
5. **BREAKDOWN OF ECONOMIC FINANCIAL BALANCE:**
 - ✓ By Applicable Laws and Provisions
 - ✓ Balance variation > 10%.



**KEY
ASPECTS
OF THE VIC**

6. INSURANCE REGIME:

- ✓ Workers staff
- ✓ All risks for construction and assembly.
- ✓ All risk of completed civil works or all risk property insurance.
- ✓ General, contractual, extra-contractual and employer civil responsibility.

7. FINANCIAL CLOSURE AND GUARANTEES OF PERMITTED CREDITORS

- ✓ In charge of PROINVERSION
- ✓ Mortgage on the right of the Concession
- ✓ Trust or transfer of income, collections or flows.
- ✓ 100% security interest in shares or participations of the capital stock
- ✓ Exercise of “step in rights”.



ASPECTOS
CLAVE DE
LA VIC

8. SETTLEMENT OF DISPUTES

- ✓ Direct deal
- ✓ Technical Controversies: Conscience Arbitration (National - CARC PUCP):
- ✓ Non-technical disputes:
 - Amount > USD 30 million: International arbitration (CCI)
 - Amount ≤ USD 30 million: National arbitration (CARC PUCP)

9. REASONS FOR TERMINATION

- ✓ By term expiration
- ✓ By mutual agreement
- ✓ For breach of the Concessionaire
- ✓ For breach of the Grantor
- ✓ By unilateral decision of the grantor
- ✓ Due to force majeure or unforeseeable circumstances
- ✓ By application of the anti-corruption clause

10. LIQUIDATION IN CASE OF TERMINATION:

- ✓ Book Value of Assets



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TENDER RULES

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RIGHT OF
PARTICIPATION

1. Right of participation:
 - ✓ USD 1,000
2. Enables bidder to:
 - ✓ ACCESS TO THE VIRTUAL DATA ROOM(VDR): TECHNICAL DOCUMENTATION
 - ✓ MAKE CONSULTATIONS TO THE BASES.
 - ✓ MAKE SUGGESTIONS TO THE CONTRACT.
 - ✓ PARTICIPATE IN THE TENDER AND SUBMIT ENVELOPES No. 1, 2 AND 3.



ENVELOPE Nro. 1 (REQUIREMENTS):

1. GENERAL REQUIREMENTS:

- ✓ Experience in PPP under the DFBOT scheme, with participation \geq 25%.
- ✓ Participation in the Bidder not less than 25%.

2. TECHNICAL REQUIREMENTS:

- ✓ Construction: At least 2 PTAR with Average Flow \geq 400 L/s (Operating).
- ✓ Operating: At least 2 PTAR with Average Flow \geq 400 L/s. (2 consecutive years)
- ✓ At least 25% participation in the experience accredited directly by the Bidder or member of the Consortium or through related parties or third party constructors.

3. FINANCIAL REQUIREMENTS

- ✓ Minimum Net Worth of PEN 90 Million.
- ✓ It is directly accredited, members of the Consortium or related companies.

4. LEGAL REQUIREMENTS

- ✓ Current statute.
- ✓ Power of attorney.
- ✓ Affidavit of % of participation of Bidder members.
- ✓ Affidavit of not being disabled.
- ✓ Affidavit of waiver of diplomatic privileges and immunity.
- ✓ Affidavit of participation in just 1 bidder.
- ✓ Among others.



**PRE-
QUALIFICATION
REQUIREMENTS**



QUALIFICATION REQUIREMENTS

ENVELOPE Nro. 2 (TECHNICAL PROPOSAL):

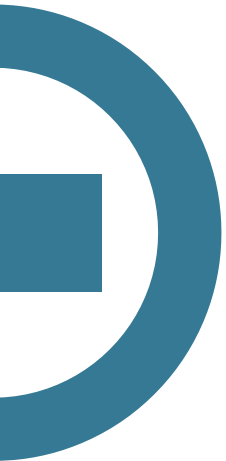
- ✓ Affidavit of validity of information
- ✓ Affidavit of acceptance of Terms and Contract
- ✓ Guarantee of validity and seriousness of the offer (**USD 1,500,000**)

✓ **Affidavit that:**

- Describes the proposed technical solution
- Declares that the Minimum Requirements will be met
- Declares that the Service Levels will be met
- Declare that it will not require larger areas than those proposed by the Grantor or by the Bidder in the proposed technical solution and acquired at its own expense, cost and risk

ENVELOPE Nro. 3 (ECONOMIC PROPOSAL):

- ✓ Minimum 2 valid Economic Offers.
- ✓ Amount of Maximum PPD Offered.
- ✓ Valid for 120 calendar days from its presentation.



COMPETENCE FACTOR

LESS ECONOMIC OFFER (EO)

Where:

$$EO = \text{PPD Max Of}$$

- **EO**: It is the Economic Offer of the Bidder
- **PPD Max Of**: PAYMENT FOR MAXIMUM ANNUAL AVAILABILITY OFFERED (PEN)

REFERENTIAL VALUE (PPD Max Of):
(It will be timely communicated by means of a circular)



MECHANISM OF MITIGATION OF RECKLESS OFFERS

1. ONLY 2 BIDDERS QUALIFY:
 - ✓ Reckless: if the EO has a variation greater than or equal to 15% of the Reference Value.
2. MORE THAN 2 BIDDERS QUALIFY :
 - ✓ Reckless: if the EO has a variation greater than or equal to 15% of the average of the EO.
3. EFFECT OF A RECKLESS BID:
 - ✓ The successful Bidder must submit a Guarantee of Complete Compliance with the Design and Construction Period of the “double” of what is established in clause 9.3 of the Concession Contract

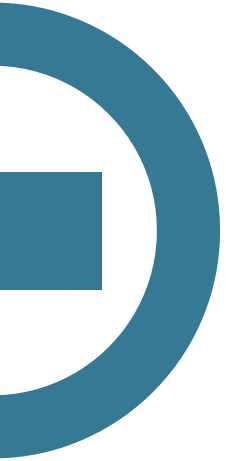


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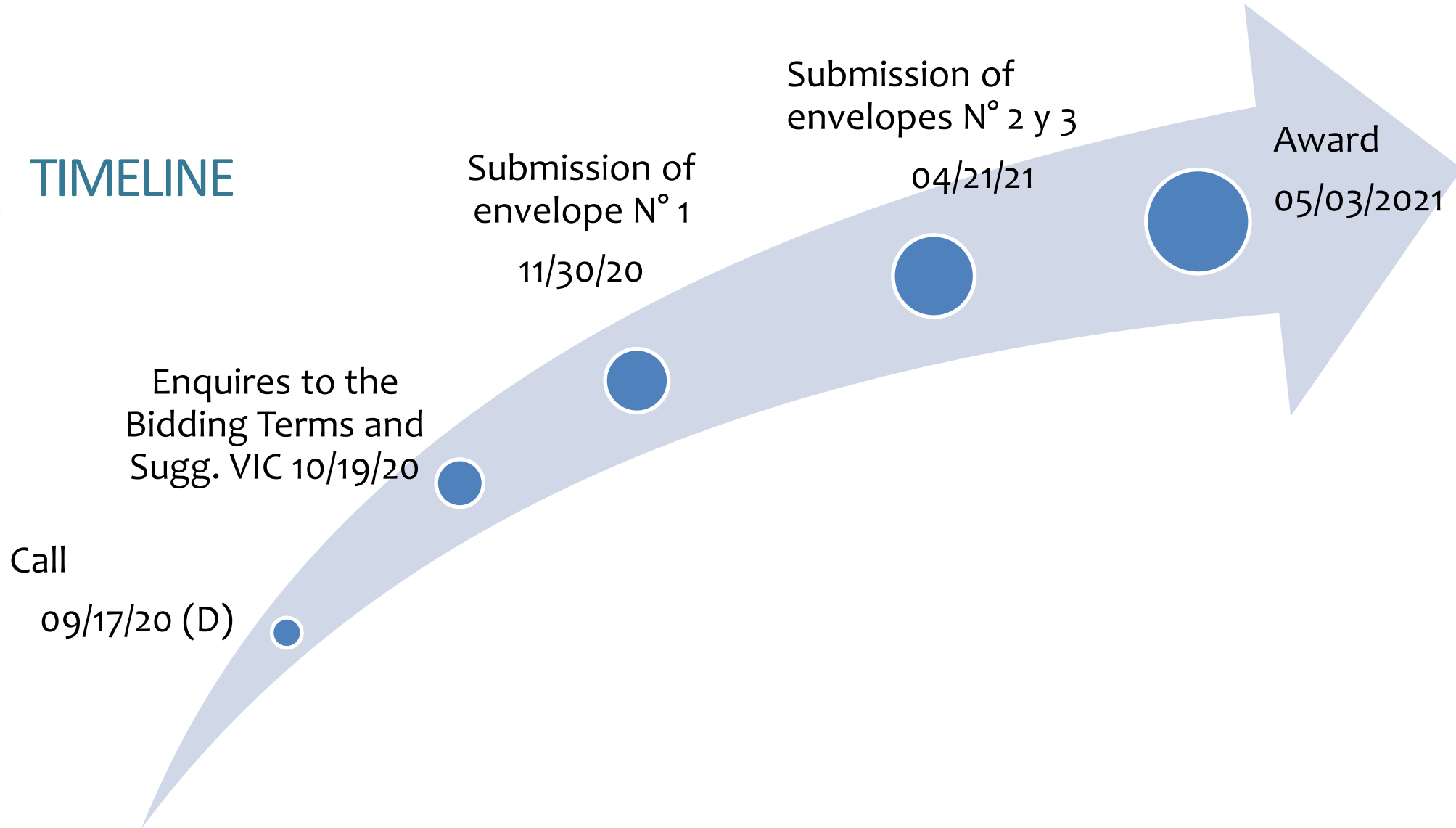
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TENDER SCHEDULE

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TIMELINE





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jmendez@proinversion.gob.pe

www.proinversion.gob.pe/ptar-puerto-maldonado