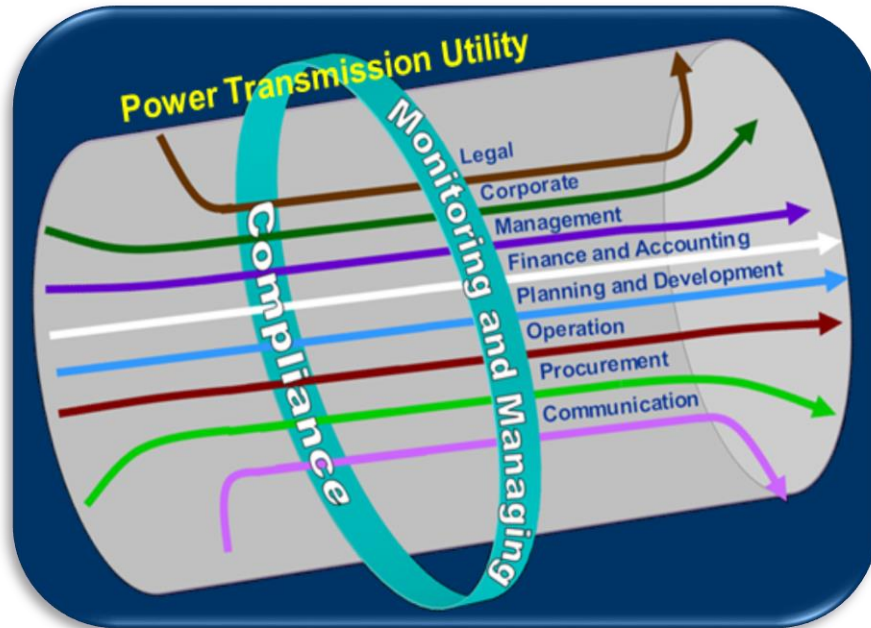


Designing Management & Monitoring Framework for Regulatory Compliance by Power Transmission Utilities in the SAARC Region



**‘Proposed Processes:
Framework for
Monitoring and
Managing Regulatory
Compliance’**

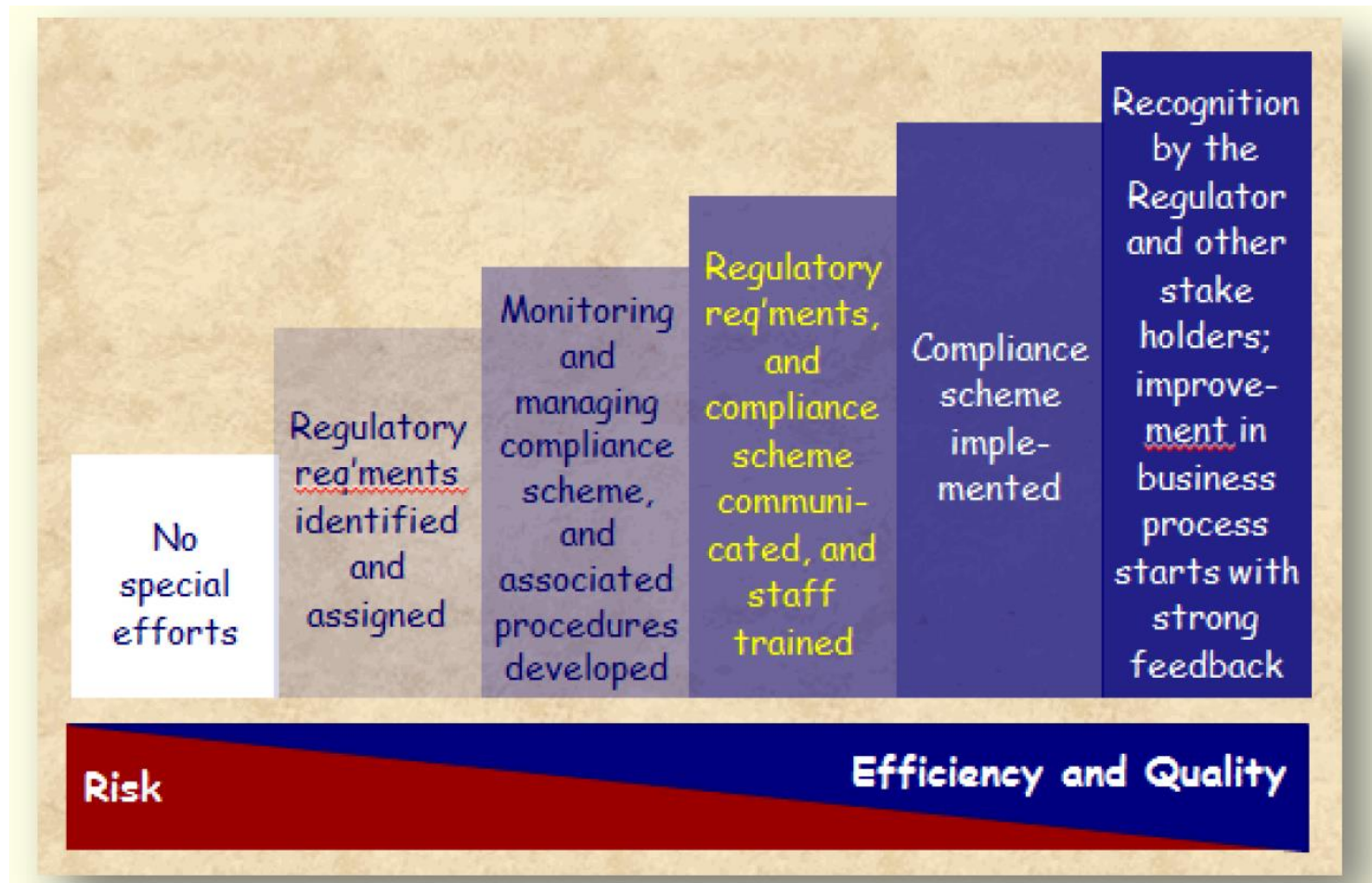
**Omar Khalid and
Rashid Aziz**



SAARC Energy Centre, Islamabad

www.saarcenergy.org

The Road to Compliance



Setting up for Compliance Management



- So where do we start?
- **Process development** to ensure that there is a well defined mechanism to meet objectives
- The processes **evolve** over time

Proposed Processes



- **Compliance Roadmap** - Development of a **formal framework** for treating compliance
- KPI Development and Compliance Tracking
- Responding to Notices
- Organizational Learning and Feedback

Compliance Roadmap

Compliance Roadmap

- One of the core elements of the study
- **Philosophy**
 - Identify
 - Assign
 - Accessibility
 - Rapid deployment

Compliance Roadmap

- For Utilities: **Transmission License** the instrument which enforces regulation
- Logical to start with the License
- **Identify** clearly the following
 - Regulatory Requirement
 - License Reference
 - Cross Reference – (Grid Codes, Accounting formats, Performance Standards etc.)
 - Time Dimension

Compliance Roadmap



- Identify clearly the following
 - Org. Dimension
 - Nature of Requirement
 - Compliance and Non-Compliance
 - Current Status of Compliance
 - Risks
 - Responsibility
 - Any fines and penalties

Template for Compliance Monitoring Metrics for Utility's Regulatory Requirements

Sr. No.	Description of Regulatory Requirement	Reference	Cross Reference	Organizational Dimension	Requirement Nature	Required Frequency of Response	Definition of Utility		Dimension of Non-Compliance Risks	Responsibilities of Concerned Departments	Proposed Penalty for Non-Compliance	
		Transmission License	Applicable Documents (if any)				Compliance	Non-Compliance			Maximum Amount	Reference No.

Identifying Requirements: Example

- For example: Transmission Regulation on Grid Code in Pakistan
 - Regulatory Requirement: Enforcement of Grid Code
 - License Reference: Article 16, Clause 1
 - Cross References:
 - Grid Code after it was formulated
 - EGOP Prior to Grid Code Formulation

Identifying Requirements: Example

- Org. Dimension: Planning and Development, Operation
- Nature of Requirement: Obligation
- Time Dimension: Within the Valid Period of the License
- Compliance and Non-Compliance
 - Ensuring there is a Grid Code
 - The Grid Code meets the requirements of the License
 - Implement and enforce Grid Code

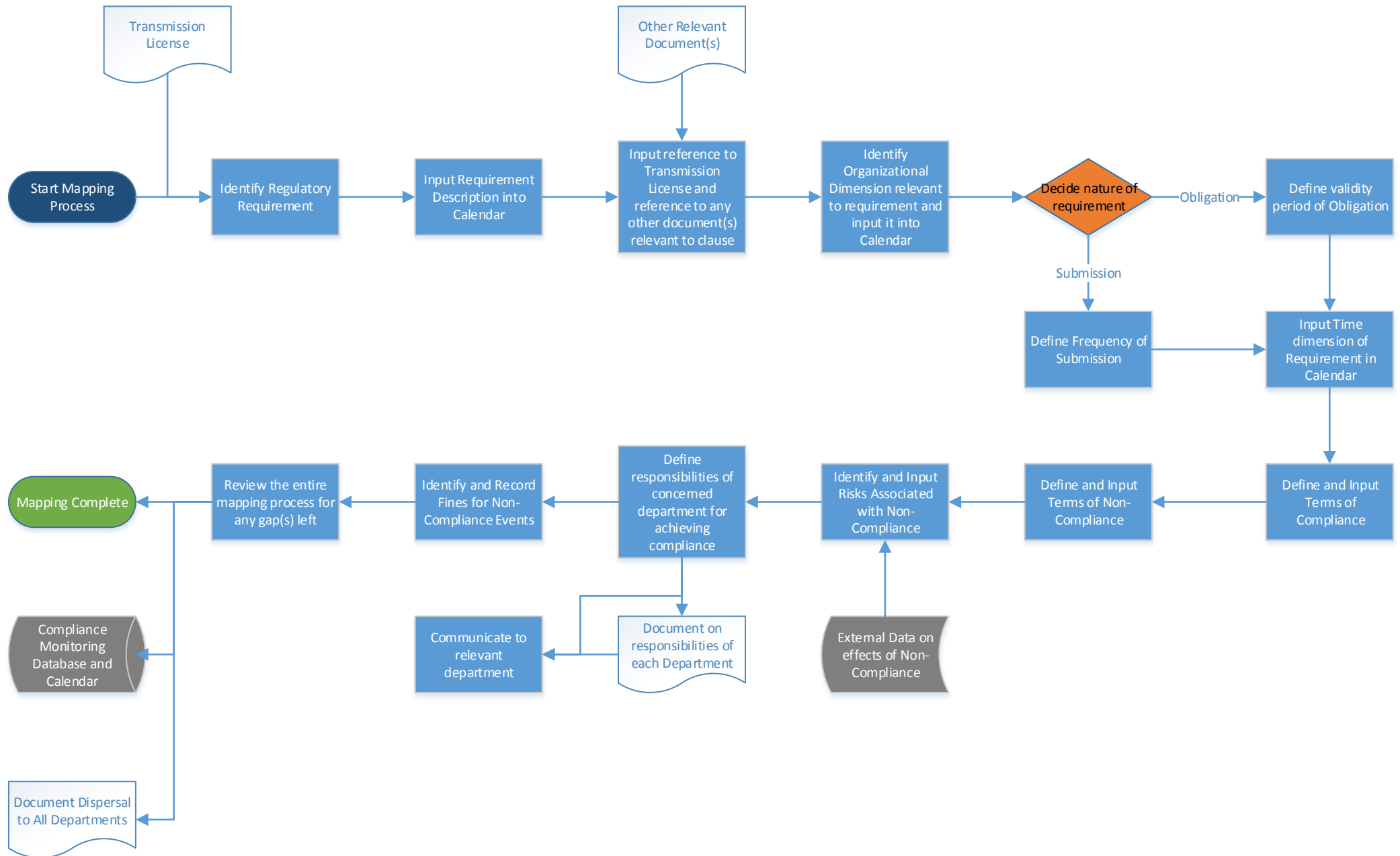
Identifying Requirements: Example

- Risks:
 - System Security Risks
 - Operational Risks
 - System Reliability Compromised
 - Supply quality issues
 - Etc.
- Responsibility: Ensure development and enforcement of Grid Code while planning and operating the system
- Any fines and penalties

Compiling Entire Database

- Start with the Transmission License
- Go Clause by Clause
- **Completely capture** the requirements in the transmission license
- Capture requirements from any other
- **Compile database** of all **relevant forms** e.g. performance standards, investment plans format etc.

Process Map for Mapping of Regulatory Requirements Database and Calendar



Completed Calendar

Draft Set of Compliance Monitoring Metrics for Regulatory Requirements National Transmission and Dispatch Company (NTDC) Pakistan

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		Transmission License	Applicable Documents (if any)				Compliance	Non-Compliance			Maximum Amount	Reference No.
1	Definitions	Article 1	Regulatory Act	All	Obligation	Within the valid period of License			Misinterpreting the regulations set in the License	Understand the Definitions as described in the License		
2i	Operational Territory	Article 2, Clause 1	Schedule - 1 Transmission License	Planning and Development/ Operation	Obligation	Within the valid period of License	Licensee carries out transmission business within the territory as set in the License	Licensee carries out transmission business outside the territory as set in the License	Legal Risk from Operating outside authorized territory	Operate within Service territory	1. 1,000,000 2. 50,000/day	NEPRA Fines Rules 2002

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		Transmission License	Applicable Documents (if any)				Compliance	Non-Compliance			Maximum Amount	Reference No.
2ii	Adherence to NEPRA rules, regulations, directions and orders	Article 2, Clause 3		Corporate/ Management / Legal	Obligation	As and when required	Act and respond to the Authority's directions in the required form and manner.	1. Ignoring of directions by the Authority ; and 2. Partial compliance to the Authority's directions	Legal Risk	Ensure compliance with all applicable regulations and adhere to the directions and orders of the Authority	1. 300,000 2. 10,000/day	NEPRA Fines Rules 2002
3	License Fee	Article 3	NEPRA Fee Rules 2002	Finance and Accounting	Submission	Annual, paid in advance within 30 days of the expiry of the	1. Pay annual license fee to the Authority ; 2. Pay within 1 month of	1. Fails to pay annual license fee to the Authority ; 2. Delays the payment	Legal Risk leading to revocation of license Financial	Ensure payment of prescribed amount of license fee in a timely manner	1. 300,000 2. 10,000/day	NEPRA Fines Rules 2002

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		Transmission License	Applicable Documents (if any)				Compliance	Non-Compliance			Maximum Amount	Reference No.
						previous financial year	notice by the Authority ; 3. Pay an amount as calculated , published and revised by the Authority ; and 4. Pay before lapsing of 20 business days of payment overdue	beyond 1 month of notice by the Authority ; and 3. Pays an amount less than calculated , published and revised by the Authority ; and 4. Does not pay within 20 business	risk from fines, late payment fees etc			

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		Transmission License	Applicable Documents (if any)				Compliance	Non-Compliance			Maximum Amount	Reference No.
							notice by the Authority	days of payment overdue notice by the Authority				
4i	License Term	Article 4, Clause 1		Legal	Obligation	Within the valid period of License	The validity of the license in 30 years from the date of issue unless License is revoked earlier	-	-	-	1. 300,000 2. 10,000/day	NEPRA Fines Rules 2002
4ii	Renewal of License	Article 4, Clause 2	NEPRA Procedure Regulation	Legal	Obligation	Near the expiry of the	The licensee's performance	The licensee's lack of	Operating the business	Ensure compliance with all	1. 300,000 2.	NEPRA Fines Rules

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		Transmission License	Applicable Documents (if any)				Compliance	Non-Compliance			Maximum Amount	Reference No.
			s 1999			License Period	nce allows the authority to renew the license for a further term that is deemed appropriate.	performance does not allow the authority to renew the license for a further term that is deemed appropriate.	after the license term has expired. Lack of performance leads to license not being renewed	applicable regulations and adhere to the directions and orders of the Authority	10,000/day	2002
5i	Exclusivity of the License	Article 5	Schedule - 1 Transmission License Regulatory Act	Corporate/ Management t/ Planning and Development t/ Communication	Obligation	Within the valid period of License	Have exclusive right in respect of the service territory	Operate out of service territory	Legal Risk from Operating outside authorized	Operate within Service territory	1. 300,000 2. 10,000/day	NEPRA Fines Rules 2002

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		Transmission License	Applicable Documents (if any)				Compliance	Non-Compliance			Maximum Amount	Reference No.
			1997	ion/ Legal			to: 1. Carry out transmission of electric power 2. Engage in other activities incidental to the transmission business 3. Operate transmission facilities of a		territory			

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		Transmission License	Applicable Documents (if any)				Compliance	Non-Compliance			Maximum Amount	Reference No.
							special purpose transmission licensee pursuant to Section 19 of the Act					
5ii	Arrangements with KESC under Exclusivity Clauses	Article 5		Planning and Development t/ Communication/ Legal	1. Obligation 2. Submission	Within the valid period of License	Do not apply Article 5 Sub clause (c) to KESC transmission facilities until such time that	1. Operate KESC transmission facilities until such time that effective communication and	Operational risk from lack of coordination between Transmission Utilities	Have effective communication and liaison with KESC to develop coordination and systems necessary for operation of Transmission	1. 300,000 2. 10,000/day	NEPRA Fines Rules 2002

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		Transmission License	Applicable Documents (if any)				Compliance	Non-Compliance			Maximum Amount	Reference No.
							effective communication and control facilities are installed in the KESC network to the satisfaction of the Authority . 1. Provide applicable instructions to KESC 2. Report	control facilities are installed in the KESC network to the satisfaction of the Authority . 2. Not provide applicable instructions to KESC 3. Not report in consultati		System as directed by the Authority		

Draft Set of Compliance Monitoring Metrics for Regulatory Requirements National Transmission and Dispatch Company (NTDC) Pakistan

Sr. No.	Description of Regulatory Requirement	Reference	Cross Reference	Organizational Dimension	Requirement Nature	Required Frequency of Response	Definition of Utility's		Dimension of Non-Compliance Risks	Responsibilities of Concerned Departments	Proposed Penalty for Non-Compliance	
		Transmission License	Applicable Documents (if any)				Compliance	Non-Compliance			Maximum Amount	Reference No.
							in consultation with KESC about progress in developing effective control and communication facilities	on with KESC about progress in developing effective control and communication facilities				

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Sr. No.	Description of Regulatory Requirement	Reference	Cross Reference	Organizational Dimension	Requirement Nature	Required Frequency of Response	Definition of Utility's		Dimension of Non-Compliance Risks	Responsibilities of Concerned Departments	Proposed Penalty for Non-Compliance	
		Transmission License	Applicable Documents (if any)				Compliance	Non-Compliance			Maximum Amount	Reference No.
							on between the NTDC and KESC transmission system till such time that effective control and communication facilities are developed 5. Does not get the contract approved by the Authority	the NTDC and KESC transmission system till such time that effective control and communication facilities are developed 5. Does not get the contract approved by the Authority				

Draft Set of Compliance Monitoring Metrics for Regulatory Requirements National Transmission and Dispatch Company (NTDC) Pakistan

Sr. No.	Description of Regulatory Requirement	Reference	Cross Reference	Organizational Dimension	Requirement Nature	Required Frequency of Response	Definition of Utility's		Dimension of Non-Compliance Risks	Responsibilities of Concerned Departments	Proposed Penalty for Non-Compliance	
		Transmission License	Applicable Documents (if any)				Compliance	Non-Compliance			Maximum Amount	Reference No.
6i	Revocation or Suspension of the License	Article 6, Clause 1	Section 28, Regulatory Act	Legal	Obligation	Within the valid period of License	No persistent failure in complying with the terms and conditions of the License	Persistent failure in complying with the terms and conditions of the License	1. Risk of License being revoked 2. Other risks such as Financial Control, Environmental and Safety risks etc	Ensure compliance with all applicable terms and conditions of the License	1. 300,000 2. 10,000/day	NEPRA Fines Rules 2002
6ii	Avoiding failure to comply with the terms of conditions of the License	Article 6, Clause 2	Article 6, Clauses 1 and 4	Legal/Accounting and Finance/Planning and Development	Obligation	Within the valid period of License	Licensee can avoid failure by: 1. Paying the License Fee when 2. Breach any provisions	1. Not pay the License Fee when due 2. Breach any provisions	Risk of License being revoked Operational, Financial and	Ensure compliance with all applicable regulations and adhere to the directions and orders of	1. 300,000 2. 10,000/day	NEPRA Fines Rules 2002

Evolve the framework



Compliance Tracking

Compliance Tracking

- Identification complete – next steps
- A way is needed to measure compliance
- Alongside implementation – need to **benchmark and measure**
- Metrics are important for Operational Improvement
- **Quantifiable and track-able** data points

Why Track and Measure

- Assessing Performance
- Detailed **insight** into non-compliance areas
- Identifying dimensions and departments from which non-compliance originates
- Identify **frequently occurring** non-compliance events

Why Track and Measure

- Objective setting to move from 'As-Is' to 'To-Be'
- Sustaining targeted performance after achieving it
- Developing better compliance and operational models

Starting with the basics

- Starting with utility level KPIs
- Make **optimistic – realistic** targets
- Communicate KPIs down to professionals
- Tie this up with a **feedback mechanism**

KPI Dimensions in Compliance

- Utilities encouraged to make their own KPI dimensions
- Suggested KPIs could include:
 - Number of Compliance Issues Reported
 - Percentage of Compliance Issues handled correctly for the first time
 - Percentage of Regulations met by required date
 - Frequency of Compliance Reviews
 - Percentage of Neglected Compliance Issues

KPI Dimensions in Compliance

- Suggested KPIs could include:
 - Backlog: Number of Compliance Issues older than a month (or a percentage relative to open issues)
 - Risk: Percentage of Escalated Compliance Issues in a time period
 - Percentage of staff trained in compliance issues
 - Cost of non-compliance
 - Average Resolution Time

KPI Dimensions in Compliance

- Suggested KPIs could include:
 - Average handling cost per compliance issues (utility wide and then department wide)
 - Percentage of compliance issues re-opened
 - Total corporate cost of compliance
 - Average time needed to respond to regulatory changes

Once built, track – every time



- Track KPIs after developing
- **Assign Responsibility**
 - Departmental Level
 - Utility wide collation
- Periodic and Event based tracking
 - Examples
- Think of them like internal performance standards for Utilities

Assign Levels to Departments



- Based on KPI Benchmarking assign various levels to Departments
- **Starter**: At this stage the department is either making no special efforts or has merely identified the regulatory requirements and assigned responsibility thereof
- **Substantially Compliant**: The department has developed procedures for achieving compliance and has implemented them to a certain degree of success. There is also some form of scheme, procedure or practice, for managing and monitoring compliance

Assign Levels to Departments



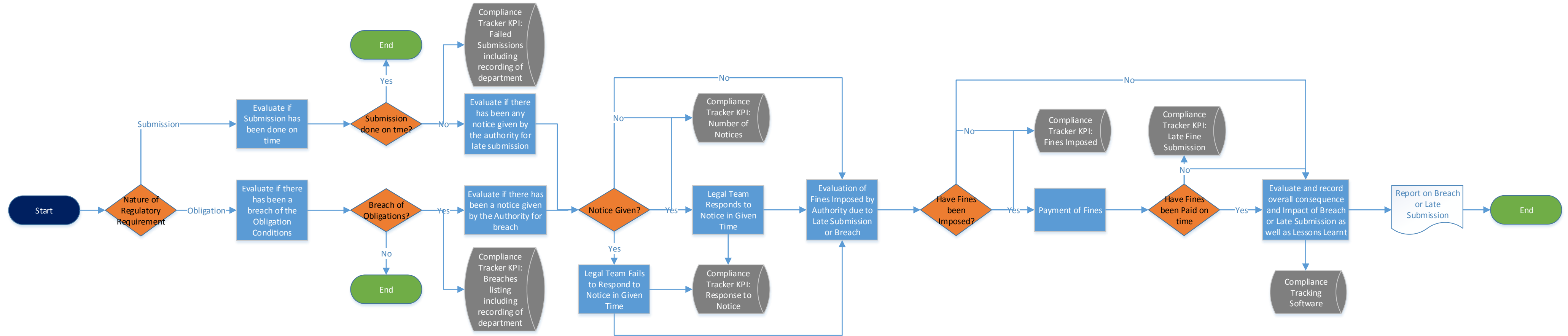
- **Fully Compliant:** In this phase, the department has fully trained staff and has achieved **full compliance** of the requirements associated with the department. There is a **comprehensive scheme** for managing and monitoring compliance. The department plays an **active role** in meeting the overall compliance objectives of the Utility and its efforts are **duly acknowledged** by the Regulator

Evolution of KPI Framework



- As the utility evolves so do the KPIs
- Build the KPI structure down to the departmental level
- Keep setting optimistic – realistic targets
- Achieve and sustain

KPI Development and Tracking Programme



Evolution of KPI Framework



- **Important realization** - Some compliance issues may be unavoidable with existing infrastructure
- **Benchmarking** against **existing capacity** to realize which dimensions may fall short
- Development of detailed plans for acquiring what is needed to completely meet regulatory requirements and the time-frame in which these can be realistically achieved

Evolution of KPI Framework



- Presenting a solid case to the regulator to allow further investment to meet requirements
- For the regulator to be able to see and evolve the regulation structure
- Transparency in performance

Responding to Notices

Process Maps



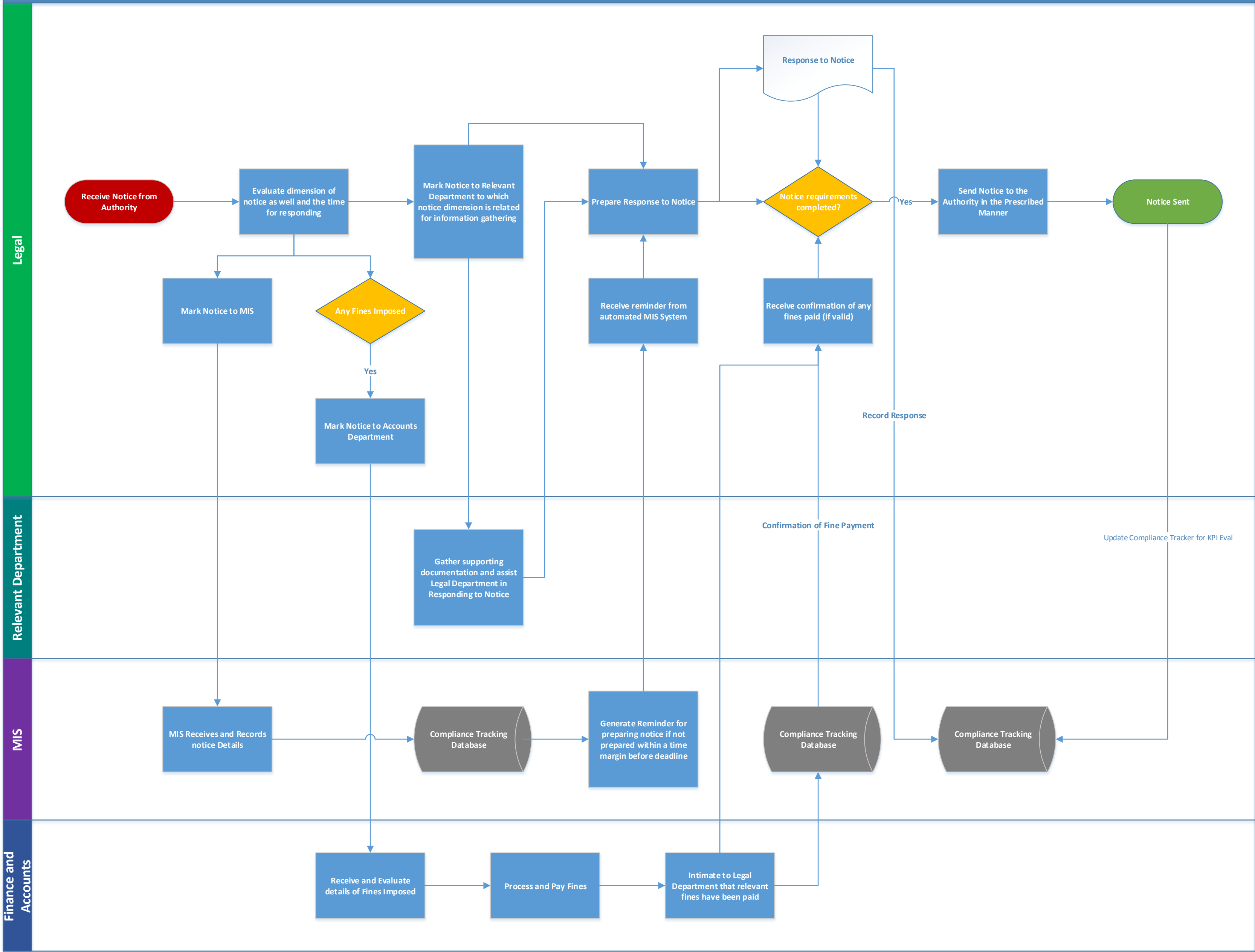
- Development of process maps for **process control** and **standardization**
- A compliance critical process map has been made as an example
- Responding to Notices from the Regulator

How to Map



- Break down process along two dimensions
- **Operational Elements**
 - Activities
 - Decisions
 - Data
- **Organizational Elements**
 - Organizations
 - Departments
 - Offices

Process Map for Responding to Notices from Regulatory Authority



Process for Responding to Notices from Regulatory Authority

Interface	Activities	Activity Time	Decisions	Documentation Data/Database
Legal:	- Evaluate dimension of notice as well and the time for responding - Mark Notice to MIS - Receive reminder from automated MIS System - Mark Notice to Accounts Department - Receive confirmation of any fines paid (if valid) - Mark Notice to Relevant Department to which notice dimension is related for information gathering - Prepare Response to Notice - Send Notice to the Authority in the Prescribed Manner		- Any Fines Imposed - Notice req'mnts complete	Documents: Response to Notice
Relevant Department:	- Gather supporting documentation and assist - Legal Department in Responding to Notice			
MIS	- MIS Receives and Records notice Details - Generate Reminder for preparing notice if not prepared within a time margin before deadline			
Finance and Accounts	- Receive and Evaluate details of Fines Imposed - Process and Pay Fines - Intimate to Legal Department that relevant fines have been paid			

Organizational Learning and Feedback

Organizational Learning and Feedback



- Utilities must evolve or risk losing operational edge
- Regulation provides guiding principles for improving performance
- Target closing compliance gaps
- Need for a well defined internal feedback and learning mechanism

Organizational Learning and Feedback



- Targets of the Feedback model
 - Ensures that Guidance makes it way down to departmental level
 - Ties in with KPI tracking
 - Helps with goal setting
 - Helps avoid repeated non-compliance issues which are avoidable with existing infrastructure

Organizational Learning and Feedback



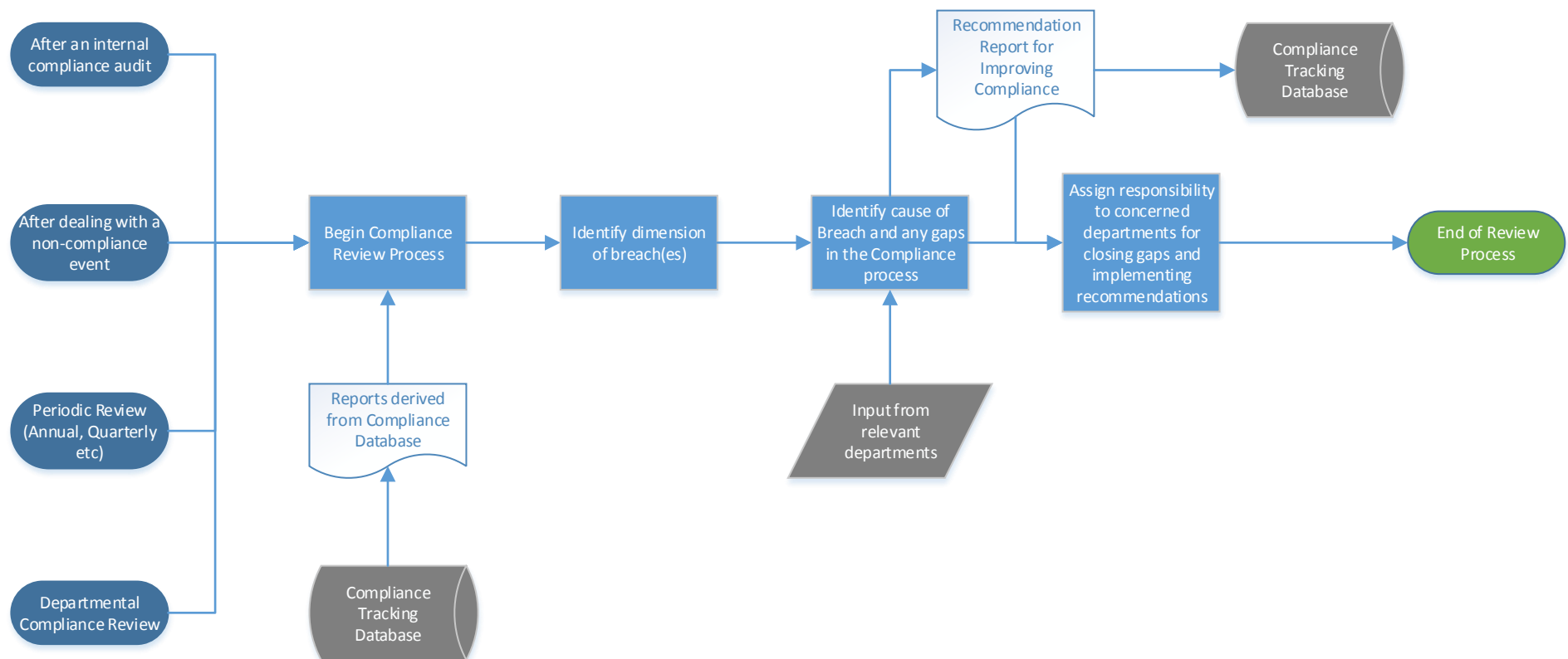
- Targets of the Feedback model
 - Reduces cost of compliance
 - Fosters a compliance culture
 - Provides edge over competition
 - Helps utility evolve under changing regulatory conditions

Organizational Learning and Feedback



- In the study a comprehensive learning mechanism has been proposed
- For maximum coverage
 - Event Based Review
 - Periodic Review

Organizational Learning and Feedback Process for Improving Compliance



Organizational Learning and Feedback



- Event Based Feedback
 - After dealing with a non-compliance event
- Periodic Review
 - Quarterly, Bi-Annually, Yearly (Utility Wide)
 - Departmental Compliance Review
 - Compliance Audit Completion

Organizational Learning and Feedback



- Elements of the review process
- Data Gathering
 - Event Reports
 - Compliance Tracking Database
 - KPIs
 - Departmental Surveys etc.

Organizational Learning and Feedback



- Identify
 - Breaches
 - Breach Characteristics e.g. Dimension, Risks, Impact
 - Gaps in meeting compliance requirements
 - Gaps in compliance framework

Organizational Learning and Feedback



- Resolve
 - Analyse the gaps
 - Take inputs from relevant departments
 - Realistic recommendations on closing gaps
 - Document the entire process and recommendations
 - Assign responsibility
 - Update compliance tracking database

Over to Mr. Rashid Aziz

Considerations for the Medium to Long-term



Outline

- Going beyond “command and control” approaches
- Voluntary compliance
 - Technical
 - Managerial
 - Environment and Social
 - Others
- Reliance on Market forces, competition, etc.
 - Competitive bidding
 - International norms, standards, specifications, etc.

Voluntary Compliance



- Technical and managerial aspects: ~ ISO 9000
- Operational aspects: Internationally recognised norms and standards for equipment
- Environmental aspects: ~ ISO 14000 etc.

Relying on Market forces



- **Competition**
 - For equipment procurement, works, services.
 - On financial aspects – e.g. price of power
- **Advantages**
 - Management initiative, so greater commitment
 - Company policy, therefore requirements of regulatory compliance (design, planning, execution, operation, monitoring and reporting) are automatically fulfilled
- **Risks**
 - Market power and dominance
 - Regulatory Capacity
 - Governance

Thanks For Your Attention