1. Automation of Op Wks Progress.

- (a) Web based application to monitor the progress of op wks at fwd areas.
- (b) <u>Motivation</u>. Progress of op wks is monitored on daily basis by fmn HQs (Bde, Div and Corps level). A lot of paper and sty can be saved by automating this process and real time progress data can be provided to fmn cdrs.
- (c) Dashboard for each fmn HQs to show progress of op wks in tabular as well as graphical format. Respective units should be able to update the data at their end.
- (d) Role bases access and data rights to user.
- (e) No cost involved.
- (f) Tech Used Web application based on DotNet Core with PostgresSQL as database.

2. Automation of Winter Stocking.

- (a) On the similar lines of Op Wks Progress.
- (b) Both can be combines in same web application as well.

3. **Genr Care Application**.

- (a) Android based application for preventive maintenance and troubleshooting of genrs.
- (b) <u>Motivation</u>. Genrs are the most critical eqpts for fwd units during winter. They are used to light the fence and crucial for tps sustenance also. Most of the faults can be prevented by timely intervened maintenance like change of filters, cleaning of filters, change of engine oil etc.
- (c) A user should be able to add the genrs on his post as per the make and model.
- (d) App will give timely reminders to change filters, eng oil or other maintenance task which need to be done as per OEM schedule (depending on the time and hours runs).
- (e) App will also include the necessary directions to do the preventive maintenance (with photographs).
- (f) Do's and Dont's as per regular EME advisories to be incl in the app.
- (g) No cost involved.
- (e) It will contain no information about units and post. Just like a civil app to help the user in maintaining the genrs.
- (f) Same idea can be extended to other critical eqpts at later stage.

4. Predictive Analysis of Sitrep Data using Al/ML.

(a) To predict the events (intrusion or other incidents) based on the last 10-15 years sitrep data using AI/ML algorithms.

(b) **Challenges**.

- (i) Avail of legacy sitrep data.
- (ii) Digitisation of legacy sitrep data needs to be done by inf units in a given format which is time consuming effort.