



CONDUCTING PA IN MINING SECTOR

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PLAN OF PRESENTATION

- Section 0 :- Introductory
- Section I :- Observations showing flaws in Internal Control
- Section II :- Observations showing lacunas in Sustainable Mining



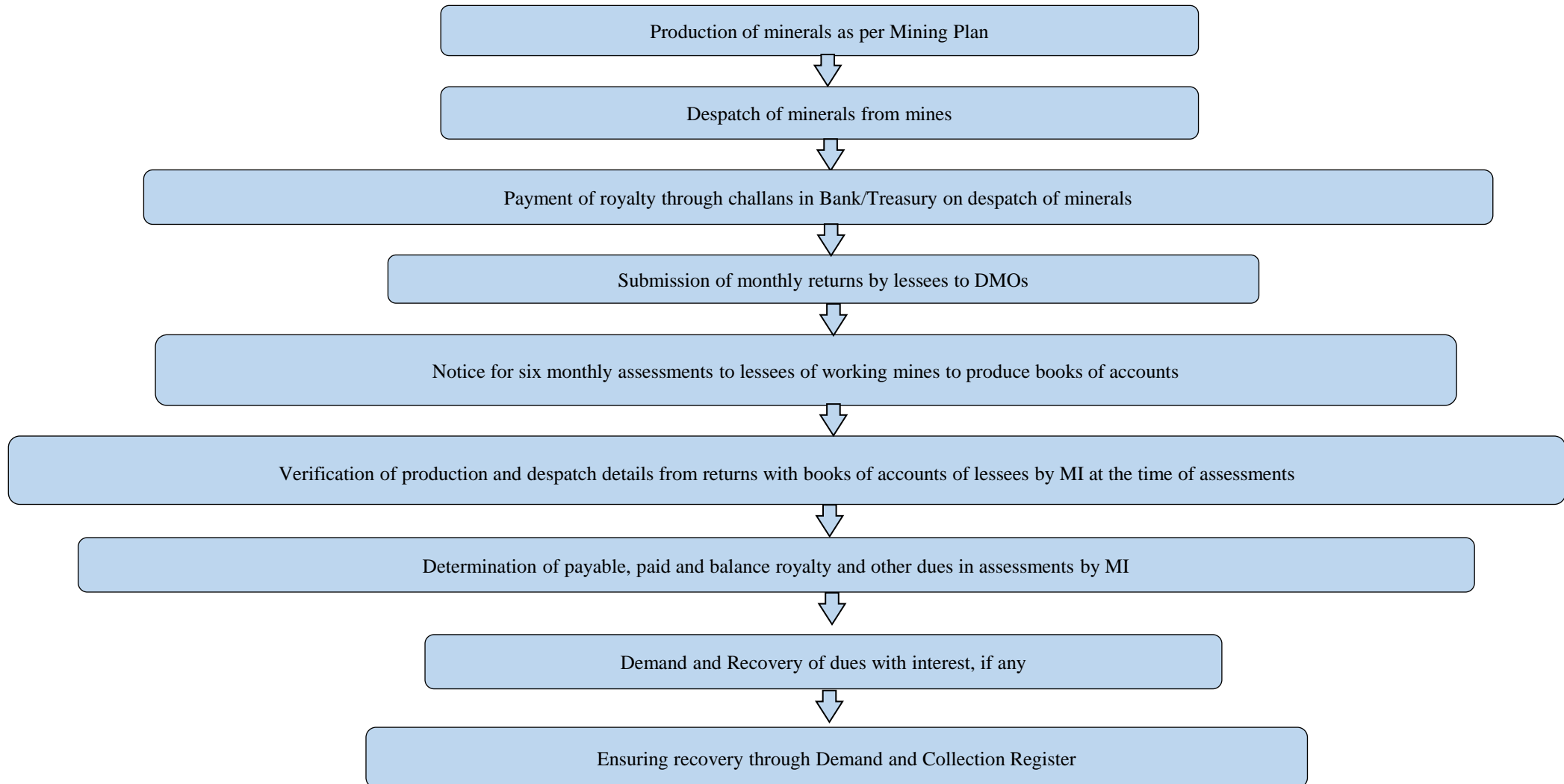
PERFORMANCE AUDITS IN MINING

- Activities of exploration
- Allocation of Mining Leases
- Revenue Collection
- Illegal Mining
- Sustainable Mining
- Environmental Impact
- Rehabilitation efforts
- Mineral specific Audits like Coal, Sand, etc.



Section - I

PROCESS OF REVENUE COLLECTION



MINING PLAN

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Annexure-I	CONSENT ORDER	
	VILLAGE MAP	
	ID PROFF	

ISSUES OBSERVED

- Inadequate Inspections
 - Deficiency in staff
 - Inadequate criteria
 - Logistical issues
 - Impact :- excess extraction, non-adherence to conditions, illegal mining, etc.
 - Solution :- Section - II
- Non-compliance with respect to monthly returns
 - As there is no strict check
 - Impact:- Same as above, impacts assessments as well, consequently affecting Revenue collection
 - Solution:- Blocking the excavation unless returns are submitted



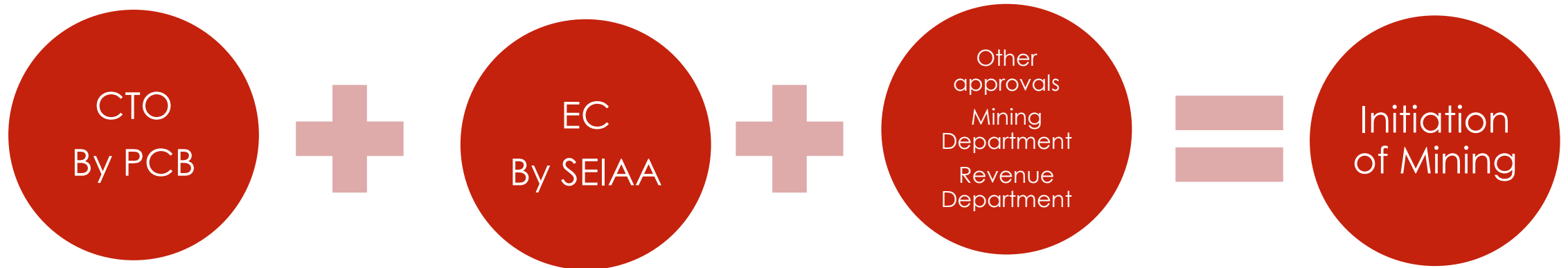
ISSUES OBSERVED

- Inadequate Assessments:-
 - Because of non-submission of returns
 - Impact:- Same as before
 - Solution:- As before
- Non-maintenance of Demand and Collection Register
 - Because of lesser assessments
 - Impact:- Absence of information regarding Royalty due and Minerals excavated
 - Solution:- Making the complete system online



Section - II

MINING APPROVAL PROCEDURE





NON-GIS OBSERVATIONS

- Excavations before obtaining clearance
- Excavations more than the quantity allowed
 - Inadequate coordination between different agencies
 - Possible ignorance of lessees
 - Impact:- Leads to mining without lawful authority
 - Solution:- Bringing all agencies on common platform (digitally)
- Excavation beyond the allowed boundary
 - Reasons mentioned in Section I
 - Impact :- Mining without lawful authority



NON-GIS OBSERVATIONS

- Not following other guidelines of Mining Plan like plantations :-
 - Same as mentioned in Section I
 - Impact :- environmental consequence
- Non-submission of environmental statement by lessees
 - Same as mentioned in Section I
 - Impact :- environmental consequence
- Non-implementation of Mine Closure Plan
 - Same as mentioned in Section I
 - Impact :- environmental consequence

GIS OBSERVATIONS- METHODOLOGY

- Obtaining Coordinates of Mines from Authorities
- Insufficient/Absence of Coordinates immediately becomes an observation
- Rest all are plotted on Google Earth or any other GIS software
- These Soft-wares will provide imagery of earth terrain temporally as well
- Different type of mineral will have different formations over earth terrain, which will have to be analysed for any aberrations
- All the plotted coordinates can be saved as images or can be stored as KMZ file, which can again be opened in GIS soft-wares

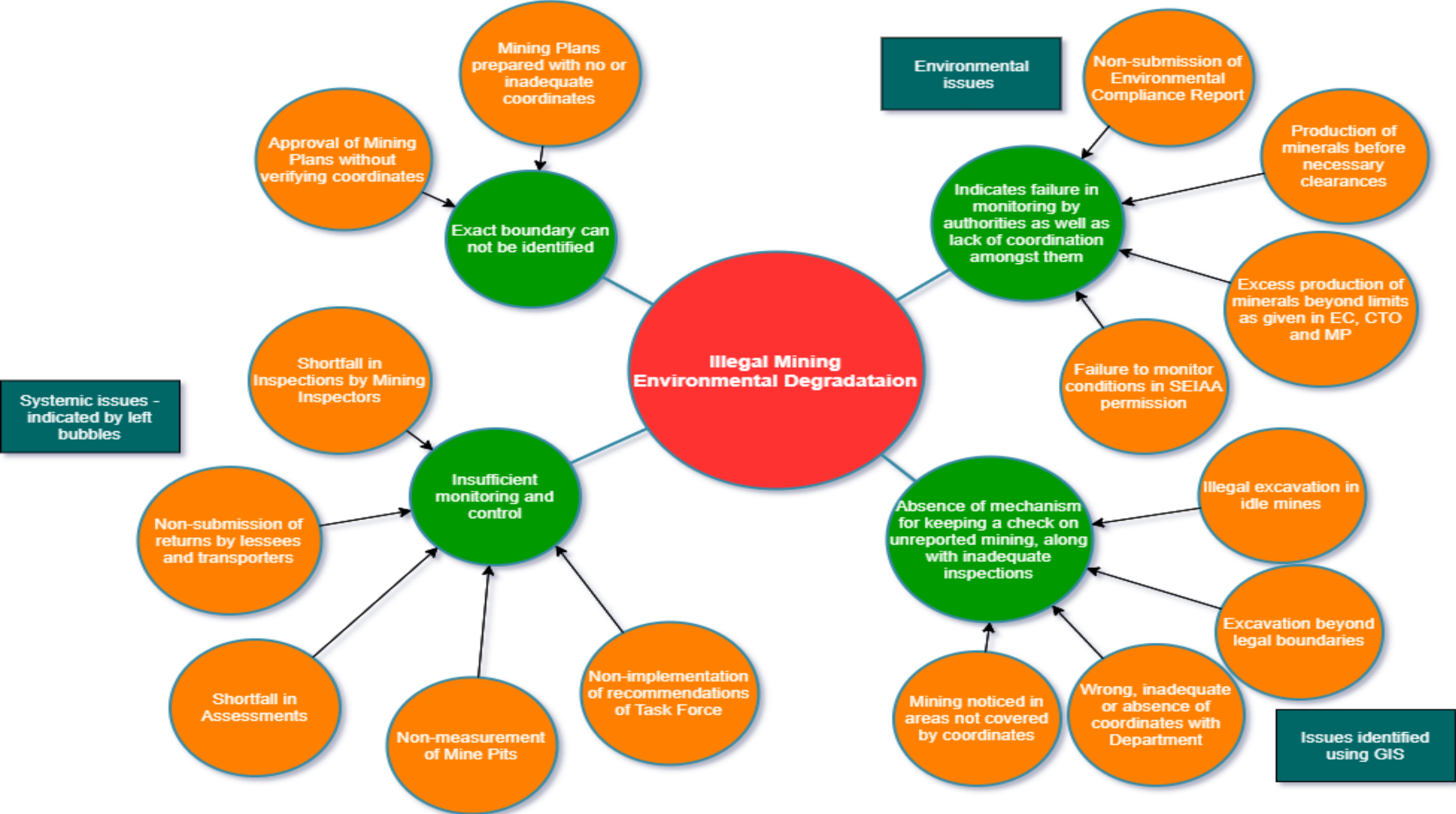


GIS OBSERVATIONS

- Absence of coordinates
- Inadequate coordinates
- Actual area in excess to what is there in Mining Plan
- Overlapped Mines
- Mining in Idle Mines
- Mining beyond the allotted boundary
- Mining at places other than the given coordinates
- No plantation

BENEFITS FROM THE INITIATIVE, SUSTAINABILITY AND REPLICABILITY

- Significantly larger Audit Coverage of Mining Leases.
- Assesses executive's performance in a holistic manner and also gives them pinpointed evidence to act upon for remedial measures.
- Highly efficient, easy to execute and results in irrefutable evidence.
- Essential method to detect illegal mining
- As it is being done in-house, it can be done fast, is economical and upwardly scalable.





RECOMMENDATIONS

- Proper maintenance of Mining Plans, especially with respect to the quality of coordinates therein
- Monitoring the submission of monthly returns
- Improve inspections via GIS tools
- Mechanism of coordination between multiple agencies
- Geo-fencing, Geo-tagging, etc.



Thank You