GUIDELINES FOR THE PREPARATION OF PERFORMANCE IMPROVEMENT PLANS (PIP) BY DISCOS

NIGERIAN ELECTRICTY REGULATORY COMMISSION

PIP

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Background

In pursuit of the Power Sector Recovery Program (PSRP), the Commission is implementing a more robust tariff review process aiming at improving the performance of the Nigerian Electricity Supply Industry (NESI). The process will involve a review of the application of the capital expenditure allowances in the MYTO model for compliance with Performance Improvement Plans (PIPs) to be prepared by the Distribution Companies (DisCos) and approved by the Commission. The implementation of the Performance Improvement Plan is to be strictly monitored by the Commission. The review will prioritize expenditure by the electricity distribution companies and reflect changes in the operational environment that have occurred since the last tariff review. It is noteworthy that one of the overarching objectives of the PSRP is the elimination of tariff shortfalls and the enforcement of market obligations.

The Performance Improvement Plan (PIP) developed by DisCos shall cover the period 2020-2024 tariff period but subject to the contractual provisions of the Performance Agreements executed between the core investors and the Bureau of Public Enterprises in respect of the allowances for capital and operating expenditure in the remaining term of the agreement. Upon approval by the Commission, the PIP shall form the basis of prioritizing and monitoring the capital investment initiatives of the DisCos with revenue adjustment for non-implemented projects. The approved PIPs will also be the basis for the defining Performance Standards/KPIs for the next five-year tariff period by the Commission with emphasis on improvement in energy throughput and delivery by DisCos, reduction in aggregate technical/commercial losses and overall improvement in service delivery to customers.

1. Introduction

Revenue requirement should cover the investment and operating costs of efficiently providing electricity services to consumers. DisCos operating in the Nigerian electricity market are to produce PIPs which will form the basis for revenue requirement projections and also serve as the companies' service charter with the consumers to which they will be held accountable by the Commission. The PIPs should therefore be realistic and well thought-out.

This document sets out the Guidelines for the preparation of DisCo's PIPs and explains how the Plans will be assessed by the Commission. The preparation of the PIP is an opportunity for DisCos to set out what they intend to deliver to consumers over the five-year tariff period as well as the associated costs, in line with the MYTO Methodology. The DisCo's PIP is expected to draw from the vision of the Electric Power Sector Reform Act, existing NERC rules and regulations, and the Power Sector Recovery Program (PSRP).

In addition to its regulatory interface with the Commission, the PIP should be a public-facing document for the DisCos, which their stakeholders will refer to throughout the five-year tariff period. Beyond being a submission to the Commission, DisCos are hereby encouraged to develop PIPs that reflect the priorities of the companies and their stakeholders. The quality of the Plan, the robustness of the underlining data and how well it is justified, will influence the degree of regulatory scrutiny the Commission will apply during the review. Hence if a DisCo produces a PIP of a high quality following the Guidelines, it will reduce the time and resources spent on iterative process of review and improvement and thus significantly reduce cost for both the company and the Commission.

These Guidelines provide guidance on the expectation of the Commission in the content of the PIP to be prepared by each DisCo, its structure and manner of presentation and the process that will be followed in assessing the plans.

2. NERC's expectations

The Commission expects an output-based plan that states the target outputs over the planning horizon, the programs and activities that will lead to the realisation of those outputs, the human and material resources required, the projected costs and analysis of the risk factors and the proposed mitigation measures. It should be noted that the capex and opex allowances for the outstanding years of the Performance Agreements shall be capped at the MYTO level in line with the contracts executed by the DisCo's core investors and BPE.

3. The Structure of the PIP

a. **Introductory Chapter**: The Plan should start with an opening chapter consisting of a brief introduction of the DisCo's business, vision, mission, and overall strategy. It should give a brief overview of its achievement in the last tariff period and stating its salient strategic goals over the planning horizon and stating the justification for the goals within the context of the wider sectorial goals and national priorities. The chapter should also include:

   - Brief statements on the current service deficits, the envisaged service output levels to close the gaps and the value propositions that is being promised to the customers and other stakeholders
   - Stakeholder views and aspirations
   - Specific forecast of demand and expected investment
   - Challenges envisaged

b. **State of Infrastructure Review:** A chapter should be devoted to describing the current state of infrastructure, a review of its current limitations, an analysis of the infrastructure deficit and the nature/magnitude of improvement needed for optimal operation as at date of preparing report. An MS Excel inventory of its current assets using the format to be provided by the Commission should be attached as an appendix to the Plan. A section of this chapter should describe in quantitative and qualitative terms, the company's infrastructural vision (based on company's strategic corporate vision and priorities of its customers following due consultation) over the planning horizon and how it intends to achieve that. A brief outline of new and ongoing programs and activities that are directed towards realizing the vision should also be provided.

c. **Detailed Programs Plan Chapter**: Stemming from the infrastructural gap analysis and the development vision described above, the PIP should give a detailed description of program projects and activities that will be carried out over the planning horizon, including description of the funding plans. In particular, the PIP

shall include specific actions aimed at achieving sustainable improvements in the operational performance of the DisCo in key business areas: electricity supply to customers, commercial operations and management of corporate resources. While the regulator would like to avoid being too prescriptive on operational matters of the DisCos, the actions in the scope of the PIP should at least include:

i. Electricity distribution

Very high priority

- Implementation of investments and other initiatives in distribution network rehabilitation and upgrade aimed at resolving existing constraints limiting energy throughput to the last mile and adversely impacting on the quality of electricity supply.
- Installation of metering systems to capture all electrical parameters involved in commercial transactions with NBET and TCN and amounts of energy injected to the network operated by the DisCo.
- Identification of eventual constraints to meeting electricity demand arising from issues affecting backbone (high and medium voltage) network infrastructure.
- Incorporation of an Incidents Recording and Management System (IRMS) to identify location and analyze extent of an interruption in electricity supply and to enable fast resolution and service restoration.
- Regularization of consumers not registered as customers located in manageable areas.
- Assess consumption in areas with constraints limiting the utilities' field operations i.e. non-manageable areas.
- Regularization of service delivery (electricity supply and commercial operations) in non-manageable areas with high/medium commercial losses.
- Installation of appropriate meters for all the ministries, departments and agencies in federal, state and local levels

ii. Commercial operations and management of corporate resources

High priority

- Incorporation of a Commercial Management System (CMS) to manage all commercial processes: revenue cycle, attending to customers, etc.
- Incorporation of an Enterprise Resource Planning (ERP) information system to support corporate planning and management of shared services (accounting, finance, human resources, procurement, logistics & information technology).
- Mapping of customers (points of electricity supply) and network infrastructure on a Geographical Information System (GIS), including customers' connections and links with network assets.

- Implementation of a Revenue Protection Project (RPP) supported by Advanced Metering Infrastructure (AMI) to systematically record and monitor consumption of large and medium customers.
- Incorporation of a Supervisory Control and Data Acquisition System (SCADA) to operate and control HV & MV infrastructure
- Implementation of improvements in management of requests for new service connections.

Medium priority

- Incorporation of a "Works Management System (WMS)" to manage all construction/installation works of network infrastructure.

A summarized description of the above actions is provided in the Annex to these Guidelines.

4. Overview of criteria for evaluating the PIP

During the privatization process, some key improvements which are measurable through key performance indices (KPIs) were agreed. These indices may be grouped into the following areas:

- Loss reduction
- Reliability/availability
- Metering
- Customer satisfaction
- New connection/network expansion
- Safety
- Social responsibility

The PIP is expected to reflect these priority areas showing baseline situation, projected improvement trajectory, the strategies for attaining such improvement and the expected efficient cost of implementation. The DisCo's PIP will, therefore, be assessed against these expectations. The key questions to ask thus are as follows:

a. **Robustness of Process: Has the DISCO followed a robust process?**

   The DisCo is required to demonstrate clearly that in the preparation of the PIP, it has engaged stakeholders and that the outcome of such engagement has influenced the content of its Plan. The data table forecasting models underlining the Plan must be submitted with the Plan.

b. **Outputs: Does the Plan deliver the required outputs?**

   The Plan must state in qualitative and quantitative terms, its expected short-term outputs broadly in line with the PSRP. It must also explain the resource implications for delivery of the output identified. The Plan must explain how the DisCo will deliver the outputs, given the base year situation and the forecast.

c. **Resources (efficient expenditure): Are the costs of delivering the outputs efficient?**

   The Plan must reflect best practices and efficient cost projections. Hence evaluation will like to see:

   - How does a DisCo's Plan compare with others/does it reflect wider best-practice?
   - Has the DisCo demonstrated that its financial costs are efficient?
   - Has the DisCo explained cost projections in context of historical performance?

- Has the DisCo demonstrated a consideration of alternative approaches to achieving value for money in the delivery of its outputs?
- Has the DisCo clearly linked its expenditure to relevant outputs and secondary deliverables?

d. Resources (efficient financing): Are the proposed financing arrangements efficient?

- Is the data in the plan consistent and has the DisCo explained cost projections in context of historical performance?

e. Uncertainty & risk: How well does the Plan deal with uncertainty and risk?

- Have the DisCo clearly articulated the key uncertainties it faces and considered how it will address them (e.g. including uncertainty mechanisms)?
- Have the DisCo considered all foreseeable risks and how to mitigate those risks?

5. Further explanatory notes on the evaluation criteria

Criterion 1 - Process

The DisCos are expected to develop PIPs reflecting their engagement with their stakeholders. Hence the Plan should be clearly written in simple language with recourse to technical language kept to a minimum. The utility shall provide clear explanation of technical content where included so as to allow all stakeholders to fully understand the documents. The Plan should provide justification for every activity (and cost to be incurred) during the plan horizon and linked to specific output that derives from the overall sector-wide development vision. DisCos need to demonstrate that a strong and robust development process has been followed in planning for the period. This process should include the engagement of the business and its stakeholders and ensure proposals are clearly communicated and evidenced. This process needs to be evidenced throughout the plan so that the Commission, stakeholders and other readers can clearly see how the DisCo has arrived at its conclusions.

All DisCos are required to demonstrate that they have effectively engaged with a wide range of stakeholders when formulating their plans. The Commission will not consider it sufficient for DisCos to set out the stakeholder engagement activities they have carried out without demonstrating what has been learnt from the engagement and how the lessons have impacted on the plans. They are also expected to provide a basis for rejecting any input from stakeholders where necessary.

The DisCos must ensure all data tables submitted are well-justified in the text and a clear linkage between the data tables and the text is provided. They should also maintain consistent terminology between their PIP narrative and the data tables.
The DisCos are expected to show how their strategy will contribute to meeting the goals of the Federal Government's Economic Recovery and Growth Plan, the PSRP and energy access targets over the period.

Criterion 2 - Outputs

A well-justified PIP would demonstrate how the DisCo will achieve successful output delivery. This means identifying the planning and resourcing requirements, especially where the level of activity is expected to increase significantly from historical levels. The DisCos shall be required to demonstrate that their resourcing requirements are efficient. As part of the Performance Improvement Plan, the DisCos are required to set out an assessment of asset health, criticality and replacement priorities at:

- the beginning of the planning period, effectively reflecting their view on the current condition, risk and replacement priorities of the network
- the middle of the period with no intervention, effectively reflecting their view on asset degradation over the period
- the middle of the plan period with intervention as proposed in their well-justified PIP
- the end of the plan period with no intervention, effectively reflecting their view on asset degradation over the period
- at the end of the plan period with intervention as proposed in their well-justified Plan

How outputs will be delivered and justified in view of baseline/forecast?

The PIP should clearly identify how a DisCo intends to deliver the outputs. The DisCo is expected to propose, in its' Plan, a target level of delivery for each output and to justify this with reference to stakeholder feedback, network performance and a consideration of efficiency. The Plan should clearly identify the impact of these outputs on the required expenditure for the plan period.

Criterion 3 - Expenditure

The DisCo must clearly set out and explain the costs of delivering its outputs. A well-justified PIP will demonstrate, through clear evidence, that DisCo's costs are the most efficient for the delivery of the planned output.

Has the* DisCo *demonstrated that cost projections are efficient?

The costs set out in the Plan should be efficient over the long-term. DisCos will need to provide evidence of the necessity of planned activities, that they have considered alternative options (e.g. operating expenditure and capital expenditure alternatives; network and non-network solutions) and that the costs of delivery are appropriate. This will include taking into account the longer-term development of their networks. We expect DisCos to use a range of tools in demonstrating the efficiency of their costs including internal and external benchmarking evidence and market testing.

How does the plan compare with others/does it reflect best-practice?

A key element in judging Plans will be the comparison of each DisCo's Plan with best practice. In assessing a DisCo's Plan, the Commission will consider the quality of that Plan in comparison with other DisCo's Plans as well as the performance in equivalent industry and business in other jurisdiction in areas such as cost efficiency. This is necessary to establish industry efficiency frontiers that the utilities have to aspire to. The DisCos are expected to be innovative, borrowing ideas from other sectors in their approach to the delivery of outputs and secondary deliverables.

Criterion 4 - Financing

The DisCo needs to clearly set out in its PIP how it plans to finance its activities over the price control period. To be considered well-justified, a plan must demonstrate through clear evidence, that the DisCo's financing projections are efficient.

Has the* DisCo *demonstrated that their financial costs are efficient?

We expect DisCos to use a range of tools in demonstrating the efficiency of their financing costs, including established economic models, evidence from market data and relevant comparators and precedents. We would expect the DisCos to take a proportionate approach to providing evidence with greater information for more material areas.

Criterion 5 - Uncertainty and Risk

Has the* DisCo *clearly articulated the key uncertainties it faces and how it will address them?

There will always be uncertainty about whether the outputs and expenditure requirements will be appropriate over the duration of the plan. Macroeconomic variables, volumetric risks and other uncertainties may affect the plan. NERC expects DisCo's Plan to articulate the key uncertainties and how the DisCo has taken account of these in developing its long-term business strategy.

Has the* DisCo *considered risk and how to mitigate those risks?

An important part of any price control settlement involves considering the type and level of risk that a DisCo consider as efficient to bear and what risks, if any, should be borne by customers. A well-justified Plan should demonstrate an assessment of risks during the price control period and state what the DisCo intends to do in the light of that risk.

6. ANNEX – Summarised description of actions in the PIP

Commercial Operations and Management of Corporate Resources

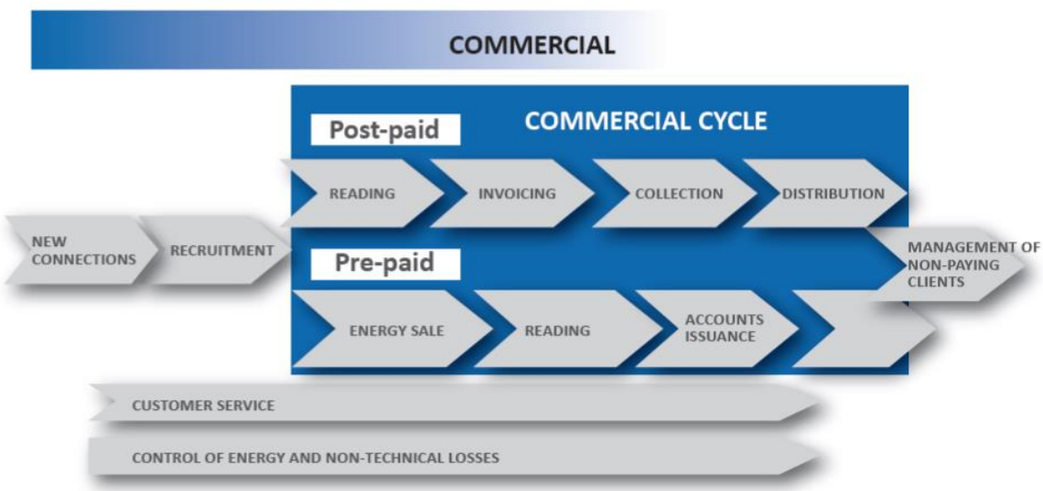
Incorporation of a Commercial Management System (CMS) to manage all commercial processes: revenue cycle, customer service, etc.

DisCos shall incorporate a state-of-the-art CMS allowing proper execution and monitoring of all activities related to:

- Commercial or revenue cycle, including specific stages for customers with post-paid meters (meter reading, billing, bill distribution and collection) and customers with pre-paid meters (energy sales, issuance and distribution of statements, etc.).
- Attending to customers at commercial centers, by phone (contact center), WEB, social media.
- Disconnection and reconnection of electricity supply related to commercial debts and other actions to manage unpaid bills
- Management of requests for connection and registration of new customers.
- Energy flows and balance and management of non-technical losses.

Incorporation of the new CMS requires building, maintaining, and regularly updating a reliable customer database.

Commercial operations



Standard modules of a state-of-art CMS are shown in the table below.

Table 1: Standard modules of CMS

MODULE	FUNCTIONALITIES
Meter reading	Provides data on performance (quality, productivity) of meter readers, and on consumption for billing and generation of field orders (inspection of meters, etc.).
Billing	Supports the generation and issuance of bills and related processes such as maintenance of rates and computation modules.
Service anomalies	Supports the management of cases involving violation of contracts and irregular/illegal service connection.
Billing adjustments	Supports massive rebilling for extended periods (around 5 years).
Payments processing	Supports processes related to collection of bills and management of unpaid bills.
Service application	Supports management of requests from customers applying for a new service connection or any change in their current contract.
Customer assistance/ complaints	Allows full management of complaints received from customers. Complaints can be related to bills, payments, contracts, meters, service application, and others.
Meter management system	Allows tracking of meters and other devices from the time they are delivered to crews for installation until removal.
Management information system	Provides a snapshot on the status of various customer-related performance indicators.
Energy sales	Supports management of energy sales to dealers.

Incorporation of an Enterprise Resource Planning (ERP) information system to support corporate planning and management of shared services (accounting, finance, human resources, procurement, logistics & information technology).

DisCos shall incorporate an Enterprise Resource Planning (ERP) information system to support efficient corporate planning and management of shared services (accounting, finance, human resources, procurement, logistics & information technology) of the DisCo.

Standard modules of a state-of-the-art ERP are shown in Table below.

Table 2. Standard modules of ERP

MODULE	FUNCTIONALITIES
Financial	• Integral (companywide) financial management, including budget preparation and monitoring of execution. • Accounting data integration: management of receivable accounts and payable accounts, banking operations, tax declaration, general accounting, etc. • Analytic accounting: management of liquid assets, expenses and investment budget, bank reconciliation statement, assets management, loans and leases management, and internal risks and insurances management.
Logistics	Supports planning, operations and management of inventories of warehouses and other facilities for storage of materials and equipment used by DisCo for its regular operations.
Human Resources	Supports all operations related to management of human resources: management of employees' database, payroll, recording of attendance, training, evaluation and promotion, recruitment, occupational health, etc.
Procurement	Supports all stages in the processes for procurement of goods and services companywide

Mapping of customers (points of electricity supply) and network infrastructure on a Geographical Information System (GIS), including customers' connections and links with network assets.

This task is key to allow proper geographic identification of each and all points of electricity supply, as well as of network infrastructure operated by the DisCo. It includes:

- Incorporation of a Geographic information system (GIS) to build up and keep updated reliable network assets and customer's databases.

- Creation of a centralized Network Asset Database (network model + link customer - network). The centralized Network Asset Database (CNADB) is an application that integrates technical information from the electricity network assets and connectivity between them. In addition, it links customers with distribution transformers or electric network. CNDAB interfaces with the Geographic Information System (GIS), Commercial Management System (CMS), Incidents Recording and Management System (IRMS) and SCADA.

- Identification of the link customer - network and incorporate it into the IRMS. The key design feature of IRMS is its ability to identify the link between customers and the electricity network, in order to analyze the location and extent of an outage. Outage prediction capabilities are enabled by a detailed representation of the distribution network. A model that represents the network's current topology and connection to the end consumer is essential to determine the location of the incident.

- Creation of customer database, integrating customer location and link to the network, comprising:

- On-site campaigns to get customers and consumers data: location, personal Information, technical information, etc.
- Upload the information to the CMS database.
- Link metered customers to reading routes.
- Check adequacy of billing of unmetered customers.
- Carry out regularization process of consumers illegally connected to the network,

Implementation of a Revenue Protection Project (RPP) supported by Advanced Metering Infrastructure (AMI) to systematically record and monitor consumption of large and medium customers.

DisCos shall implement a Revenue Protection Program (RPP) targeting all high and medium voltage customers, and low voltage customers with monthly consumption above 1,000 kWh. The objective of the RPP is to ensure that every unit (kWh of electricity) consumed in that "high value" segment of the market served by the DisCo is metered and billed on a permanent basis.

The RPP is based on the need to:

(i) systematically record and monitor consumption of selected groups of customers using remote metering enabled by Advanced Metering Infrastructure (AMI); and

(ii) adopt consistent corrective action when irregular situations are detected, to ensure full metering and billing of consumption on a permanent basis.

Implementation of task (i) and (ii) requires the implementation of organizational arrangements (creation of one or more Metering Control Centers) to make proper and timely use of the information provided by the AMI with the support of state-of-art software (Meter Data Management (MDM), and adopt consistent corrective action if needed.

Regularization of consumers in manageable areas.

DisCos shall identify all consumption points located in fully manageable areas (without constraints to carry out field operations), register all users as regular customers in the database of the CMS (supported by the GIS), install consumption meters (post-paid or pre-paid, depending on type of consumer), and incorporate customers to the regular revenue cycle managed through the CMS.

Criterion to prioritize manageable areas for implementation of the plan should be decreasing estimated per-capita consumption, based on demand of distribution transformers supplying each area and estimated number of consumers located in the area. The plan should include actions to inform population in each area and stakeholders about the activities to be carried out by the DisCo.

Implementation of arrangements to secure payment of consumption of government agencies (all levels).

DisCos shall submit to NERC a up-to-date list of points of electricity supply corresponding to government agencies (all levels: Federal, State, Municipalities, etc.). Installation of appropriate meters should be a specific activity of the PIP. The PIP should include timeline to complete metering of all MDA customers and innovative revenue protection plan.

Implementation of improvements in customer service and efficiency in revenue cycle operations.

DisCos shall implement a full-scope Contact Center able to attend and solve all requests from customers related to quality in electricity supply (complaints for outages and other issues), as well to commercial matters. The Contact Center should be able to solve all requests received, without need for customers to move to commercial agencies, unless they are responsible for any wrongdoing. Customers should be able to reach the Contact Center via phone, SMS, WEB or social media.

DisCos shall implement delivery of bills to postpaid customers via mobile phones, using SMS for customers with conventional devices, and emails to those users with smart phones (customer choice). They should explicitly agree with each customer on the phone number to be used for reception of bills, and incorporate that information in the customer's account in the CMS database.

DisCos shall allow customers to pay their bills using the mobile phone payment systems developed by telecommunications companies operating in Nigeria.

Implementation of improvements in management of requests for new service connections.

DisCos shall implement clear and transparent procedures to attend any request of new service connection, including on-line application, publication on the company's website of all the information on the connection process, providing customers WEB access to records of GIS, and integrating to the Contact Center provision of information on status of requests for connection and procedures to be followed for applications.

Electricity Distribution

Identification of eventual constraints to attending to demand deriving from issues affecting backbone (high and medium voltage) network infrastructure.

DisCos shall identify investments aimed to remove any constraint to attending to demand deriving from insufficient capacity, configurations not meeting applicable criteria on stability and reliability and other situations involving backbone (high and medium voltage) network infrastructure. Once those investments are implemented, any constraint in attending to demand should derive from issues affecting generation and transmission infrastructure, but not assets operated by the DisCo.

Implementation of investments and other actions in distribution network rehabilitation and upgrade aimed at attending do existing situations severely affecting quality in electricity supply.

Short-term actions shall be executed by DisCo in manageable areas and include:

- Replacement of deteriorated network assets
- Reinforcements/replacements needed to solve situations of big overloads/voltage drops
- Installation of new switchgear equipment (reclosers, disconnectors, etc.) needed to optimize network configurations and enhance flexibility in operations (isolate segments with faults, etc.)
- Install fault Indicators in the most important circuit branches.

Medium-term actions should include:

- Construction of MV - backup facilities to improve quality of service in manageable areas.
- Implementation of new distribution networks for regularization of supply in non-manageable areas with high commercial losses.

Installation of metering systems to record all electrical parameters involved in commercial transactions with NBET and TCN and amounts of energy injected to the networks operated by the DisCo.

DisCos shall install metering systems to record all electrical parameters involved in commercial transactions with NBET (power purchase agreements) and TCN (provision of transmission services), as well as all amounts of energy injected to the distribution networks operated by the DisCo (to enable energy balances and computation of losses). Metering systems must be designed and installed in full compliance with applicable national standards and regulations issued by NERC.

Incorporation of an Incidents Recording and Management System (IRMS) to identify location and analyze extent of an interruption in electricity supply, and enable fast resolution and service restoration.

DisCos shall incorporate an IRMS to support quick and accurate identification of location and analysis of extent of any interruption in electricity supply to customers, and enable fast resolution and service restoration.

IRMS allows the DisCo to keep permanent track of all customers' complaints from the time each call is received, progress in resolution of each complaint, and actions taken by the regional Distribution Operation Centers (DOCs) to manage and monitor the crews responsible for field actions needed for service restoration until this condition is achieved. Starting and ending times of all interruptions in supply affecting each individual consumer are recorded, and therefore frequency and duration of interruptions are measured at the end-user level. IRMS is supported by a detailed representation of the distribution network and links between points of electricity supply and network assets, using a Geographic Information system (GIS).

IRMS is in general composed by three modules:

- Reception and automatic classification of customers' calls (complaints).
- Follow-up of complaints and actions on the distribution network for service restoration.
- Information to management to assist decision making and monitoring.

The system relies on a fully functional database that contains:

- The data on customers in the database of the CMS.
- The link of each customer to supplying MV/LV transformer and LV lines.
- The supply circuit 'upstream' each MV/LV transformer to the transmission substation.

Incorporation of a Supervisory Control and Data Acquisition System (SCADA) to operate and control HV & MV infrastructure.

DisCos shall incorporate a Supervisory Control and Data Acquisition (SCADA) system to remotely operate, supervise and control their high and medium voltage infrastructure. SCADA is complemented by IRMS to manage and resolve incidents at low-voltage level. A state-of-art SCADA system contributes to increase quality and reliability in electricity supply and reduce operating costs.

Incorporation of a "Works Management System (WMS)" to manage all construction/installation works of network infrastructure.

DisCos shall incorporate a Works Management System (WMS), also identified as Enterprise Asset Management System (EAMS), to support planning and execution of works in electricity networks infrastructure, including construction of new networks (expansion plans), rehabilitation/upgrade of existing networks, works to connect new customers, etc.

WMS/EAMS enables efficient execution of processes for network planning, costing, preparation of quotations to applicants, assignment of works to own staff/appointed contractors (work orders generation process), control of flow of materials, supervision of execution of works, commissioning of works.

Business plan presentation and structure

Each DisCo is expected to submit a well-written business plan that reflects the strategy for its business. They are expected to develop a real business plan for use by their employees and stakeholders, rather than just a regulatory submission. This guiding document has not been too prescriptive in the requirements for the common presentation and structure that should be used. Rather a high-level guidance on presentation and structure is presented here which DisCos should follow when they are drafting their business plans. The guidance covers three areas:

- Presentation: the written style and look of the plans
- Structure: how the information in the plans should be grouped to allow for a level of consistency and comparability across the plans
- Navigation: how to make it easier for readers to find the information they require easily.

As well as submitting plans to the Commission, DisCos will be expected to publish their business plans in full on their websites. It is expected that their published plans and the plans they submit to the regulator to be as similar as possible.

In addition, all DisCos are required to set out their key information in a one-page factsheet.

One-page factsheet

There are groups of stakeholders such as consumers, consumer groups, media and small suppliers who have an interest in high-level information. These stakeholders may not have the time, resources or expertise to scrutinize the business plans and extract the information they require. Even the executive summary would not allow stakeholders access to the information as quickly and easily as they required; hence a uniform report structure as set out in Appendix 2 and hyperlinked table of contents will go some way towards helping such stakeholders locate information within the plans. It however recognized that not all stakeholders would be able to read through the plans, hence all DisCos are to include their key information in a One-page factsheet based on a template that the Commission will develop in consultation with DisCos, consumer groups via bi-lateral meetings.

Content of the One-page factsheet

The format of the factsheet would be common across all DisCos and they would be required to fill in a page for each of their license areas. This page will contain only the key information and data these stakeholders would want/need to know including:

- a brief description of the network, number of customers, number of staff, length of cables etc. as well as brief background detail on the company that owns the network
- a brief description of the outputs the consumers should expect from executing the plan and some ideas of how the plan is likely to impact on customer bills
- how the money received will be spent, either as network investment or operating costs
- a brief description of the DisCo’s strategy for the network over the five years.

The factsheet is intended to be high level and is therefore limited in detail. Stakeholders requiring in depth information will need to find it in the full business plans. DisCos must publish these factsheets alongside their business plans and they should be clearly signposted to ensure consumers can easily access them. Links to all the factsheets will also be published on the Commission's website.

NERC will not use the content of the One-page factsheet in its assessment of the business plans other than to confirm accuracy and consistency. Using the factsheet does not preclude DisCos from producing any additional communication material for their stakeholders if they wish to do so.

Structure

The DisCos business plans must conform to a high level structure. This will provide clarity on which section of the document will contain the information required. Table A1. below, sets out the high level business plan structure and a description of what we would expect each of these documents to include.

Table 3: Structure of Business Plans

Stakeholder facing document	• **One-page summary** • **Executive summary/overview** • **Process**
Core Narrative	• **Expenditure** • **Outputs** • **Financing** • **Managing uncertainties**
Innovative strategy	**Proposed innovations**
Annex	

Navigation

Readers of the plan should be able to find the information they require quickly and easily. This will save them a lot of time and effort and also save the DisCos themselves from having to provide further clarification at a later date.

Cross referencing

In order to successfully navigate the plans, DisCos should effectively cross reference between different sections. The use of hyperlinks would be a great help to readers. Hyperlinks should be included when referencing any of the data tables, annexes or any further detail which is explored elsewhere in the plan (including the annex documents).

It is important to have clear links between the data tables and the core narrative sections. Data tables should be clearly numbered and any data in the narrative should be clearly linked to the relevant data table number (and hyperlink). For each data table there should also be a link to where in the main narrative this data is mentioned. For some data tables this may be more than one part of the plan that describes the data.

Overview for each section

Each section of the plan should have an overview and contents page. It should be easy for readers to get to the information they require (using hyperlinks). Each DisCo should include a section upfront explaining how its plan fits together. This should include a table that maps our assessment criteria to relevant parts of the plan and another that maps individual cost, output, uncertainty and finance areas to the relevant sections of the plan.