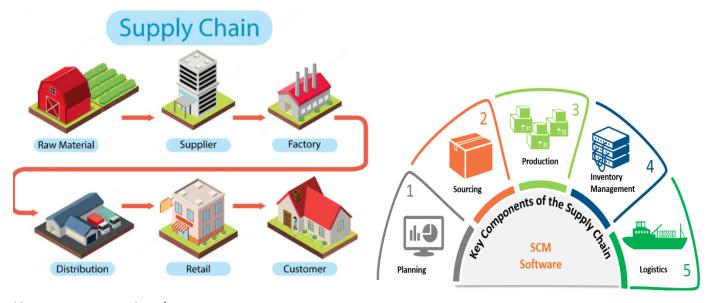


KSEBL – Procurement and Supply Chain Management

Supply chain management (SCM) is the process of overseeing and optimizing the flow of goods, services, information as they move from supplier to manufacturer to wholesaler to retailer to consumer. It involves the coordination and integration of these activities to maximize efficiency, minimize costs and ensure customer satisfaction.



Key components involve:

Planning: This involves forecasting demand, developing strategies for meeting that demand.

Sourcing: Involves selecting suppliers, contracting, and managing relationships with vendors.

Inventory management: Involves optimal levels of inventory to meet demand.

Information systems: This involves the use of technology and data analytics to do procurement and supply chain management.

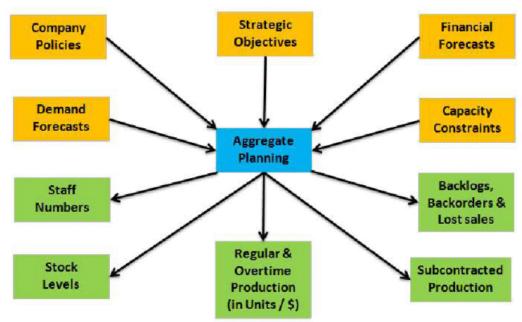
Aggregation:

In a big company like KSEBL, it is high time to implement aggregation process of procurement of materials. No restriction is imposed in KSEB for procuring vital materials at present. Aggregation process is initiated to achieve scale of economies, ensure standardization by procuring quality materials. The process is already streamlined after comprehensive discussions, Workshop of all stake holders and trainings. Until the final implementation, the present process of emergency

procurement shall continue as per the guidelines stipulated and hence the work flow will not be disrupted.

Those materials of emergency nature/ consumables, but not in the plan purchase list will be purchase as stated above for the stipulated period upto August 2024. However, these items required for the remaining period shall be procured by following procurement process to ensure seamless supply. All measures are set in position by KSEB to make available the materials in nook and corner of the states in a time bound manner. Now the Assistant Engineers to Chief Engineers are purchasing same materials with different pricing strategy without a prompt quality check. This often leads to a high pricing and forgone revenue of KSEB. This process and situation is going to change. Different materials in bulk quantum's will be procured by the designated officers through tendering process and shall be distributed across the state.

Aggregation is a process has demonstrated its efficiency in achieve cost optimization and quality in all sphere of activities. Aggregation in supply chain management refers to the process of combining or consolidating multiple individual items, orders, or shipments into larger units for more efficient handling, transportation, and distribution throughout the supply chain. It involves grouping similar items or orders together to achieve economies of scale and optimize various aspects of the supply chain, such as transportation costs, storage space utilization, and order processing efficiency.



Advantages:

- 1. The seamless materials supply reach electrical sections, the field officers can concentrate in matters of core functional areas.
- 2. Ensure good quality materials as per the standards.
- 3. The price optimization compared to local procurement can be achieved and can prevent revenue loss.

Procurement and Supply Chain Management is one of the most important functions in any company. It is not only important to concurrently study successful bidding but also failed bidding to understand the reasons for failure of the bids. Such concurrent analysis improves the procurement and other related processes. The quality of work, life of infrastructure,

operational performance, as well as company's financial performance depends on the improvement in procurement.

It was specifically instructed that procurement cycle shall start in September and complete the process by December in every year and place the orders to ensure that there is no material shortage.

It is noticed that the present Bidding documents are old version and no fruitful efforts were taken to incorporate appropriate and timely changes. Because of this, the bidding response became poor and supplies marred with one or the other issues. It becomes problems at later stages regarding payments, penalty, barring the Agency etc. Therefore, it is highly essential to amend the Bidding documents as per the specifications, conditions etc.

At the outset all the Pending issues raised by the manufacturers and suppliers in SCM Unit are analyzed. Series of Workshop conducted with manufacturers and suppliers on 6, 7 and 11 th December 2023. Practices of other utilities were also studied.

- 1. Basic principles of the procurements are identified and Board Order is released as below.
- 2. Resolved to standardize the tender conditions for procurement of materials:
- 3. The standard guidelines practiced by other DISCOMs and Central PSU in power secretor were considered.
- 4. Contract management as per the Agreement

The methodology followed to work out Procurement and Supply Chain Management modification:

The procurement of material and EPC contracts were studied and analysed. Based on the analysis, the workshops with major EPC contractors as well as suppliers were conducted. After that series of meetings with Directors of SBUs, Chief Engineers, Dy Chief Engineers and field staff including Store in charge were conducted from Nove 2023 onwards till date. The respective officers were asked to update the data of the items in store. The Directors were instructed to do proper prioritization of projects for FY 2024-25 and do forecasting of items required for the same. They were instructed to prioritize deposit works, works to mitigate regional imbalances, works to rectify most problem areas based on technical criteria. Based on these detailed exercise, the Directors have submitted the procurement of items and quantity.

Each of the respective SBUs were oriented to do standardization of items so as to avoid same item with same utility but different specifications. After doing standardization by Transmission SBU and Generation Electrical SBU, the Functional Committee has done standardization of items for Distribution SBU.

The SCM unit with the help of the resource persons of SBUs have done clusters of items. Each cluster is now assigned to a specific Procurement Authority. In short a particular designated officer is Procurement Authority for the specific items belonging to that particular Cluster.

After doing the structures and the processes i.e. Bidding was corrected and all officers were trained by conducting series of training.

It was also decided to have supporting procurement authorities from Information Technology Unit, Internal Audit unit and APTS unit to facilitate the procurement and supply chain related other complementary activities. Information Technology unit completed SAMAGRA — it is ERP of KSEBL, for Distribution SBU. Other modules for Transmission is almost complete and

Generation Electrical is in pipe line. In three months all these modules will be complete and fully functional.

The Board shall do assessment of the procurement system yearly by engaging an expert agency to understand the gaps, if any and strengthen the processes further.

<u>Board Order 1 -</u> Material Procurement - Pending issues raised by the Manufacturers and Suppliers in SCM unit -Specific observations and remarks - consolidated - Revision of the Bidding Document for procurement.

B.O. (DB) No.69/2024 (SCM/TA-Gl/2023-24) Thiruvananthapuram. Dated:13-02-2024. (Click the link below for BO)

https://drive.google.com/file/d/1d1VXoM_eCroXxxQ8MWUmY2gMATOxojKL/view?usp=drive_link

<u>Board Order 2 – Procurement and supply chain management frame work for materials and services in KSEBL:</u>

B.O. (DB) No.70/2024 (SCM/TA-GI/2023-24) Thiruvananthapuram. Dated:13-02-2024, (Click the link below for BO)

https://drive.google.com/drive/folders/1JmjKTUyJbEDc6kPhSgwOIZfa_0xUwlzZ?usp=drive_link

This Board order defines the present scenario of material procurement frame work of KSEBL in Distribution, Transmission and Generation. Draw back in existing method is listed out.

-New Procurement authority is defined. Ten Annexures for the materials in Distribution, Transmission and Generation with its pricing is defined and can read in the above link.

A 12-point indicator is framed:

- 1. Present scenario of material procurement.
- 2. Draw back in existing system
- 3. Proposed frame work.
- 4. Procurement for the financial Year 24-25
- 5. IT support for felicitating procurement
- 6. Procurement through open tenders/ Rate contract.
- 7. Material needing fabrication.
- 8. Procurement of Transmission and Generation Items
- 9. Revision of Delegation of Powers.
- 10.PQ Evaluation committee and Price bid evaluation.
- 11. Engaging external agency
- 12. Special team for FAT (Factory acceptance test)

Procurement Authority

Procurement Authority			
Distribution materials	Transmission materials	Generation materials	Raw materials for fabrication of material items
The Chief Engineer (P&SCM).	The Chief Engineer (P&SCM).	The Chief Engineer (Generation).	Deputy Chief Engineer, Civil Circle, Pallom
The Regional Chief Engineers of Distribution.	Chief Engineer Transmission South, North, Chief Engineer (SO)	Deputy Chief Engineers of Generation Circles	
The Dy. Chief Engineers of Electrical Circles.	Deputy Chief Engineer of Transmission Circles and Executive Engineer of Transmission Division, Pathanamthitta and Deputy CEs of SOC		

Special team for FAT (Factory acceptance test)

FAT (Factory acceptance test) & Pre dispatch inspection:

An inspection team is formed with a panel of officers both from Electrical and Civil division who have experience in the field of material inspection. Proper training is planned on Indian standards and International standards of various equipment so as to ensure quality checks of the material getting procured.

<u>Guide lines</u> for purchasing essential material required for emergency and Pre monsoon maintaince Materials required are listed out specifically and vivid instructions are accorded to SBU for purchase of Emergency materials.

<u>Order 3-</u> Process re-engineering of procurement procedure in KSEBL- Procurement of urgent material for emergency pre-monsoon and breakdown maintenance works — Guidelines for purchasing essential material required for the period May to August 2024.

Office Order (CMD)No.DD/AE6/22663/2024/PP/MaterialDated:06-05-2024

https://drive.google.com/file/d/1DWFKAKFww5r09HBzFXg3e5ozX9pKIY9H/view?usp=drive link

Having considered the proposals, all the respective SBUs shall do the purchases of emergency material up to August 2024 as per the guidelines. (Click the above link to view)

Standardization of items and its specification is made.

Prioritization of projects is done. Total quantity required is arrived. If needed 25% of additional order can be placed.

Order 4 - First batch of procurement plan for 24-25 for three strategic business Unit:

Office Order (CMD) No. 734/2024/ SCM/ XM/ AE(E)DD/AE6/2024/PP/MateriaDated10/05/2024/

https://drive.google.com/file/d/1ysPo09xS1ak-6QbVvVKSlgSdyuoNfspn/view?usp=drive_link

Additional guide lines: Material requirement for essential works.

Procurement of urgent material for emergency pre-monsoon and breakdown maintenance works- Additional Guidelines for purchasing essential material required for the period May to August 2024.

The stock in hand as on 30th April 2024 is updated. All Procurement Authorities, especially the Chief Engineers and Dy Chief Engineers have item wise plan for supply chain management so that during exigency without any time lag the information can be passed on to the store where the items are available.

<u>Order 5-</u> Process re-engineering of Procurement in KSEBL-Procurement of urgent material for emergency pre-mansoon and breakdown maintenance works- **Additional-Guidelines** for purchasing essential material required for the period May to August 2024:

OfficeOrder (CMD)No.DD/AE6/2024/PP/Material/22663Thiruvananthapuram. Dated:10-05-2024 (Click below link for Office Order)

https://drive.google.com/drive/folders/17iykyEyu4PTEFWhRPBfydgMeU7X4kITo?usp=drive_link

Conclusion:

Effective supply chain management can lead to numerous benefits, including lower costs, faster delivery times, longevity of power infrastructure, and greater competitiveness in the marketplace.

It requires consistent committed efforts from the dealing officers. Every procurement whether resulting into supply order or not is learning process. With such learning, concurrently system to be updated, processes to be revisited, standardization to be improved.