



Natural Gas Pipeline Network & Gas Management System (GMS) At GAIL

Monitoring & Control of Natural Gas Pipeline Network at GAIL



NGMC
(National Gas
Management Centre)



RGMCs
(Regional Gas
Management Centers)



**Terminals &
Maintenance Bases**



SCADA



CAPPS



Monitoring & Control Activities For NG Pipeline Network



Activity Type	List of activities
Safety & O&M	24 x 7 Monitoring & controlling of pipeline hydraulics
	Coordination with Customers/ Suppliers for uninterrupted Operations
	Reporting & MIS
	Natural Gas Reconciliation
	Coordination for Pipeline Maintenance & ILI
	Leak Detection Monitoring using CAPPS
	Mock Drills & Incident Reporting



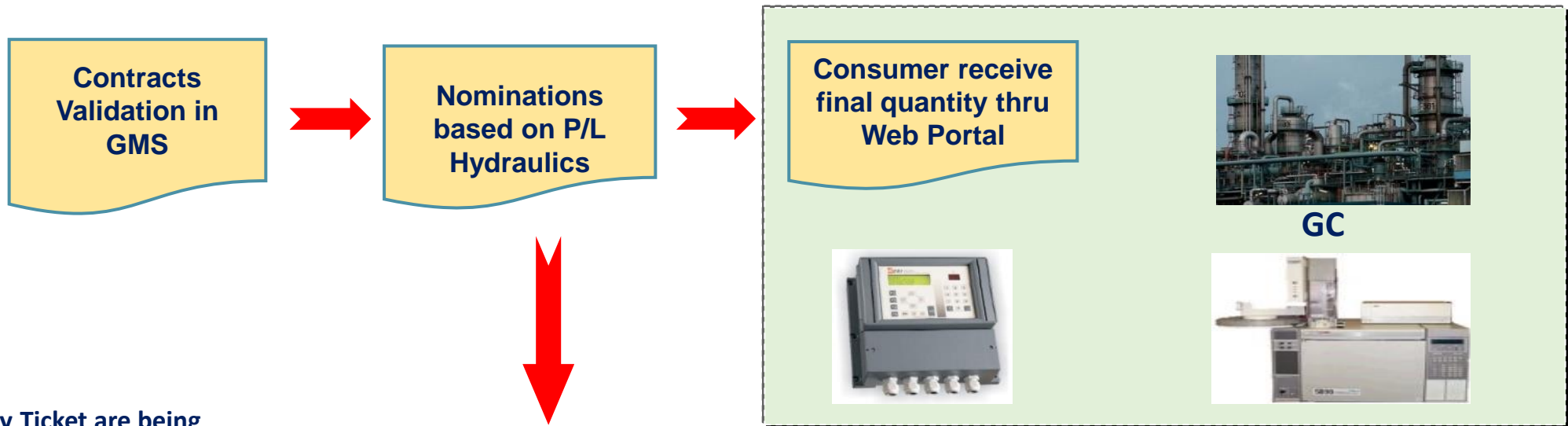
Monitoring & Control Activities for NG Pipeline Network



Activity Type	List of activities
Commercial & Statutory	Accepting nominations through Gas Nomination Portal
	Gas Scheduling to Customers
	Domestic Gas Allocation as per Ministry Directives
	Imported Gas Nomination & Inventory Management.
	Reporting & MIS



Gas Management System (GMS) at GAIL



Daily & Fortnightly Ticket are being communicated to customers

Fortnightly Joint Ticket (Over drawl adjustment)

Daily Joint Ticket

Allocation based on Priorities of Consumer
(Distribution among various contracts and calculation of over drawl, if any)

Gas measurements from FC (NCV, GCV, Volume)

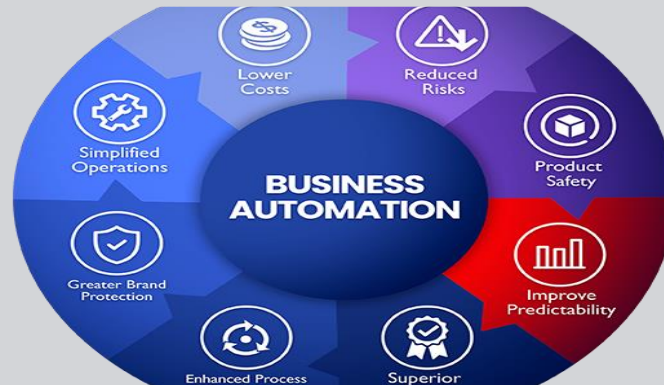
SCADA

Gas Measurement from SCADA

Invoice created, sent to Consumer thru E-mail Digitally Signed by F&A

SAP based Gas management system (GMS) is a tailor made application which comprises standard module i.e. MM, SD, IS-OIL & FICO

DIGITIZATION & AUTOMATION INITIATIVES



Web Portal and Mobile App for Customer Nominations.



SAP-GMS for Joint Ticketing and Gas Invoicing



Surveillance of Pipelines through DRONES



SCADA Web Page to Customers for Real Time Data Monitoring.



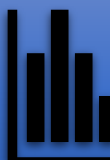
Implementation of PIDS



Automated SMS and Voice Call System is in place to report Incidents



Open Access Portal for P/L Capacity Booking.



Usage of various OEM software for Analytics



Leak Detection System (through simulation software – CAPPs)