

1. Project Title New on-air sites tracker

2. Problem in Brief

- ❖ In the current situation, there's very poor communication between users' group most of the time the INOC Team is not aware of their sites.
- ❖ No single system to capture the process of sites. (table 1)
- ❖ It is taken the more time to find sites recodes of define sites and the progress of sites.
- ❖ It may difficult to obtain the details of the site from define sites and separately identify the On-air site.
- ❖ When considering the current system, the occurrence of human errors is ordinary and hard to handle manual data.

Table 1: Process of sites activity

Group ID	User Group	Activity
1	RNP & RNO	Define sites
2	RAO	Configure in systems (U2000/EMS) & update site configuration status
3	CS	Configure in MSC & Update configuration status
4	PCN	Configure in SGSN & Update configuration status
5	Vendor	Configure in systems (U2000/EMS) & update site configuration status
6	RO	Update PAT status
7	INOC	On-air site

3. Proposed Solution

- ❖ We are going to develop a system that facilitates the interconnection between users' group by a web application.
- ❖ Easy and quickly update single or multi define sites separate user groups.
- ❖ Quickly find the details of the site.
- ❖ This system can be minimized human errors, reduce time-wasting than manual system and enhance the quality of new on-air sites.

4. Requirements identification

4.1 Functional requirement

- ❖ Add and remove new sites by RNP & RNO. (single sites or multi-sites)
- ❖ View all site details and search sites.
- ❖ Configure in systems (U2000/EMS) and Update site configuration status.
- ❖ Configure in MSC and Update configuration status.
- ❖ Configure in **SGSN** and Update configuration status.
- ❖ Update PAT status.
- ❖ Define the On-air site and show the count of On-air sites.
- ❖ Mail and SMS function-> A message is sent to the requestor about the response of the cell block request.
- ❖ Can export the records. (date range or all records as the excel sheet)

4.2 Non-functional requirements

- ❖ Usability. (Color combination is valid for even color-blind people, User interface responsive to any device)
- ❖ User-friendliness – adding icons and information messages.
- ❖ Increasing Performance. (AJAX form submit use to data insert and search, using table plugging)
- ❖ Security- prevent unauthorized access and SQL injection by using security functions.
- ❖ Data adding and update are not reflecting with other accounts.
- ❖ Reliability.

4.3 User levels

- ❖ RNP & RNO
- ❖ RAO
- ❖ CS
- ❖ PCN
- ❖ Vendor (Huawei, ZTE)
- ❖ RO
- ❖ INOC

4.4 User Roles

Group ID	User Group	Access level	Functions
1	RNP & RNO		Add new sites. (single sites or multi-sites) View and search site details.
2	RAO		Update site configuration status. (single or multi) View and search site details.
3	CS		Update site configuration status and remark. (single or multi) View and search site details.
4	PCN		Update site configuration status and remark. (single or multi) View and search site details.
5	Vendor		Update site configuration status and remark. (single or multi) View and search site details.
6	RO		Update PAT status and remark. (single or multi) View and search site details.
7	INOC		On-air site. (single or multi) View and search site details.

5. Interfaces

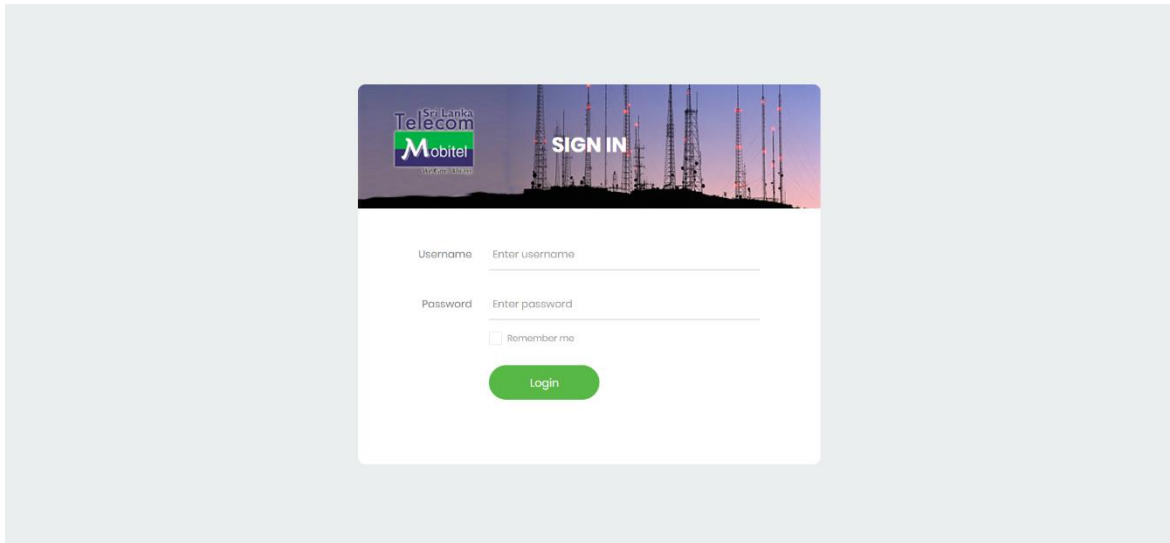


Figure 1: User Login

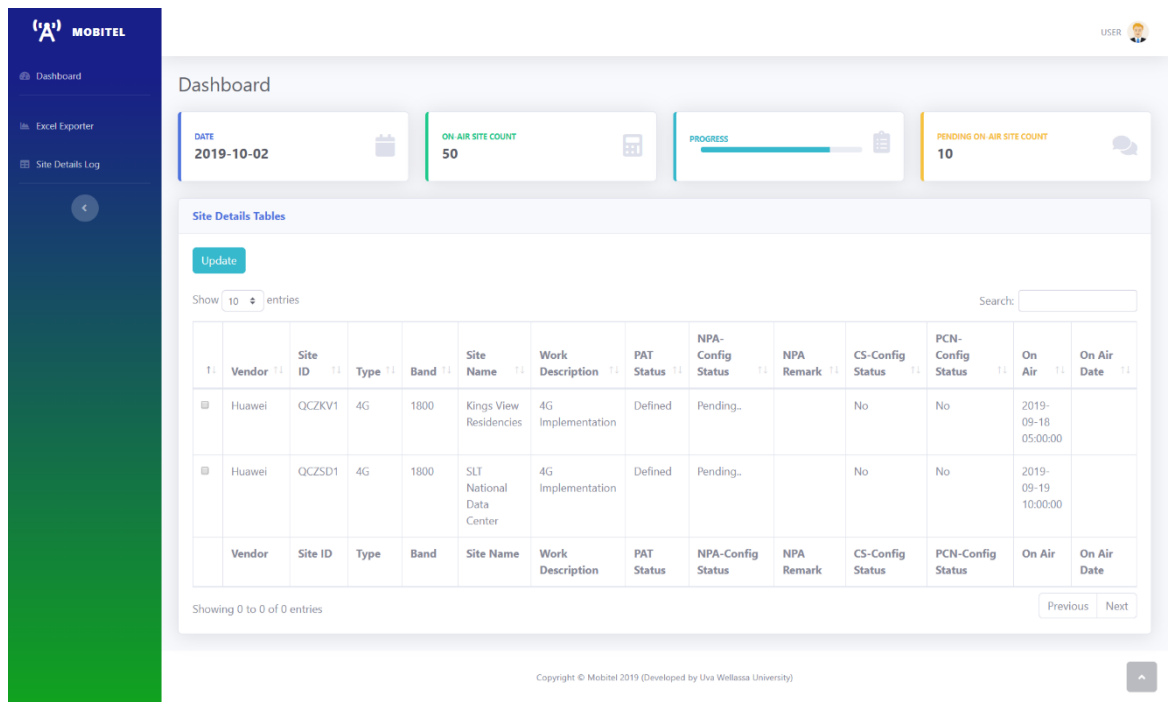


Figure 2: Dashboard

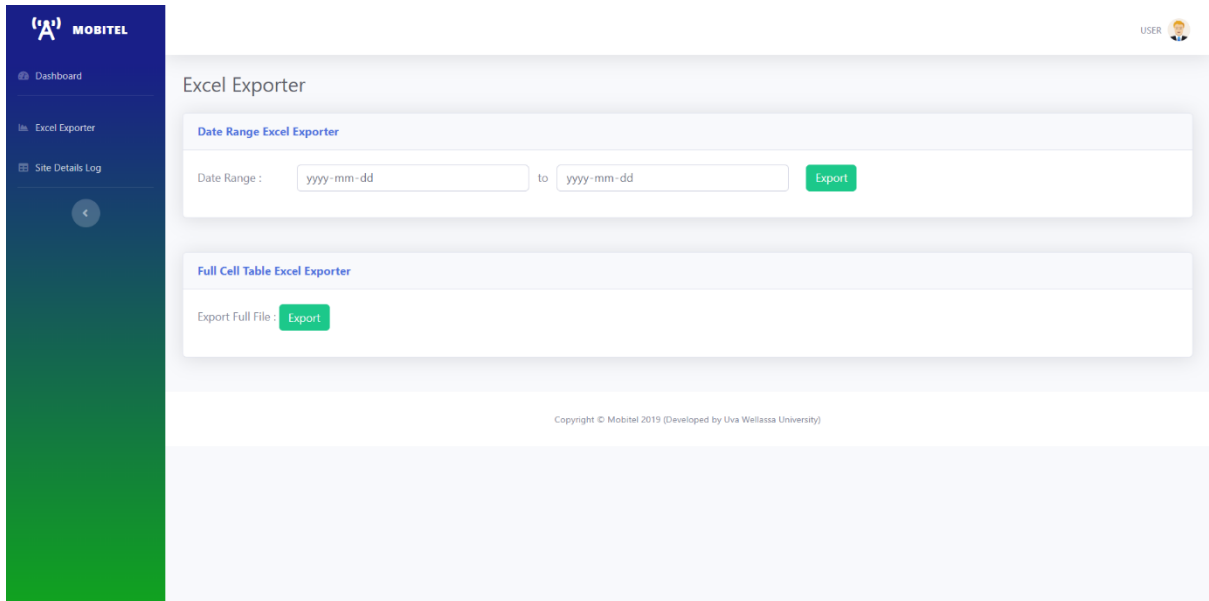


Figure 3: Excel Exporter

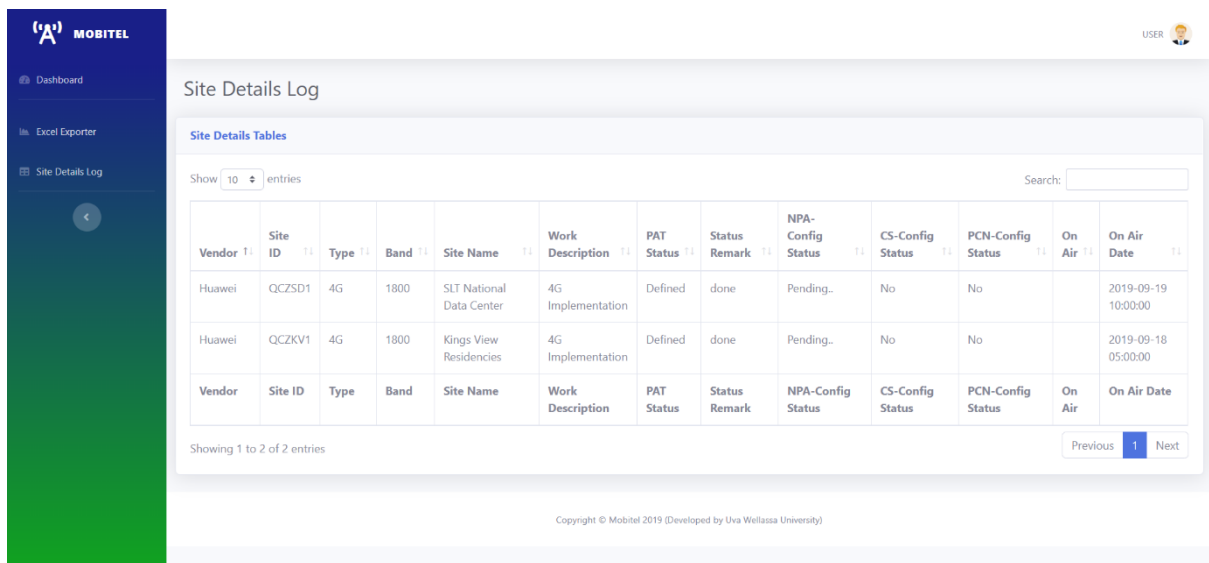


Figure 4: Site Details Log