

**Minutes of the meeting held with the State Governments and Union Territories other than the major mineral rich States on 16<sup>th</sup> June 2017 at Aluminum Room, First Floor, 'D' Wing, Shastri Bhawan, New Delhi under the Chairmanship of the Union Secretary (Mines), Shri Arun Kumar.**

A meeting was held under the Chairmanship of the Union Secretary (Mines), Shri Arun Kumaron 16<sup>th</sup> June 2017 at 11:00 am at Aluminium Room, Shastri Bhawan, New Delhi with the State Governments other than the major mineral rich States. The list of participants is given at Annexure-I.

2. Union Secretary (Mines) welcomed all the participants. At the outset, Union Secretary (Mines) emphasised that Central Government is ready to extend all possible support to the State Governments and this meeting is an opportunity to share experiences to improve the mineral administration in the country. He mentioned that District Mineral Foundation (DMF) has been envisaged in the MMDR Amendment Act, 2015 for amelioration of mining affected areas may be extended to minor minerals by the State Governments. He informed that the Central Government has developed a Mining Surveillance System (MSS), Star Rating System (SRS) and Mining Tenement System (MTS) for major minerals which are extremely useful ICT tools in mineral administration. These systems may be adopted by the States for minor minerals as well, with suitable modifications as per their respective State Government minor mineral rules. He mentioned that though the control of illegal mining is under the domain of the State Governments, the Central Government has taken initiative to develop the MSS to facilitate the States for leveraging the modern space technologies in monitoring of illegal mining activities. Likewise the Star Rating System which has emerged as a potent tool for implementation of the Sustainable Development Framework (SDF) in the mining sector may also be adopted with suitable modifications for minor minerals where it may be helpful in addressing environmental concerns. He informed that the Ministry is working out a model template for the Star rating of minor minerals. He informed that in the last meeting of Mining Ministers on 4.5.2017 held at New Delhi, a committee had been constituted by the Central Government to address the ubiquitous issues in Sand Mining raised by the State Governments, which will formulate policy guidelines for sustainable sand mining ensuring adequate availability at reasonable prices.

3. Shri Prithul Kumar, Director, Ministry of Mines made a presentation giving brief overview of recent developments in the mineral sector. Copy of the presentation is placed as Annexure II. The salient points are as under:

- a) The e-auctions introduced for major minerals have generated huge premiums to be received by the State Governments over the life of the leases. The adoption of auctions in minor minerals would also entail realisation of better values to the State Governments.

- b) The recent initiatives of the Union Ministry of Mines MSS, SRS and MTS were explained. Their development process and methodology were explained illustrating the immense benefits of each of the systems when implemented for the mineral regulation and administration. Their current status of implementation was informed. Their adoption in the minor mineral regimen would be immensely useful in similar ways.
  - c) The implementation of PMKKKY through DMF would make available the requisite funds to address the issues of the affected population in the minor mineral mining areas.
4. Shri Ranjan Sahay, CG/IBM made presentation on MTS. Copy of the presentation is placed as Annexure III. The salient points are as under:
- a) MTS would be an online system, which will bring in a lot of ease and transparency in mineral administration and will cover the entire life cycle of a mine from exploration till mine closure. Real time information will bring transparency, fair play and effectiveness.
  - b) MTS will be implemented in two phases where Phase I will encompass key modules such as registration, mine plans, mining returns and mobile apps for reporting, Star Rating integration followed by Ore Accounting System, whereas Phase II will comprise submission of details of mineral concessions, grant of mineral concessions, inspection and mine closure etc.
  - c) MTS will bring in transparency, minimise discretion in mineral administration, real time data on mineral production and despatch, revenue collection across the country.
5. A presentation on 'Star Rating of Mines: A Tool for Implementation of Sustainable Development Framework' was made by Shri Prithul Kumar, Director, Ministry of Mines. Copy of the presentation is placed as Annexure-IV. The salient points are as under:
- a) Challenges in sustainable mining are use of appropriate technology and managing the environmental, social and economic impacts on the ecology in the mining areas.
  - b) Sustainability by managing social, economic and environmental impacts through targeted and collaborative approach with stakeholders' participation.
  - c) Mining Leases are rated on scale of 1 to 5 stars where 5 star rating is the best. The mines have been mandated to achieve at least 4 stars within 2 years of its implementation. This rating system will also help in obtaining faster clearances from various regulatory and environmental bodies.
  - d) The template for Star Rating has modules for evaluating parameters such as managing impacts at mine level, addressing land, resettlement and other social impacts, community engagement, final and progressive mine closure and adoption

of international standards. The importance and the extent of each of the modules were explicated.

- e) Its implementation is vital in the wake of recent Supreme Court Judgment in the Deepak Kumar case where the environmental norms are to be adhered and monitored in case of minor minerals.

6. A presentation demonstrating the online portal and dashboard of MSS was made by the representative of Bhaskaracharya Institute for Space Applications and Geo-Informatics (BISAG) illustrating its utility as a tool for curbing illegal mining using space technologies. The salient points illustrated are as under:

- a) The MSS is a simple, transparent and efficient system by which illegal mining can be detected using space technology for which areas surrounding the mining lease are monitored. It is done using satellite imagery and the triggers are generated by MSS upon noticing the likelihood of illegal mining activity in the vicinity of the leases. The triggers need to be verified physically on the ground by the concerned mining officials of the State Government to take appropriate action.
- b) For MSS implementation, the creation of database of leases by collecting lease maps, scanning of maps, aligning and geo-referencing using satellite data and digitization of geo-referenced map are needed.
- c) Monitoring illegal mining activity is achieved by superimposing mining lease area on satellite imagery to get multi-temporal satellite imagery.
- d) This system has minimum human interference and even a remotest area could become easily accessible and it provides automatic detection and trigger generation.

7. The Union Secretary (Mines) then requested representative of each state government to share their views and concerns. Following is state wise response:

- a) **Punjab:** The representative of Punjab apprised that DMF Rules have been drafted and approval from the Cabinet is awaited for notification. The IT system on the lines of i3MS of Odisha is being developed by the State. They gave consent for adopting the MSS for minor minerals and also adopting all other technological advances developed or conceptualized by the Central Government. Surprise raids are being made on regular basis to have check on illegal mining in the state.
- b) **Sikkim:** There were 3 major mineral mines in the State but they are not operational. The Forest Department of State administers the minor minerals in the state. Minor Mineral Rules have been drafted and are currently with the Law Department for vetting. There is no incidence of illegal mining in the state. The State requested to be part of the MSS.
- c) **Mizoram:** The representative from Mizoram mentioned that it would be helpful if any north-eastern sister state provides guidelines for making the minor mineral rules or a copy of the minor mineral rules itself if they have already been notified.

The state has meager reserves of accessible river sand deposits most of which are under the Riverine Reserve Forest and hence cannot be exploited. Efforts to include guidelines for sand mining and guidelines framed under 15 of the MMDR Act in the Minor Mineral Rules of the state are ongoing.

- d) **Manipur:** There is no operational mine in the state hence DMF and NMET have not been constituted so far. Manipur has deposits of limestone and chromite ore. The mineral sector is with the State Forest Department.
- e) **Haryana:** In Haryana, most of the minerals are minor minerals that are used for construction purposes. District level task force has been created for curbing illegal mining in the state. DMF rules have been framed but are yet to be notified.
- f) **Arunachal Pradesh:** The State only has sand, gravel and boulders for which permit is issued for short term of three months. Minor mineral rules have been modified but the same is not finalized yet which is expected to be done within two months. DMF rules are under preparation but is yet to be notified

8. Union Secretary suggested that instead of giving mining permits of short term the State Government may grant permit for longer term which will result in permit holder to be more serious as any wrong doing by him will bear serious consequences. He mentioned that mining is with the State Forest departments in many of the North-Eastern States and asked that Assam may take the lead in organizing a workshop on the minor mineral rules. He also mentioned that the State Government may lose the opportunity in terms of funds to initiate development and welfare in the mining affected areas, if the creations of DMFs are delayed.

9. Union Secretary (Mines) asked representatives of the State Governments who are interested to be part of the various initiatives taken by the Central Government like MSS, Star Rating Scheme and MTS may send written confirmation.

The meeting ended with thanks to the Chair.

### **List of Annexures**

Annexure I: List of Participants

Annexure II: Presentation on overview of mining sector initiatives

Annexure III: Presentation on Mining Tenement System

Annexure IV: Presentation on Star Rating of Mines

**Total-4 Annexures**

## List of participants:

Ministry/States	Name	Designation	Email
Ministry of Mines	Shri Arun Kumar	Secretary	<a href="mailto:secy-mines@nic.in">secy-mines@nic.in</a>
	Shri Niranjana Kumar Singh	Joint Secretary	<a href="mailto:jse-mines@nic.in">jse-mines@nic.in</a>
	Shri Subhash Chandra	Joint Secretary	<a href="mailto:subhash.chandra65@gov.in">subhash.chandra65@gov.in</a>
	Smt. Reena Sinha Puri	JS&FA	<a href="mailto:jsfa.moc@nic.in">jsfa.moc@nic.in</a>
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	Shri Shersha	Director	<a href="mailto:shersha.mohideen@nic.in">shersha.mohideen@nic.in</a>
	Dr. Joyesh Bagchi	Director (T)	<a href="mailto:dirtech.mom@nic.in">dirtech.mom@nic.in</a>
	Dr. R.P. Singh	Joint Director	
	Shri Rakesh Moza	Deputy Secretary	<a href="mailto:rakesh.moza@nic.in">rakesh.moza@nic.in</a>
	Shri Adhir Kumar Mallik	Under Secretary	<a href="mailto:ak.mallik@nic.in">ak.mallik@nic.in</a>
	Shri P. Vinay Kumar	Under Secretary	<a href="mailto:pv.kumar70@nic.in">pv.kumar70@nic.in</a>
IBM	Shri Ranjan Sahai	Controller General	<a href="mailto:cg@ibm.gov.in">cg@ibm.gov.in</a>
	Shri Pushpender Gaur	DCom	<a href="mailto:pushpgaur@rediffmail.com">pushpgaur@rediffmail.com</a>
	Shri D.D Bhardwaj	Senior A.CoM	<a href="mailto:darshandeep2011@gmail.com">darshandeep2011@gmail.com</a>
GSI	Shri Hemraj Suryavanshi	Dy. DG, GSI	<a href="mailto:hemrajgsi@gmail.com">hemrajgsi@gmail.com</a>
Arunachal Pradesh	Smt. Geetanjali Gupta	Residential Commissioner	<a href="mailto:rcarunanchalbhawan@gmail.com">rcarunanchalbhawan@gmail.com</a>
	Shri K.N. Dawan	Dy. Residential Commissioner	
Haryana	Shri R.K Sharma	Mining Engineer	<a href="mailto:rksharmame62@gmail.com">rksharmame62@gmail.com</a>
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Mizoram	Shri Lalhmachhuana	Director, DGM Mizoram	<a href="mailto:lhchhuanadgm@gmail.com">lhchhuanadgm@gmail.com</a>
Punjab	Smt. Shruti Sharma	Additional Director Mining	<a href="mailto:shrutisharma.ias@gmail.com">shrutisharma.ias@gmail.com</a>
Sikkim	Shri Upen Silal	Addl. Director	<a href="mailto:upen_41@yahoo.in">upen_41@yahoo.in</a> <a href="mailto:upen@lycos.com">upen@lycos.com</a>
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	Miss Aditi Rao	Manager	<a href="mailto:aditi.rao@sbicaps.com">aditi.rao@sbicaps.com</a>
	Shri Gautam Agrawal	Manager	<a href="mailto:gautam.agrawal@sbicaps.com">gautam.agrawal@sbicaps.com</a>
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<b>BISAG</b>	Mrs. Paru Thakka	Project Manager	<a href="mailto:bisugsp8@gujarat.gov.in">bisugsp8@gujarat.gov.in</a> <a href="mailto:info@bisag.gujarat.gov.in">info@bisag.gujarat.gov.in</a>
<b>WIPRO Ltd.</b>	Shri Shoumen Choudhury	Senior Account Manager	<a href="mailto:Shouman.choudhury@wipro.com">Shouman.choudhury@wipro.com</a>

Anneuxre-II

## MEETING OF STATES & UTs OTHER THAN MAJOR MINERAL PRODUCING STATES

16 JUNE 2017

MINISTRY OF MINES  
GOVERNMENT OF INDIA

## CHANGES IN REGULATORY FRAMEWORK

- e-Auctions
- DMF
- NMET
- Mining Leases for 50 years for security of tenure
- Stringent penalties to curb illegal mining
- Transferability of captive leases
- Additional 31 minerals classified as minor minerals

## MAJOR MINERAL e-AUCTIONS

- 27 blocks estimated resources **1,54,632 crores**
- Estimated revenue **1,19,031 crores**
- Additionality through auctions **91,891 crores**
- Royalty, DMF and NMET **27,139 crores**

## MINOR MINERAL RULES

- Directive under Section 20A - to implement transparent systems for granting minor mineral concessions
- Supreme Court's opinion dated 27/09/2012 on President of India reference dated 12/04/2012

*"the action of the State, whether it relates to distribution of largesse, grant of contracts, or allotment of land, is to be tested on the touchstone of Article 14 of the Constitution"*

*"The action has to be fair, reasonable, non-discriminatory, transparent, non-capricious, unbiased, without favouritism or nepotism, in pursuit of promotion of healthy competition and equitable treatment. It should conform to the norms which are rational, informed with reasons and guided by public interest, etc. All these principles are inherent in the fundamental conception of Article 14. This is the mandate of Article 14 of the Constitution of India".*

## PRADHAN MANTRI KHANIJ KSHETRA KALYAN YOJANA





## PRADHAN MANTRI KHANIJ KSHETRA KALYAN YOJANA

- Developmental & welfare programmes in mining affected areas

### **60% of funds for High Priority Areas-**

- drinking water supply, health care, education, welfare of women, children & disabled, skill development & sanitation etc.

### **40% of funds for Physical Infrastructure-**

- Roads, irrigation, energy, watershed development etc.



## PRADHAN MANTRI KHANIJ KSHETRA KALYAN YOJANA

- Annual DMF collection expected Rs. 6000 Cr. - Rs. 9179 Cr collected till date
- 287 Districts in 11 mineral rich States have been covered
- Directions issued under section 20A to set up DMF and collect funds as PMKKKY.
- Monitoring of PMKKKY would be done under "DISHA"



## **COLLECTION OF FUNDS FOR DMF IN CASE OF MINOR MINERALS**

- State Governments can establish DMF in respect of Minor Minerals.

***15A. The State Government may prescribe the payment by all holders of concessions related to minor minerals of amounts to the District Mineral Foundation of the district in which the mining operations are carried on***

## SAND MINING



## SAND MINING

- Supreme Court judgment on 27-02-2012 – **‘Deepak Kumar’** case
- MoEFCC – Guidelines - September 2016 - **‘Sustainable Sand Mining Management Guidelines’** and on 15-01-2016 amendment of the Environment Impact Assessment Notification dated 14-09-2006.

## **COMMITTEE ON SAND MINING**

- Chaired by the Secretary, Mines
- Committee officials drawn from State Governments
- To prepare a sand mining policy
- Ensuring transparency, sustainability, and availability of adequate supply of sand at reasonable rates

## **IFORMATION SOUGHT FROM ALL STATES & UTS**

- 1) whether the State/UT has assessed the demand/supply situation and efforts made to meet deficit from other States/UTs, or by use of manufactured sand, and if there is a surplus whether there is a policy to allow availability of sand to other States:
- 2) The historical evolution of the State policy regarding sand since 2010 and a copy of the present policy including administrative systems in place today:
- 3) whether all districts have made DSRs, if so a copy of DSR of one district to be submitted to the Committee;
- 4) any suggestions in this regard.

## **LIKELY WAY FORWARD**

- Sand mining Mining lease/permit: e-auction
- MSTC for auction
- MSS for checking illegal mining
- Maximum blocks to be identified
- Substitute for sand
- Free Inter-State movement

## **PRESENTATION ON MTS**

- Key Modules –
  - Ore accounting system
  - Online returns
  - Star rating
  - Mining plan, etc.
- Implementation timelines
- States & UTs may adopt for minor minerals
- Support to the States – customizations, software, training, handholding, troubleshooting, online help, etc.

# NEED OF MSS

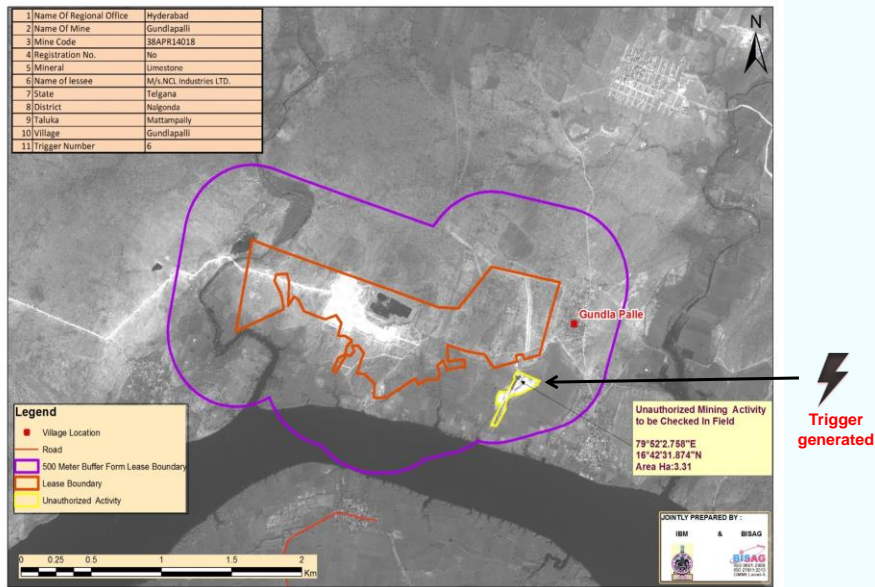


*Hon'ble Prime Minister, Shri Narendra Modi  
Addressing the National Meet on Promoting Space Technology based Tools & Applications in  
Governance and Development, New Delhi, September 07, 2015*

## MINING SURVEILLANCE SYSTEM (MSS)

- MoM through IBM has developed the MSS in collaboration with BISAG and MeitY based on the Space Technology
- Basic principle - most minerals occur in continuity and their occurrence is likely to extend in the vicinity of existing leases
- Surveillance of area up to 500m outside the lease boundary using the satellite imagery

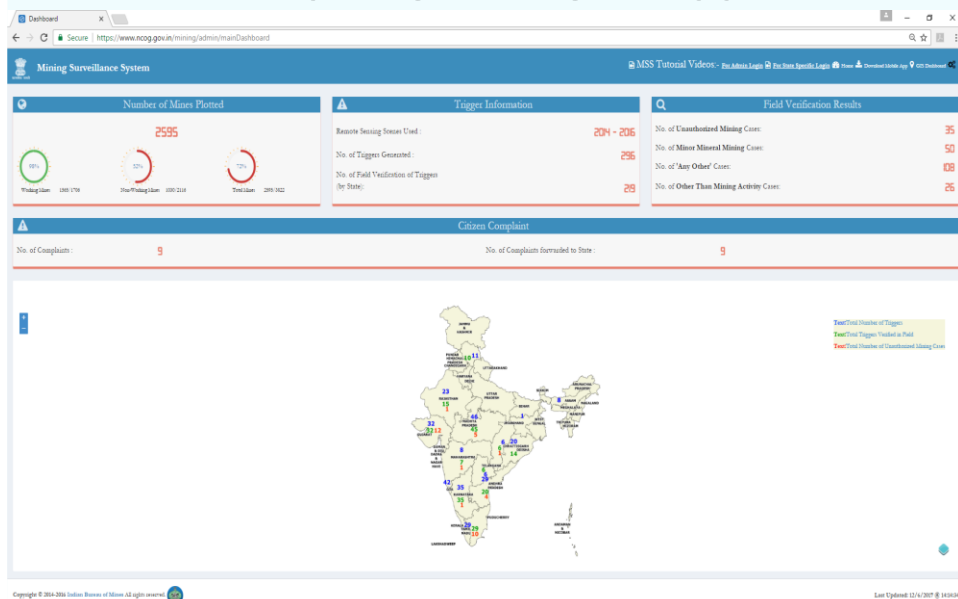
## CHECKING UNAUTHORIZED MINING IN VICINITY OF EXISTING LEASES



# MSS ADVANTAGES

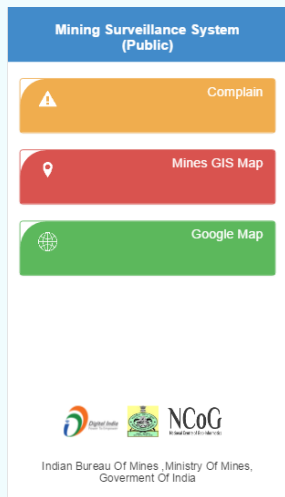
- **Deterrence Effect** : ‘Eyes watching from the sky’
- **Transparent & Bias-free**: No human interference
- **Participatory** : Citizens can report unusual mining activity
- **Quicker Response and Action**: Sensitive areas can be monitored more frequently.
- **Effective Follow-up**: Action on triggers monitored through Dashboard

## DASHBOARD OF MSS





# USER FRIENDLY MOBILE APP



*Inspection report by the State Government Officials*



*Complaints by Citizens*



*Plotted Mining Leases on Satellite image*

## USER REVIEWS ON MSS MOBILE APP



Manoj Pandya December 19, 2016



Mining surveillance system A citizen centric app. providing assistance to indicate mining related actives. **Endeavour taken by ministry and respective stakeholders is praiseworthy.**



Nupur Patel December 1, 2016



Very useful application Good step taken by mining department and also well done by the developers... **Nice work... Keep it up..**



Vikas Choubey November 22, 2016



Mining Surveillance System MSS is a satellite based monitoring system for curing illegal mining activity ...**Great effort by Govt ...Awesome**



Nehani Parmar December 1, 2016



**Cool app Very good initiative by gov nd mining department...**kudos to developer...simple and useful app..I have submitted my illegal mining repot by this app..

# INTERACTIVE LIVE PORTAL



*A dedicated portal for the system has been prepared for all stakeholders*

*Filters allow drill-down from state level right upto mine name/owner level*

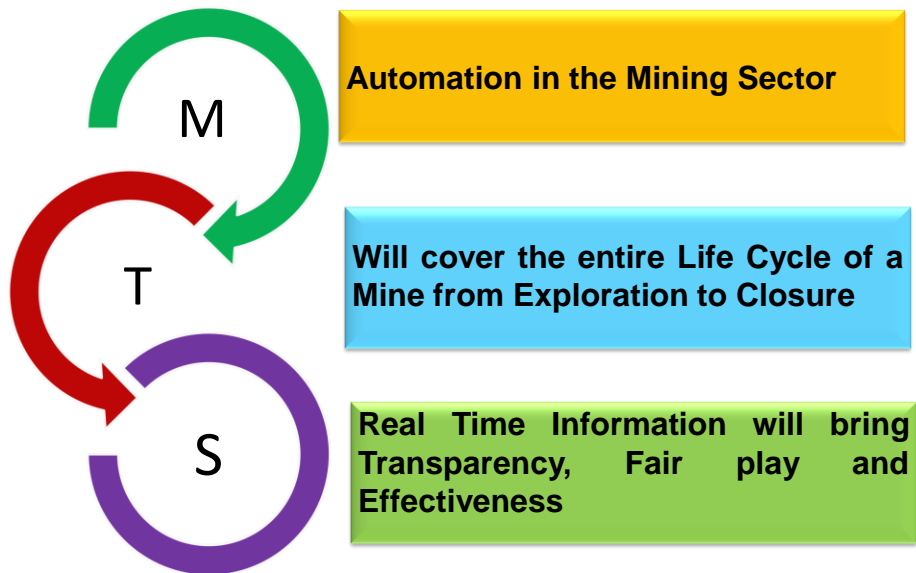
*Option to select the type of scenes/information layers which have to be overlapped for comparison*





## Mining Tenement System

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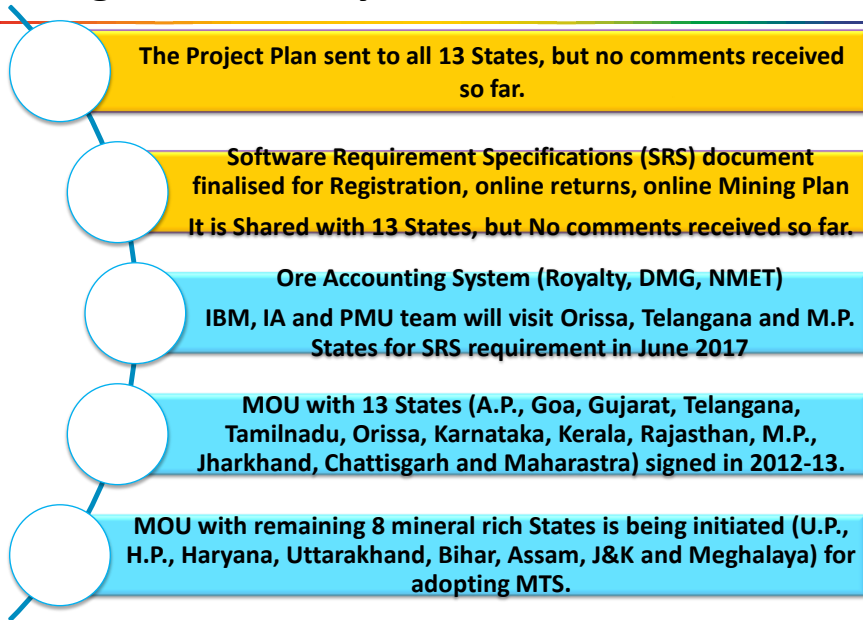
**MTS Modules Divided in two phases**

**Go-live of Phase-I by 30<sup>th</sup> Sept 2017**

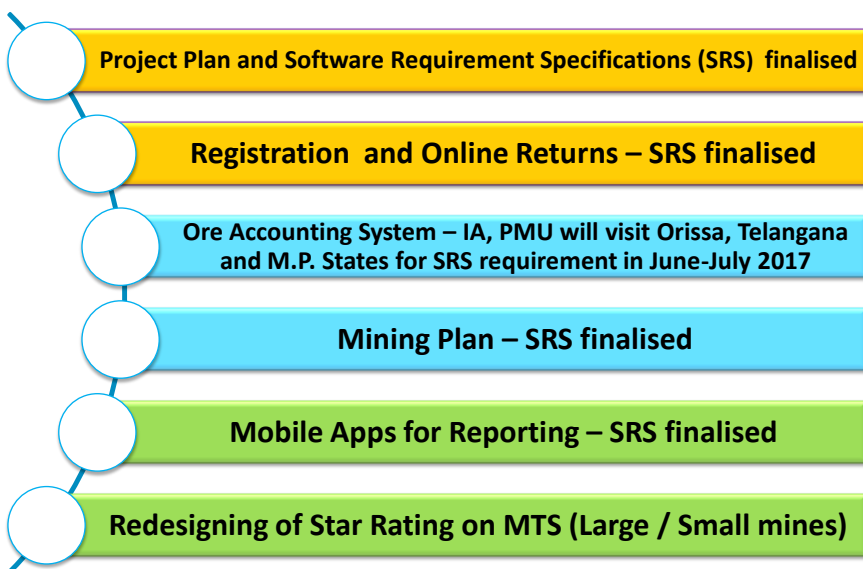
**&**

**Phase-II by 31<sup>st</sup> March 2018**

## Mining Tenement System - States

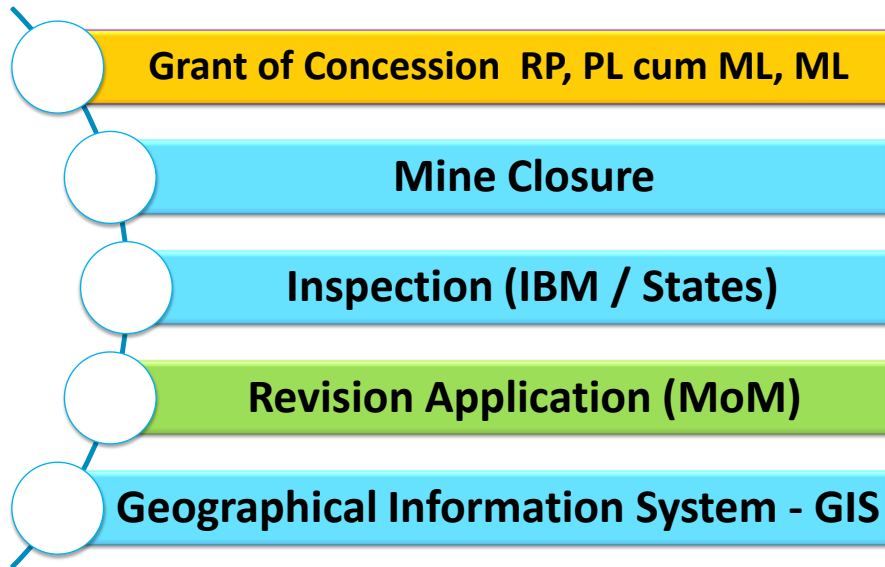


## Mining Tenement System- Phase I



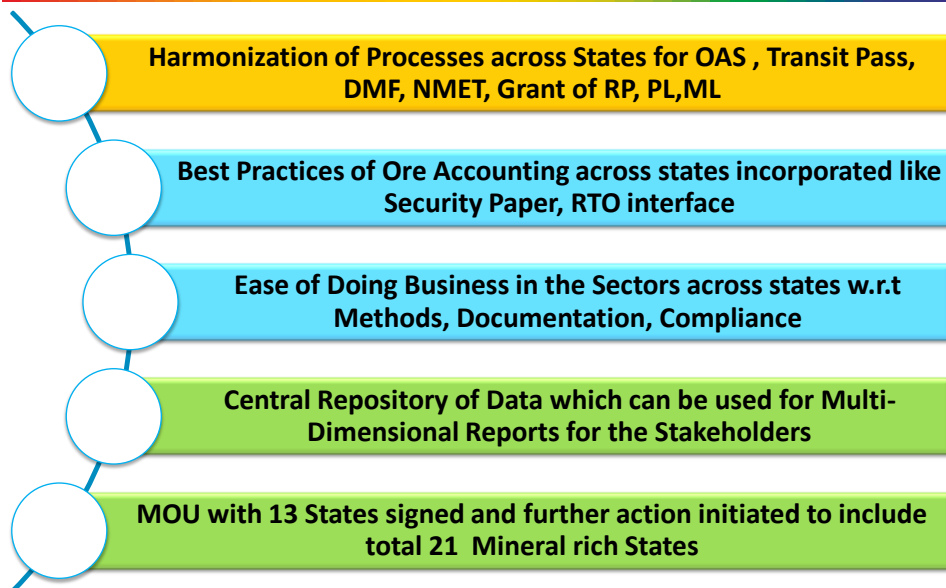
## **Mining Tenement System- Phase II**

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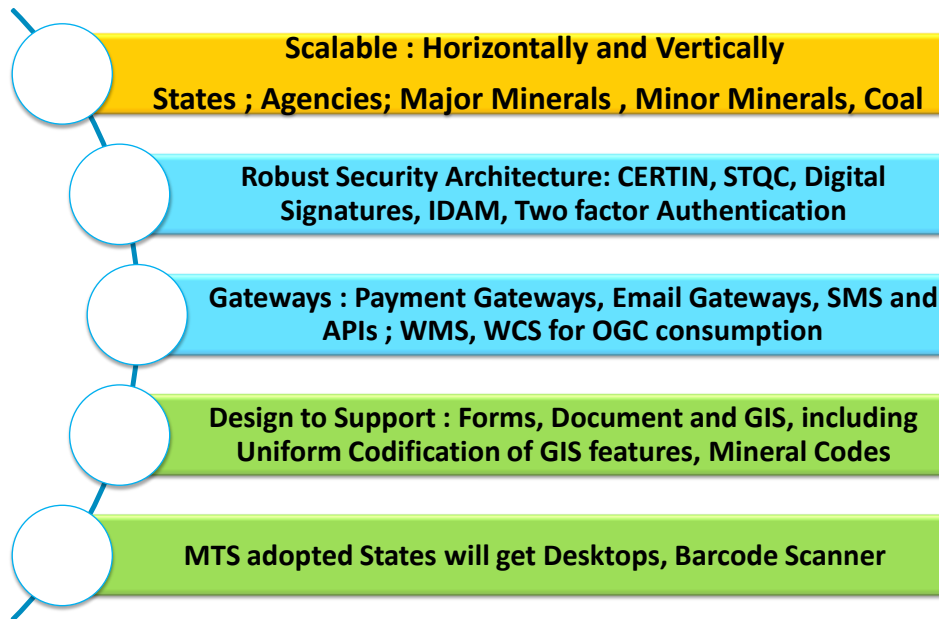
## **Mining Tenement System - Business Benefits**

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## **Mining Tenement System- Technical Benefits**

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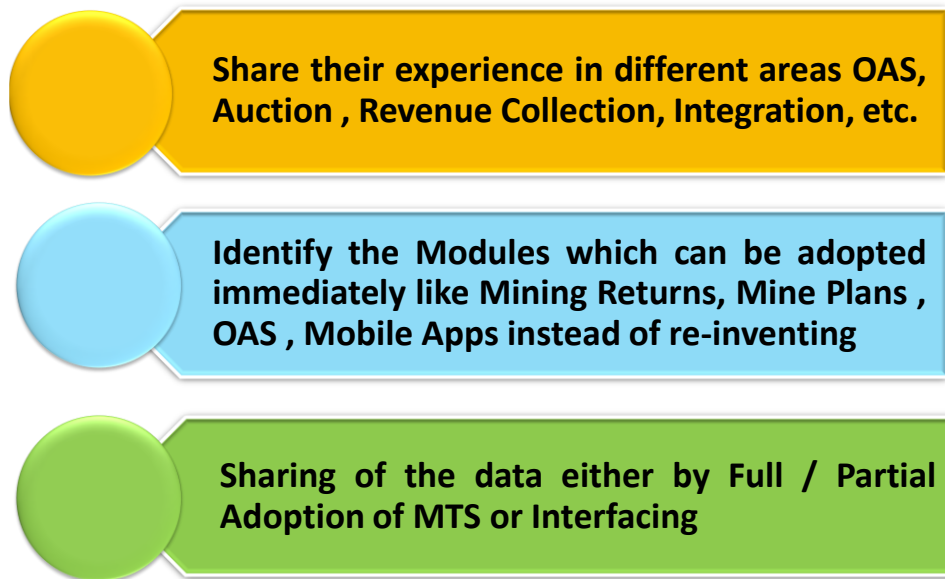


## **Benefits to State DMGs**

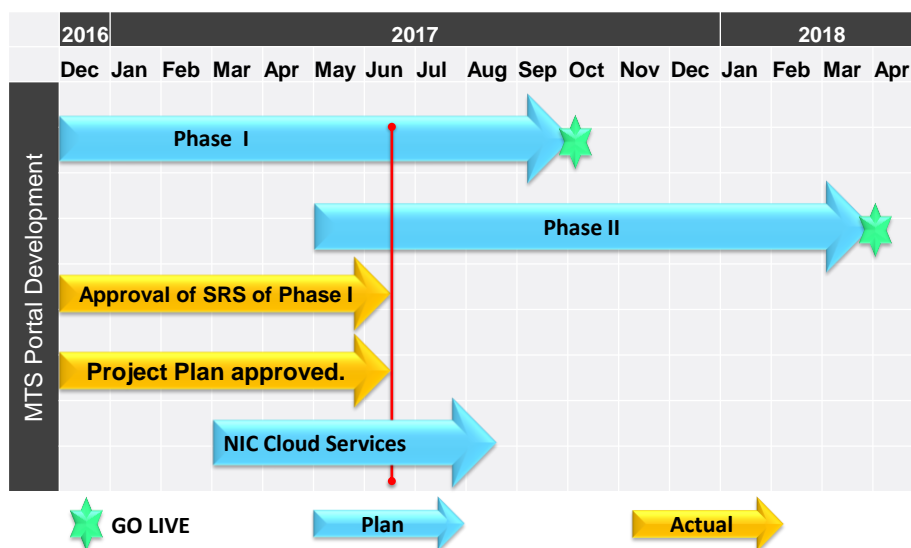
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## Role of the State DMGs

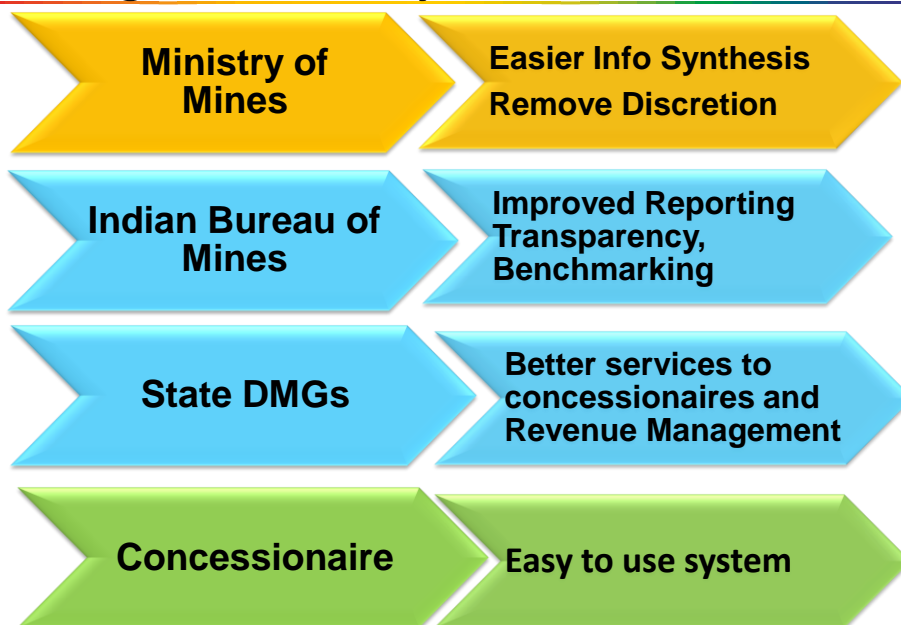


## Mining Tenement System – Project Plan






## Mining Tenement System



Anneuxre-IV

MINISTRY OF MINES, GOVERNMENT OF INDIA

### STAR RATING SYSTEM - INSPIRATION



**“The principle of common but differentiated responsibilities is the bedrock of our enterprise for a sustainable world”**

Prime Minister of India Narendra Modi addressing United Nations Sustainable Development Summit on 26 Sep, 2015



## SYSTEM FOR 'STAR RATING'

- Annual rating scheme
- One to five stars
- Based on self certification
- Verification by IBM at the time of inspection
- Leases operational for more than 180 days
- Implemented for major minerals



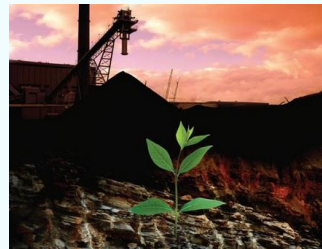
# PRINCIPLES FOR EVALUATION

- Addressing Impacts by scientific mining compliances.
- Addressing social impacts- Land, resettlement and rehabilitation.
- Socio-economic development - Local community engagements and welfare.
- Progressive and final mine closures.
- Adoption of international standards.



## BENEFITS OF STAR RATING SYSTEM

- Evaluation of Mining footprints.
- A platform for exchange of ideas and the best practices
- A transparent mechanism to disseminate information amongst all the stakeholders/public.
- Tool for enhancing social acceptance of mining.
- A system to establish credibility amongst various authorities, NGOs and Social organizations.



Economic Environmental and Social Benefits of enhancing Sustainability in Mining by Star Rating System.

## STAR RATING OF MINOR MINERALS

- Evaluation template for minor minerals
- Draft circulated
- Comments of the draft
- Challenges and Issues in implementation
  - Large no leases
  - Verification challenge
  - Documentation
  - Mining Plan compliances