

# SMART GRID READINESS-SELF ASSESSMENT TOOL

*Power distribution companies (DISCOMs) in India are at different stages of development in terms of their physical infrastructure and process maturity, with each having their set of challenges and resources at disposal to mitigate such issues. However, the need for modernization towards a smart grid system is a common priority for all, for which a number of initiatives at discom, policy and regulatory level are already underway.*

In this context, the National Smart Grid Mission (NSGM) has developed a Smart Grid Readiness-Self Assessment Tool (SGR-SAT) that aims to facilitate DISCOMs better understand the grid modernization journey and prepare them for this transition. The SGR-SAT, developed under the UK-India bilateral programme “Supporting Structural Reforms in the Indian Power Sector” (Power Sector Reforms Programme), provides a common framework for utilities to self assess, understand gaps in their areas of priorities and learn from each other.

## WHY USE THE TOOL?



Establish a generic notion of the smart grid journey



Evaluate utility readiness to implement smart grid initiatives



Support inter-se learning from each other



Define smart grid goals, and prioritize investment/intervention areas

## ABOUT THE TOOL

The tool takes a systems view of a typical power distribution company in India and surrounding region and attempts to analyse each of the distinct utility components (domains) and sub-systems (sub-domains) to create a common and holistic evaluation methodology.

The six domains include: Organization; Network Planning, Asset Development and Asset Management; Grid Operations; Revenue Management and Energy Audit; Customer Interface; and Regulatory and Policy.

All these components/ domains can be further viewed as a sum of parts of various sub-systems/ sub-domains that amalgamate to complete the utility internal structure.

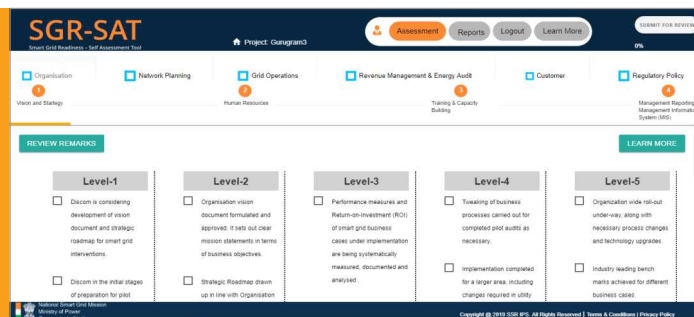
Maturity levels within each sub domain map the utility modernization journey, and help the utilities define their targets.



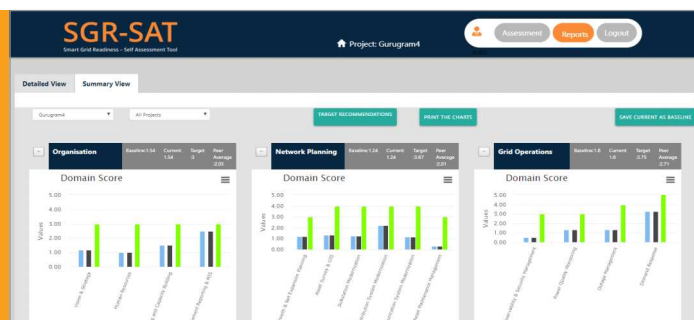
The SGR-SAT is not a tool for ‘ranking’ DISCOMs. The tool emphasizes the maturity assessment based on DISCOM’s own set of priorities and supports peer-to-peer learning.

# HOW SGR-SAT WORKS?

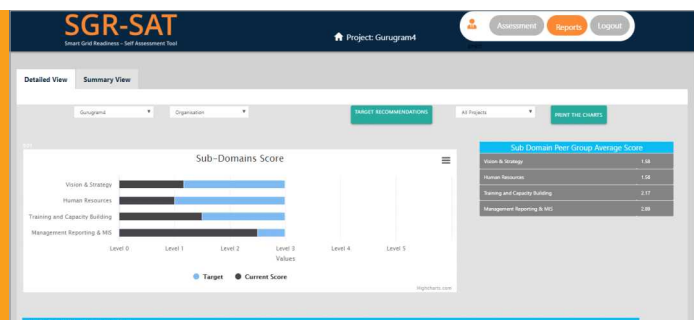
The utility completes the maturity self-assessment survey and creates an as-is maturity state. It may also upload documents for review/validation of the self-assessment by NSGM or appropriate agency specified by the Ministry of Power.



The utility analyses survey results on the maturity dashboard using peer group analysis. This analysis will help the utility identify areas where it lags and create opportunities to learn from utilities performing well in the respective domain/sub-domains.



The utility sets target maturity levels across different domains/sub-domains based on its business objectives and overall vision. Regular assessments can be undertaken to track progress against its targets.



## ABOUT THE NATIONAL SMART GRID MISSION (NSGM)

The National Smart Grid Mission (NSGM) has been established by Government of India to accelerate Smart Grid deployment in India. NSGM has been operational since January 2016 and has its own resources, authority, functional and financial autonomy to plan and monitor implementation of the policies and programs related to smart grid in the country. To know more, please access <https://www.nsgm.gov.in/>

## ABOUT THE POWER SECTOR REFORMS PROGRAMME (PSR PROGRAMME)

The UK Government, in partnership with the Ministry of Power (Government of India), has undertaken a Technical Assistance programme titled, "Supporting Structural Reforms in the Indian Power Sector" (Power Sector Reforms Programme)". The programme commenced in November 2016 and focuses on supporting structural market reforms that can ensure better energy security, reduced carbon emissions and help India achieve inclusive economic growth. KPMG is the lead implementing partner of the PSR Programme. To know more, visit: <https://www.psrindia.com>

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