

Public Consultation by  
Oil and Gas Regulatory Authority

# Gas Network Code

*For Gas Pipeline Transportation System of Pakistan*

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# Presentation Outline

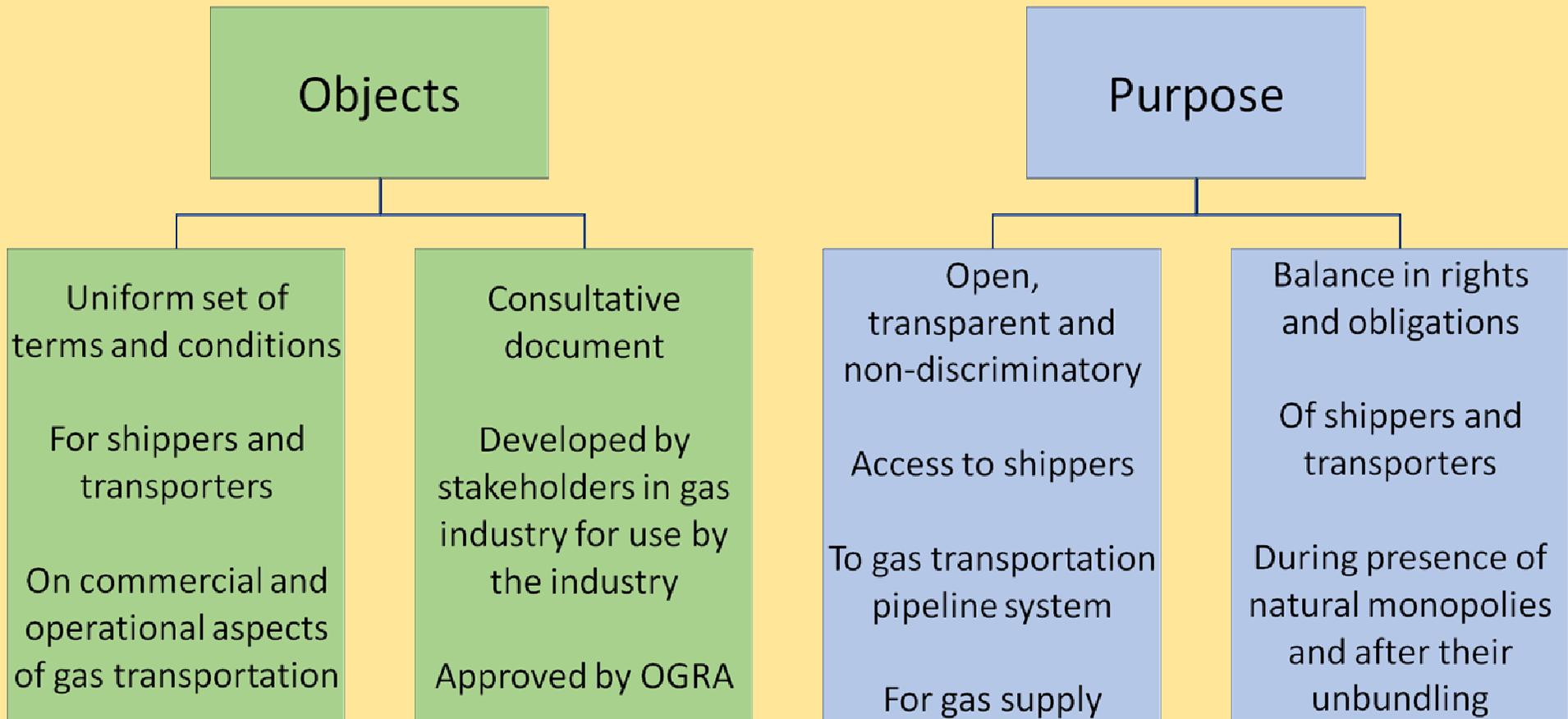
- Regulatory basis
- Objects and purpose of Network Code
- Synopsis of Network Code
- Overview of capacity provisions
- Overview of gas balancing provisions
- Overview of system shrinkage provisions
- Nominations, re-nominations and scheduling charges
- Measurement, specifications, system planning and emergencies
- Dispute resolution mechanism
- Modification of Network Code
- Legal and contractual process
- Appendices

# Regulatory Basis

## OGRA Gas (Third Party Access) Rules Draft 2017

- Rule 11
- *“transporters shall prepare the Network Code and submit it to the Authority for approval which may be granted by the Authority after necessary consultation with the interested parties”*

# Objects and Purpose of Network Code



# Synopsis of Network Code

## SCOPE AND APPLICATION

1 – DEFINITIONS AND INTERPRETATION

2 – CAPACITY

3 – BALANCING

4 – SHRINKAGE

5 – ENTRY POINTS

6 – EXIT POINTS

7 – NOMINATIONS AND RE-NOMINATIONS

8 – DELIVERY OF GAS: TITLE AND RISK

9 – ALLOCATIONS

10 – MEASUREMENT AND TESTING

11 – SPECIFICATIONS: QUALITY AND PRESSURE

12 – SYSTEM PLANNING

13 – OPERATION, MAINTENANCE, AND REPAIR OF FACILITIES

14 – EMERGENCIES

15 – TAXES

16 – DISPUTE RESOLUTION

17 – CONFIDENTIALITY

18 – INVOICING, PAYMENT AND GAS THEFT

19 – FORCE MAJEURE

20 – LIABILITIES AND INDEMNITIES

21 – MODIFICATIONS

22 – CREDIT ISSUES

23 – GOVERNING LAW

24 – NOTICES

25 – TARIFF

26 – CUSTOMER POINT ADMINISTRATION

27 – MISCELLANEOUS

*APPENDIX A* – FORM OF ACCESS AGREEMENT

*APPENDIX B* – SCHEDULE TO ACCESS AGREEMENT

*APPENDIX C* – SPECIFICATION OF GAS

*APPENDIX D* – GAS MEASUREMENT PROCEDURES

*APPENDIX E* – PARTICULARS FOR DECLARING CAPACITY OF GAS PIPELINE TRANSPORTATION SYSTEM BY TRANSPORTER

## Overview of Capacity – Article 2

Allocation	Transportation	Disclosures
<ul style="list-style-type: none"><li>• Application by shipper to transporter with all details</li><li>• Decision by transporter in 14 days</li><li>• Apply first-come-first-served principle to allocate capacity</li></ul>	<ul style="list-style-type: none"><li>• Receive and deliver gas up to contracted capacity</li><li>• Firm or interruptible capacity in volumetric terms</li><li>• Firm capacity &gt; 1 year &amp; Interruptible capacity &lt; 6 months</li></ul>	<ul style="list-style-type: none"><li>• Report available capacity by 25<sup>th</sup> of month to OGRA</li><li>• Report capacity allocation in 7 days to OGRA</li><li>• Report capacity vis-à-vis entry and exit points</li></ul>

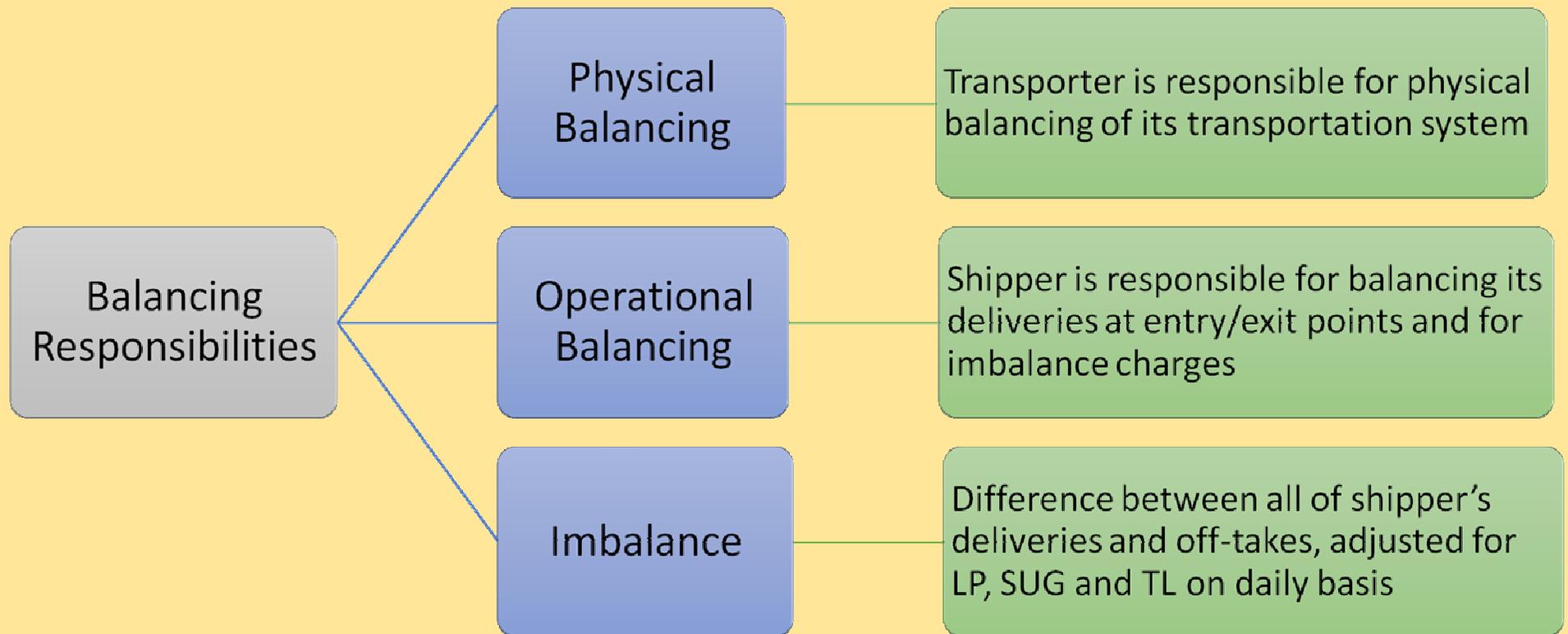
## Overview of Capacity – Article 2

Transfer	Hoarding	Overruns
<ul style="list-style-type: none"><li>• Shipper can transfer capacity with transporter's consent</li><li>• Transporter to decide in 10 days</li><li>• Capacity transfer may be permanent or temporary</li><li>• Transfer requires OGRA's approval</li></ul>	<ul style="list-style-type: none"><li>• Capacity held but not used</li><li>• No use for 50% or more in a year</li><li>• Notice of 1 month to show cause for non-use</li><li>• Cancellation of unused part</li><li>• May be assigned to other shippers</li></ul>	<ul style="list-style-type: none"><li>• Shipper flows more gas than contracted capacity in a day</li><li>• Overrun will be determined on an entry or exit point</li><li>• Will be determined on percentage basis</li><li>• Shippers will be liable to pay overrun charges</li></ul>

## Overview of Capacity – Article 2

<b>Proposed Overrun Charges</b>		
<i>Overrun Tolerance Limits</i>	<i>Winter overrun charges (December – February)</i>	<i>Non-winter overrun charges (March – November)</i>
Up to 10%	[4] x Daily Capacity Charge	[2] x Daily Capacity Charge
From 10% - 20%	[8] x Daily Capacity Charge	[4] x Daily Capacity Charge
More than 20%	[16] x Daily Capacity Charge	[8] x Daily Capacity Charge

## Overview of Gas Balancing – Article 3



# Overview of Gas Balancing – Article 3

<b>Balancing Tools</b>	<b>In Use</b>	Line Pack Adjustment
		Pressure overrides at entry point and network pressure
		Load shedding at exit points
		Recourse to regasified LNG
	<b>Proposed</b>	Gas Storage
		Margins Gas
		Nomination and re-nomination regime
		Imbalance Charges: daily discipline

# Overview of Gas Balancing – Article 3

Shipper takes off or leaves more gas in/from system

Gas left in or taken off is more than agreed tolerance

Intermediate reconciliation will be made for such excess gas

Excess gas left in or taken off will be charged at neutral price

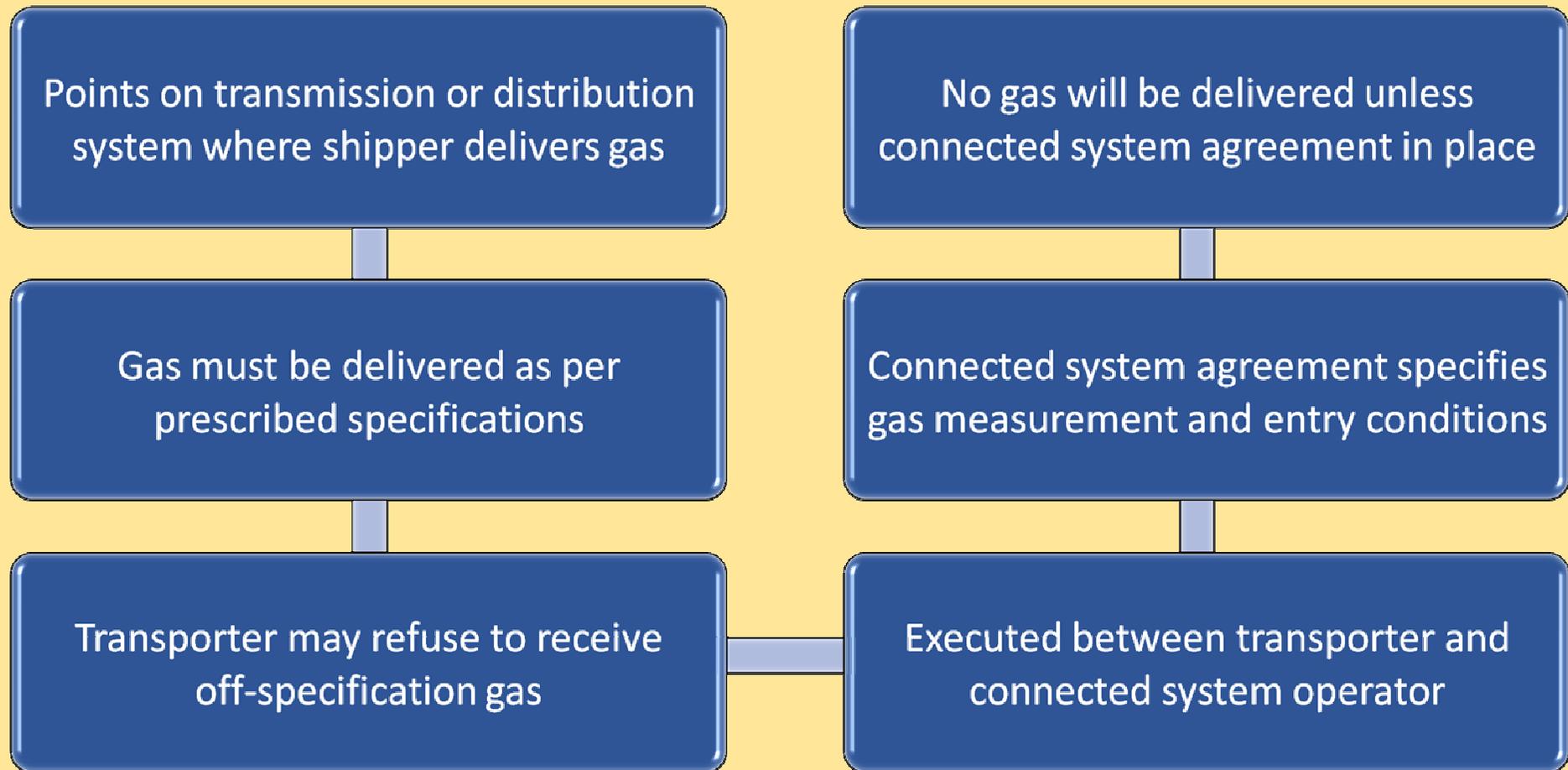
Neutral market price will be approved by OGRA

Imbalance Charges		
	December to February	March to November
<b>Cumulative Imbalance Tolerance</b>	[5%] of Total Booked Entry Capacity	[10%] of Total Booked Entry Capacity
<b>Cash out when cumulative imbalance long</b>	[80%] of the neutral price	[80%] of the neutral price
<b>Cash out when cumulative imbalance short</b>	[120%] of the neutral price	[120%] of the neutral price

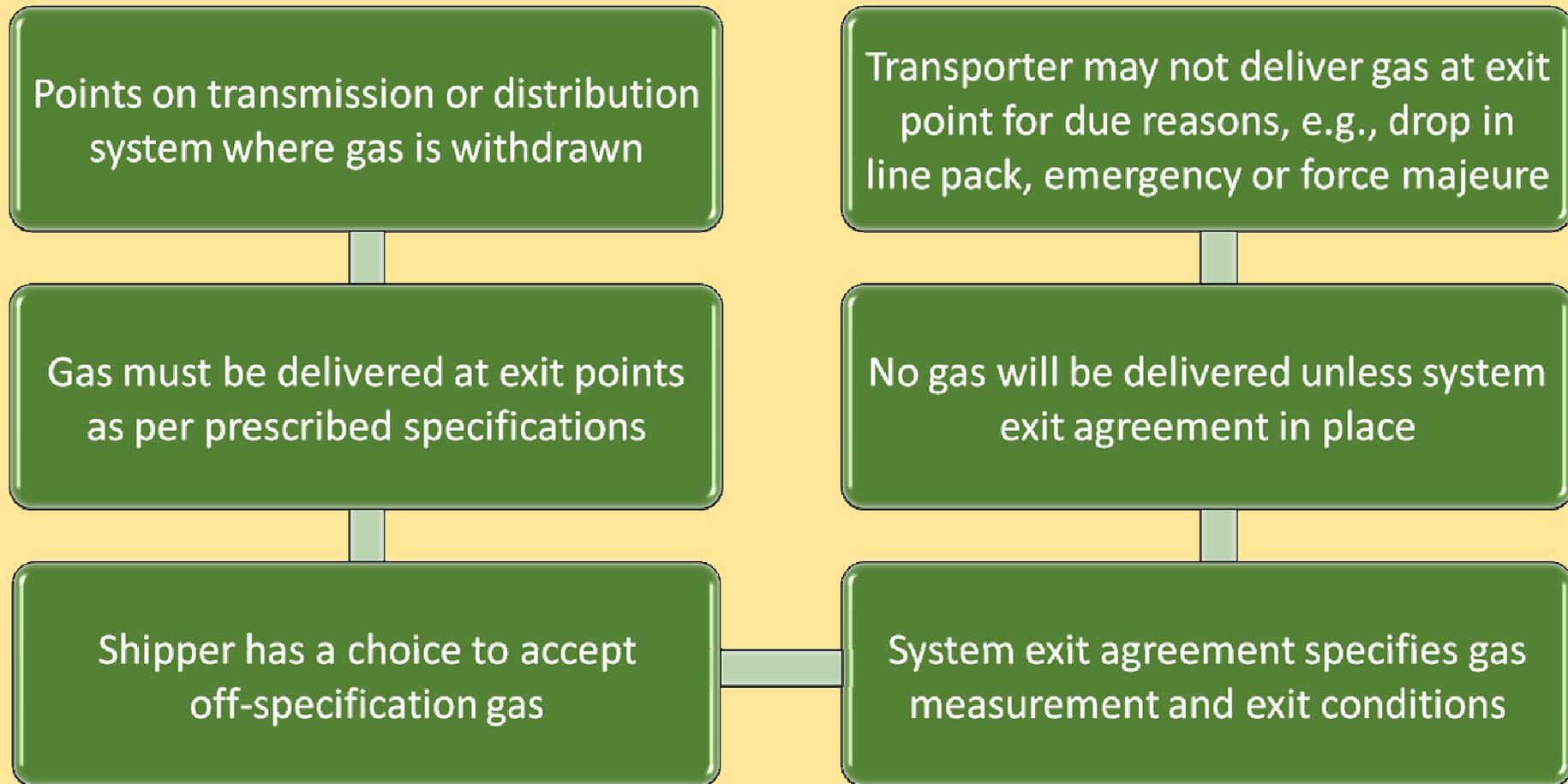
## Overview of System Shrinkage – Article 4

<b>Shrinkage</b>	<b>Shipper's Responsibility</b>	<b>Transporter's Responsibility</b>
<ul style="list-style-type: none"><li>• System Use Gas (SUG) is used by transporter for system operation</li><li>• Transportation Loss (TL) is unaccounted-for gas due to theft, ruptures, leakages, blow downs, measurement uncertainty, etc.</li><li>• SUG and TL factors will be approved by OGRA</li></ul>	<ul style="list-style-type: none"><li>• To provide additional gas for adjustment against system shrinkage</li><li>• Shrinkage gas will be proportionate to a shipper's off-takes</li><li>• To provide Line Pack (LP) proportionate to its capacity or full LP where dedicated pipeline is installed</li></ul>	<ul style="list-style-type: none"><li>• To keep fair and accurate record of shrinkage gas</li><li>• To annually report to OGRA on system shrinkage</li><li>• To return LP volumes supplied by a shipper in kind or cash</li><li>• To act as a reasonable and prudent operator</li></ul>

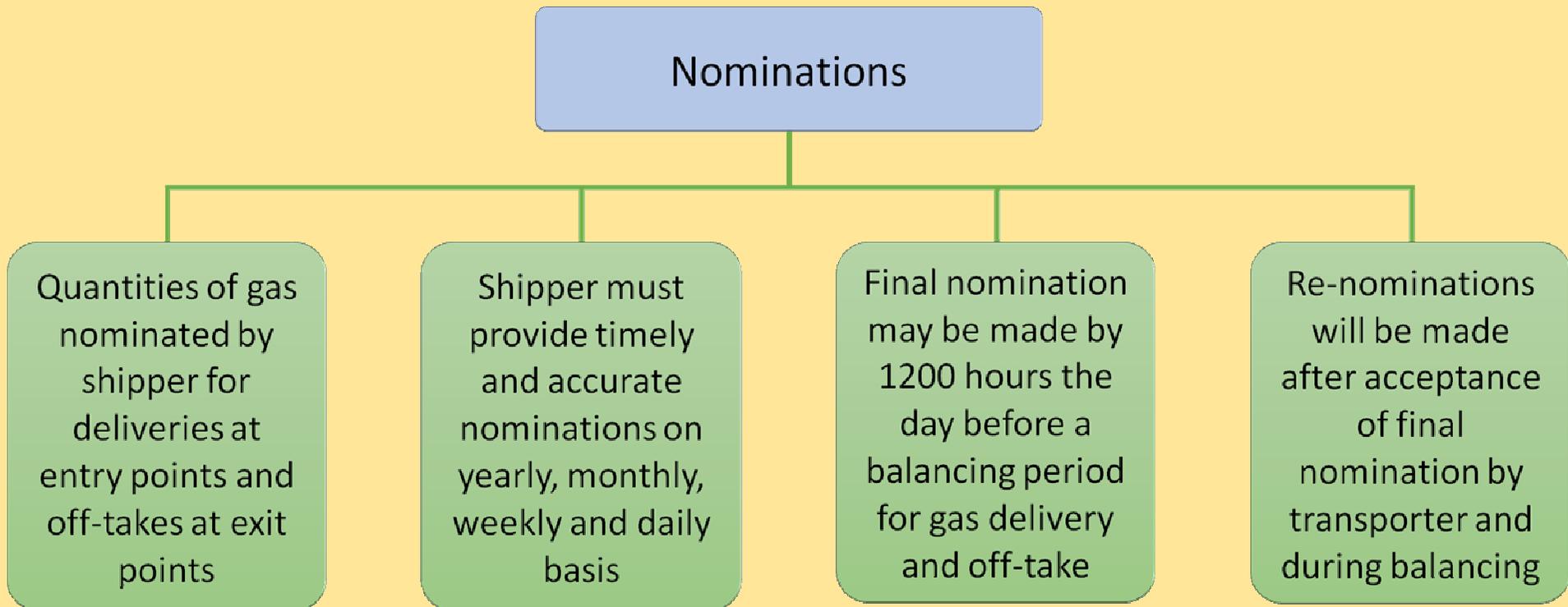
## Overview of Entry Points – Article 5



## Overview of Exit Points – Article 6



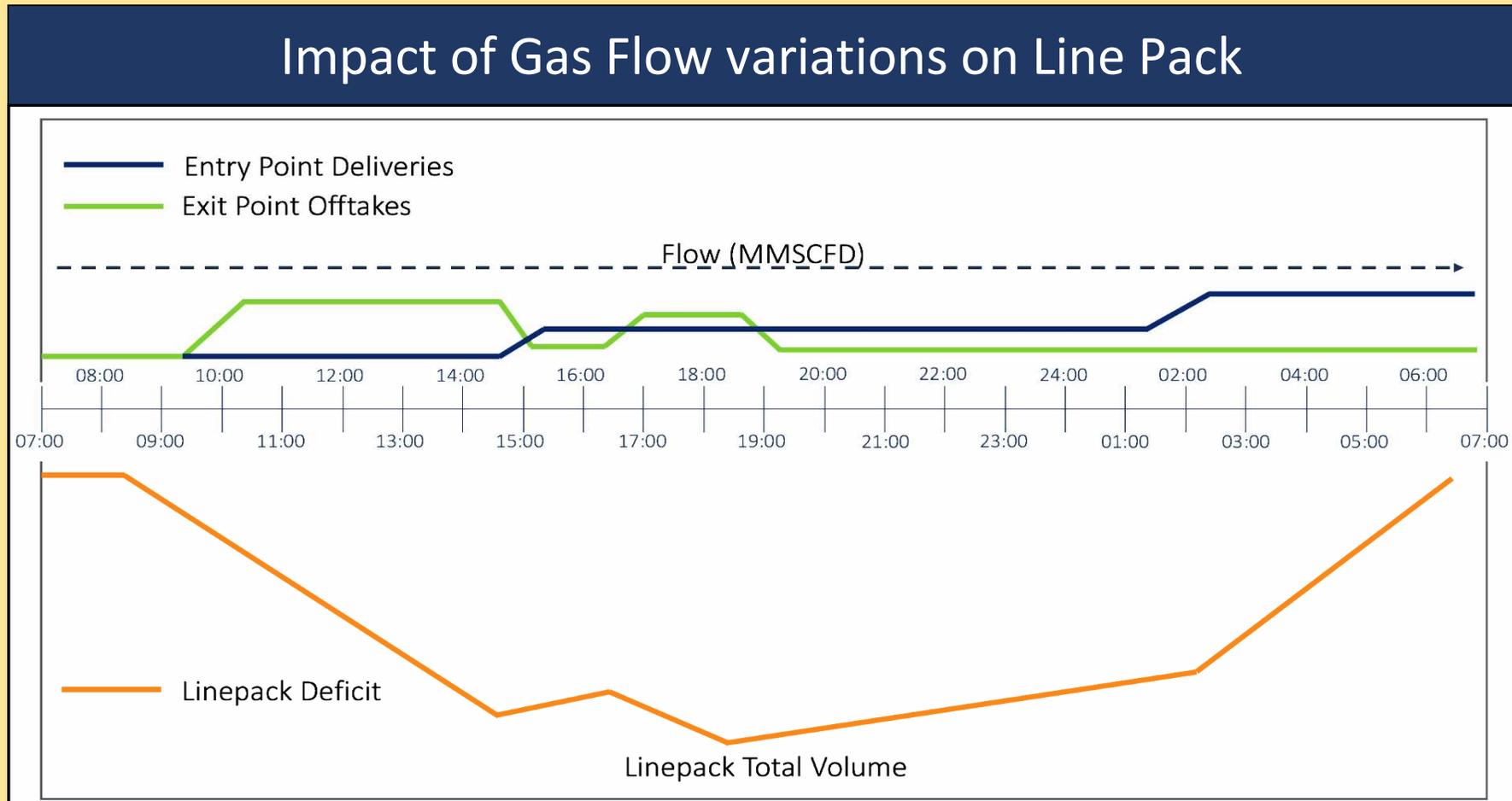
# Overview of Nominations and Re-nominations – Article 7



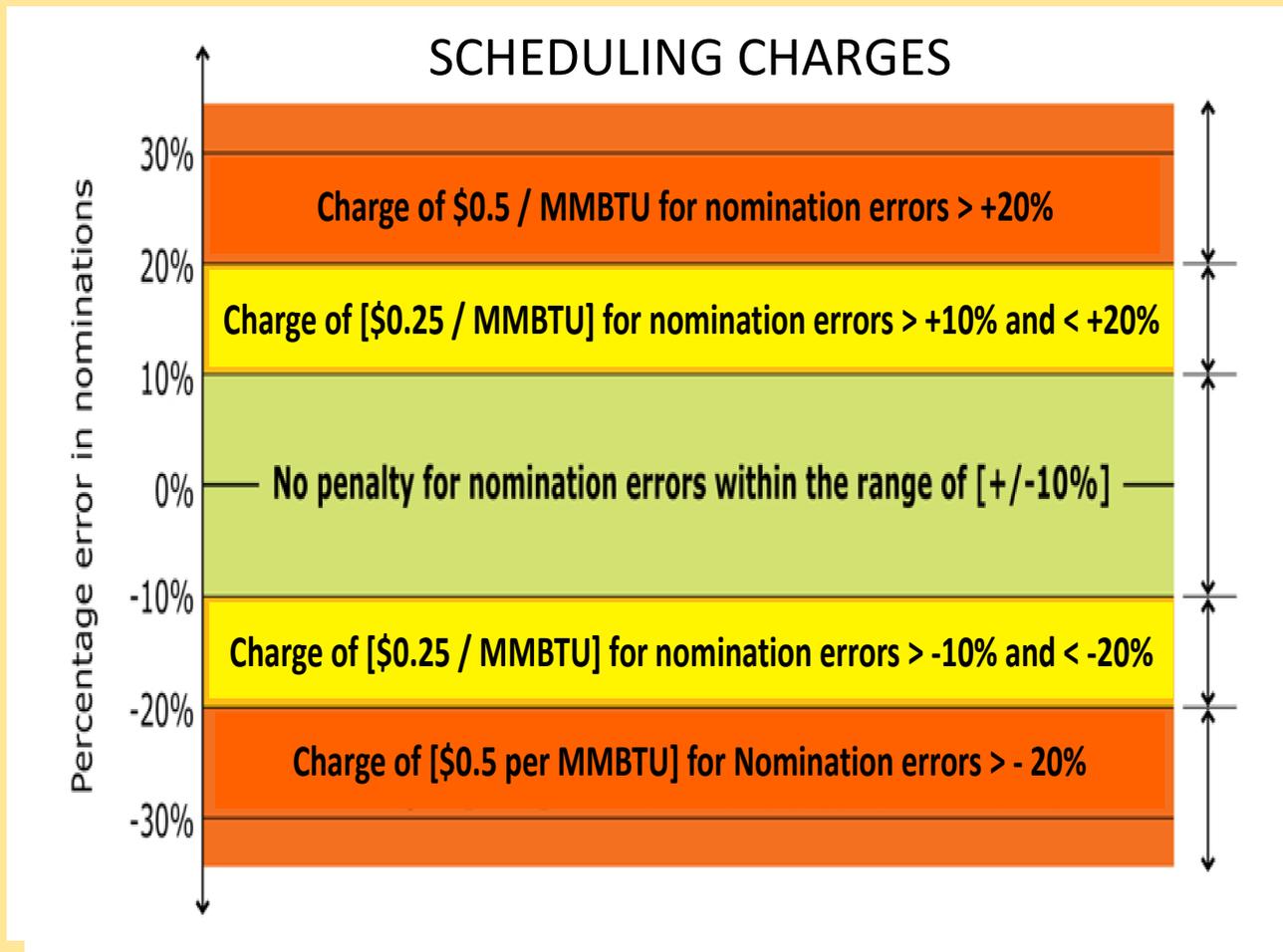
## Overview of Nominations and Re-nominations – Article 7

Nominations and Re-nominations Schedule	Yearly	Monthly schedule given 1 month before the year
	Monthly	Daily schedule given 10 days before the month
	Weekly	Daily schedule given 3 days before the week
	Daily	Daily schedule given by 1200 the day before
	Within Day	Two windows: 0830-0900 and 1630-1700

# Overview of Nominations and Re-nominations – Article 7



# Overview of Nominations and Re-nominations – Article 7



## Scheduling Charges

### *Purpose*

To ensure financial discipline on shippers to provide timely and accurate nominations for safety and integrity of system

### *Penalties*

Proposed scheduling charges flow variations are financial only and no buying or selling of gas takes place

# Measurement, Specifications, System Planning & Emergencies

## Measurement (Article-10)

- Shipper will measure gas delivered at entry points and transporter will measure gas withdrawn at exit points

## Specifications (Article-11)

- Shipper will deliver gas as per prescribed specification at entry points at matching pressure and transporter will deliver gas at exit points at supply pressure

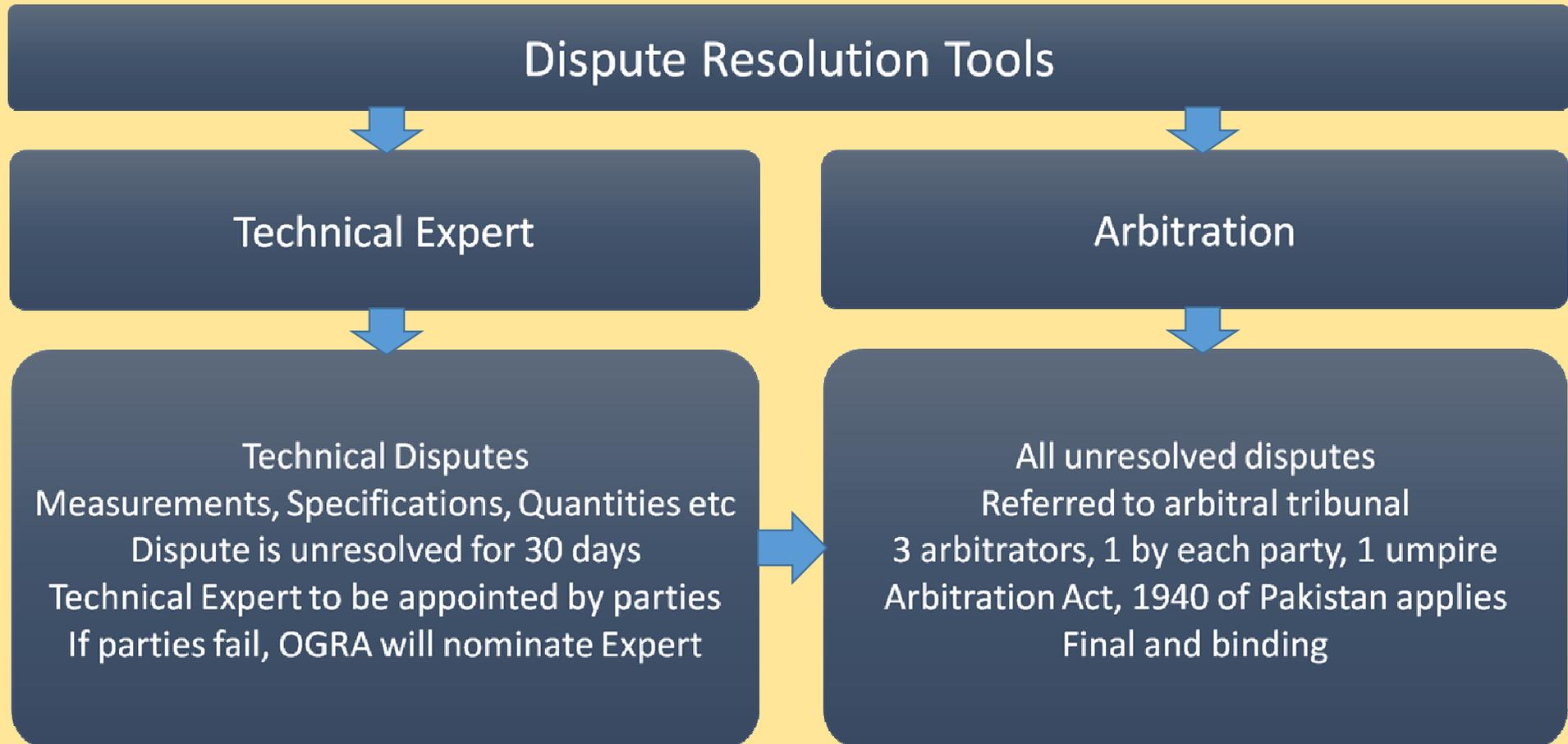
## System Planning (Article-12)

- Transporter will prepare and publish system expansion plan for each of next five years in cooperation with stakeholders

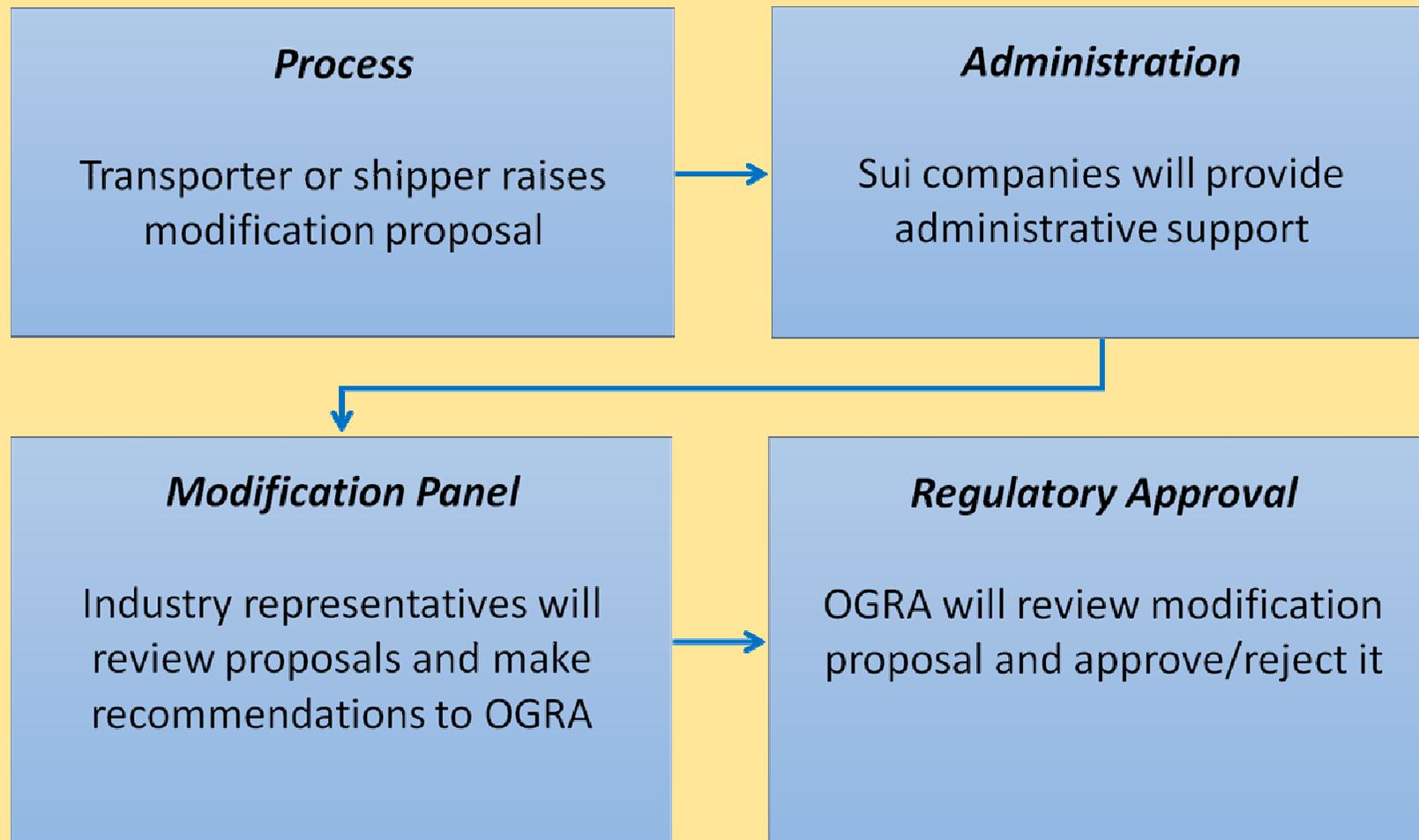
## Emergencies (Article-14)

- Transporter may take steps necessary to address emergencies including increase, decrease or discontinuance of gas intakes at entry points and delivery at exit points

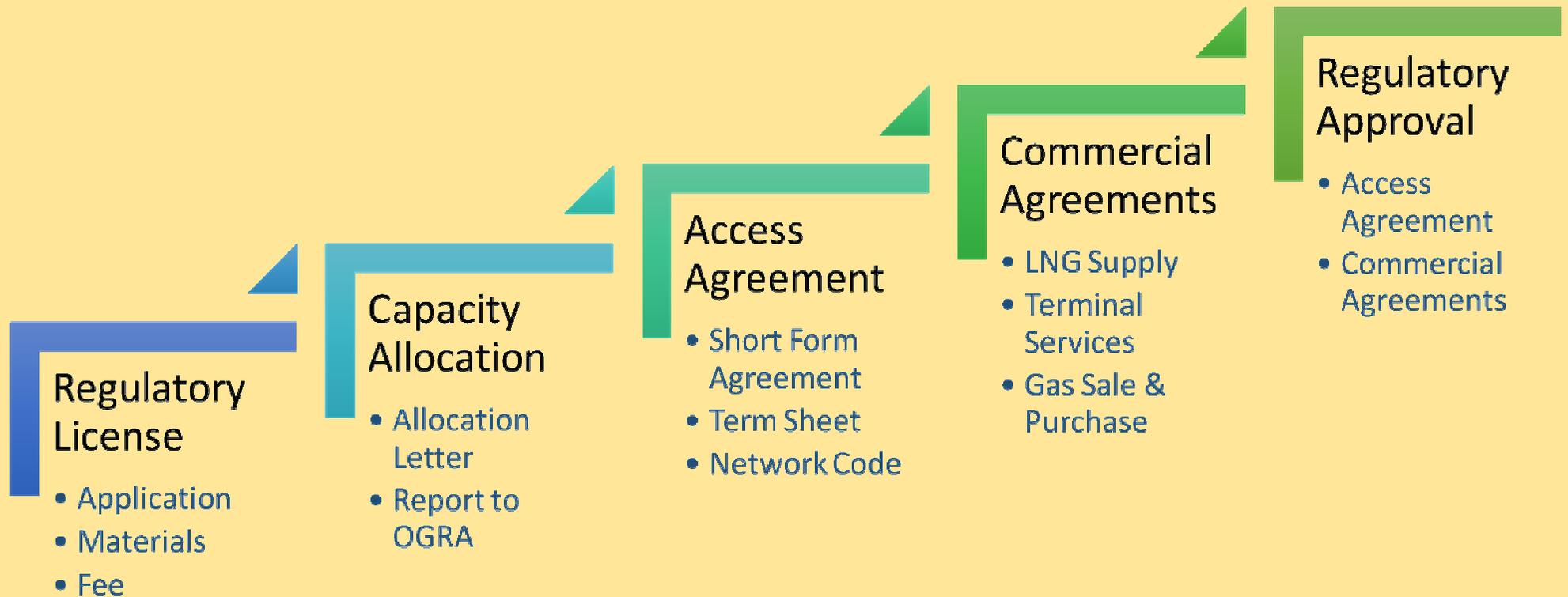
## Dispute Resolution Mechanism – Article 16



## Modification of Network Code – Article 21



# Legal and Contractual Process



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