# Concept Paper

# LPG Interoperable Service Delivery


**Executive Summary**

LPG is a critical household and industrial fuel in India, with over 32 crore domestic connections as of 2024 which accounts for nearly 100% of coverage. LPG coverage in India has expanded from 14.5 crore in 2014 to over 32.8 crore in 2024, yet customer service quality issues remain. LPG being the one of the critical utilities like electricity and water, ensuring unhindered supply is pivotal.

PSU OMCs (IOC, BPCL, HPCL) supply most domestic LPG; all domestically produced LPG is mandated to be routed through these PSUs. Service obligation: Distributors are required to keep sufficient stock, promptly serve customers, and provide home delivery. The largest single source of consumer dissatisfaction is delayed delivery sometimes exceeding a days or even a week in urban centers

This concept paper intended to present the case that outlines the current challenges in LPG service delivery (backed by complaint statistics), proposes a framework for inter-company service portability, and highlights global best practices – including European models of consumer protection and supply continuity. Key recommendations include setting a strict 24 hour delivery standard, establishing an *LPG Supplier of Last Resort* arrangement among OMCs, and creating enabling regulatory provisions under the Petroleum & Natural Gas Regulatory Board (PNGRB) or Ministry guidelines. The paper concludes that implementing this policy will significantly enhance customer satisfaction, strengthen supply security during emergencies, and align India's LPG distribution practices with international norms of consumer rights and service quality.

## Introduction / Background

As of FY 25, India consumes 31.2 MMT of LPG and primarily as a cooking fuel for a vast majority of Indian households, and its reliable delivery is essential for everyday life and energy security. Three public sector undertakings (PSUs) namely Indian Oil Corporation Ltd (IOCL, marketing Indane gas), Bharat Petroleum Corp Ltd (BPCL, Bharat Gas), and Hindustan Petroleum Corp Ltd (HPCL, HP Gas) supply roughly 88.3% of packed domestic LPG in India through its network of 25566 distributors. Together, these companies serve over 33 crore consumers across urban and rural areas. In the past decade, government initiatives like the Pradhan Mantri Ujjwala Yojana (PMUY) have expanded LPG access to millions of new consumers, taking national coverage from 62% in 2016 to virtually 100% today. This massive scale-up, while a laudable achievement, has put strain on the LPG distribution infrastructure and highlighted the need for robust customer service mechanisms. A consumer is typically locked into one OMC's ecosystem – for example, an Indane customer can only get refills from IOCL's distributors. If that distributor faces a stock out, logistics issue, or any outage (such as a bottling plant breakdown or transport strike), the consumer's refill is delayed until the issue is resolved.

A High-Level Expert Committee (HLEC) constituted by PNGRB in March 2025 which summarizes that **over 1.7 million (17 lakh) LPG related complaints are lodged annually**. While this represents only about 0.5% of the massive subscriber base (32+ crore connections), it is indicative of persistent issues affecting millions of people. The HLEC's findings brought out specific patterns of dissatisfaction across the three state run firms.

## Current Challenges

At present, the onus is on the individual OMC and distributor to meet the demand, with limited options for the consumer to seek alternative supply without formally

switching connections. This can be problematic during supply disruptions or surge demand (e.g. festive seasons or natural disasters), when one company's network might be overstretched while another's has spare capacity.

As mentioned above there were 17 Lakh complaint which got registered, 90% via CRM and 10% through CPGRAM

- **Delivery delays dominate complaints:** A majority of grievances are about not receiving refills on time. For instance, nearly *half* of all complaints recorded by BPCL (49%) and HPCL (47%) were **refill related issues** – typically cylinders not delivered promptly after booking. Nonetheless, in absolute terms IOCL had the highest number of complaints overall (58% of total LPG complaints were related to IOCL's Indane service), reflecting its market share and perhaps service strain.
- **Existing delivery standards are not consistently met:** As per Marketing Discipline Guidelines issued by OMCs, the norm for LPG refill delivery has been within 48 hours of booking to achieve Excellent rating in **Targeted Delivery Time Norms**. In fact, oil companies and local authorities have issued guidelines from time to time to adhere and even orders to enforce this. In fact Local administration are also vocal about service delivery. **There is also no uniform mechanism for a customer to get help from a different distributor or company if the 48-hour window passes unmet.** In fact, most consumers are not aware that a standardized delivery timeline of 48 hours exists for LPG refills.
- **Supply disruptions and outages exacerbate delays:** India's LPG distribution, though generally robust, is occasionally hampered by events such as LPG's shortage of supply, transport strikes, natural disasters, shortages of cylinders, or administrative challenges in transport contracts. When such incidents occur, one OMC's ability to deliver might be compromised in a

given area. For instance, if A company's bottling plant in a region is under maintenance, A's customers there could face delays until supply is rerouted from farther plants. Meanwhile, B/C's might have sufficient stock nearby, but their infrastructure is walled off to A's customers. **Lack of interoperability** means the available resources of one OMC cannot easily be used to serve another's customers in an emergency. This siloed approach leads to avoidable service outages – a situation this paper seeks to address.

**Need for an Interoperable Service Mechanism**

Given the challenges outlined, this paper suggests that **business as usual is inadequate** to eliminate chronic service delays. What is needed is a structural change in how LPG companies cooperate to serve the end consumer. Specifically, we propose instituting a *Cross-PSU Service Mechanism* – effectively an arrangement where **the nearest available LPG distributor (regardless of company) completes a delivery if the primary company's distributor cannot do so within 24 hours** of booking.

The rationale for such a mechanism is rooted in the principle of *universal service obligation*. All OMCs ultimately have the same mandate from the Government of India: to ensure that cooking fuel reaches every household reliably at an affordable price and in reasonable time. They operate under the administrative control of the Petroleum Ministry, sell LPG at uniform prices (with government subsidies where applicable), and are collectively accountable for energy access goals. From the consumer's perspective, Indane, Bharat Gas, or HP Gas cylinders serve an identical purpose they are standardized 14.2 kg cylinders with identical regulator fittings and gas composition. **In effect, these brands are substitutable from a user standpoint**, even if the commercial entities are different. This interchangeability is what allows us to envision a cross PSU service solution.

Consider a scenario where a customer has booked a refill with Distributor “A” but 24 hours have elapsed without delivery. Normally, the consumer would lodge a complaint and wait longer, while perhaps her neighbor who happens to use “B’s” LPG from Distributor “B” got a refill in 12 hours. With a cross PSU mechanism in place, Distributor “B” could be alerted to deliver a cylinder to Distributor “A’s” customer immediately after the 24-hour lapse. The customer would get their LPG cylinder without further delay, and appropriate inter-company adjustments can be made behind the scenes (discussed later). The key outcome is the customer is served on time, turning a potential complaint into a resolution.

In India’s context, all three LPG companies are government owned and often collaborate on Infrastructure sharing. It is thus logical that they should *collectively guarantee* the service to every LPG customer. If one’s network hits a snag, the others can immediately fill the gap. This approach would transform the customer experience by *making the service provider boundaries invisible* to the consumer during emergencies or delays. Instead of seeing three separate silos who are delivering Domestic LPG, the public would effectively see one national LPG service system that ensures no home is left without cooking gas for more than 24 hours.

It is advisable to pilot the cross-service mechanism in a few areas first, to iron out practical difficulties. The pilot could focus on a mix of urban and rural settings – for example, one metro city and one or two districts known for supply challenges. During the pilot, the coordination systems and inter-company processes can be tested. KPIs such as average delivery time, reduction in complaints, and feedback from consumers and field staff would be collected. Lessons from the pilot would inform a nationwide rollout just like MoPNG’s 2021 LPG portability pilot in select cities. That initiative allowed consumers to choose between available LPG distributors at the time of a new connection or refill booking by promoting service competition and customer empowerment. However, the actual implementation process remained cumbersome, with limited digital integration, logistical delays,

and low consumer awareness hindering its effectiveness. Nonetheless LPG Interoperability will ensure **real-time service continuity** during delivery failures, leveraging centralized digital tracking and cross-entity coordination. Lessons from the pilot will guide the operational, financial, and technological framework for a seamless nationwide implementation.

**PNGRB Act Enablement**

The PNGRB Act lays a strong legal and regulatory foundation that can support the implementation of an interoperable LPG service system in India. At its core, the Act is designed to protect consumer interest, promote fair trade practices, and ensure uninterrupted and efficient supply of petroleum and natural gas. The Act mandates non-discriminatory access to infrastructure, encourages open access and competition, and promotes transparency in pricing and service levels, thereby laying the groundwork for seamless cooperation among LPG marketing entities.

Additionally, the PNGRB Act enables the regulator to monitor performance, impose penalties for service failure, and establish mechanisms for dispute resolution and grievance redressal—essential tools for ensuring accountability in a shared-service environment. Thus, the Act's consumer-first approach, focus on infrastructure access, and enforcement powers collectively make it a suitable instrument to operationalize and govern an interoperable LPG delivery framework, ensuring reliable and timely service to consumers across the country.

**Likely Issues in Implementing LPG Interoperability**

A key concern is the issue of **cylinder ownership and branding**, as each LPG provider uses uniquely marked cylinders, making tracking and maintenance complex when interchanged. The absence of a centralized digital platform further complicates real-time booking redirection, subsidy tracking, and dispute resolution. **Regulatory gaps** also pose hurdles, as current laws do not mandate interoperability or clarify liability in case of service failures. Additionally, **resistance from distributors** is

expected due to concerns over revenue loss, logistical complexity, and dilution of customer ownership. Addressing these issues is critical for the success of an interoperable delivery model.

**Expected Benefits, Impact & Roadmap**

The interoperable LPG service model will drastically reduce customer complaints by ensuring timely delivery, especially in underserved or delayed cases, thereby improving public trust and satisfaction. It ensures equitable access during supply disruptions, particularly benefiting rural and PMUY households. This mechanism promotes healthy competition among PSUs, raises service standards, and reduces administrative firefighting. With measurable improvements in delivery times and consumer perception, it aligns with global best practices and reinforces India's clean energy goals. It can significantly reduce regional service disparities by optimizing the existing delivery infrastructure across companies, thus improving coverage in hard-to-reach areas without requiring massive new investments.

Economically, it may lead to cost efficiencies through shared logistics, improved asset utilization, and better demand forecasting. This pilot will empower consumers by reinforcing the principle of service as a right, not a privilege.

**Global Benchmarking Case study**

In the EU, uninterrupted energy supply is a protected consumer right, with mandatory "supplier of last resort" (SoLR) systems ensuring continued service even if a provider fails. This principle—already applied to electricity and piped gas—mirrors the logic of cross-PSU LPG delivery in India: no consumer should face disruption due to supplier issues. Markets like the UK also enable consumer choice and switching even for bottled LPG, driving better service through competition. Adopting similar safeguards in India reinforces consumer rights and aligns with global best practices.

## Conclusion

India's LPG sector has reached a critical milestone of nearly 100% access. The next frontier is ensuring impeccable excellence in service. This concept paper outlines a strong case for a nationwide policy that guarantees timely LPG delivery through inter PSU collaboration. By instituting a system where if one PSU cannot deliver within 24 hours, another steps in, the government can eliminate refill delays, the most frequent source of consumer complaints.

This solution is practical, fair, and urgently needed. It places the consumer at the center of service delivery and envisions a unified national response, leveraging the collective strength of all OMCs. While healthy competition remains, this mechanism fosters cooperation when needed most, ensuring no household is left without fuel due to procedural or logistical hurdles.

Implementing such a framework will demand coordination, technology integration, and regulatory support but the benefits are substantial. It will reduce public grievances, enhance reliability, and showcase how public entities can collaborate for greater good without compromising competitive spirit. This initiative by PNGRB aligns with the broader vision of ease of living and responsive governance. Adopting a regulatory backed, nationwide service continuity protocol ensuring any LPG customer left unserved for 24 hours is automatically supported by another PSU will sharply reduce service complaints.