Electronic Vaccine Intelligence Network

Handbook on eVIN Application for Vaccine and Cold Chain Managers
Handbook on eVIN Application for Vaccine and Cold Chain Managers India, 2016
PREFACE

As India progresses into a digital era, encouraging the use of technology for governance, the introduction of Electronic Vaccine Intelligence Network (eVIN) for vaccine logistics management comes at an opportune time. The eVIN being set-up across the country by the Ministry of Health and Family Welfare (MoHFW) and the United Nations Development Programme (UNDP) is transforming the traditional methods of vaccine storage and record-keeping. By digitizing vaccine inventories and storage temperatures and making it available on an online platform, the innovation is strengthening the evidence-base for decision-making. The combination of a user-friendly mobile and web-based application, state-of-the-art temperature loggers, standardized processes and regular supportive supervision from the vaccine and cold chain managers deployed in the districts is contributing to efficient vaccine logistics.

With the aim of ensuring equity through easy and timely availability of quality vaccines to all children, eVIN is a powerful contribution to strengthening health systems. The merits of eVIN are growing beyond the technology; the initiative will build capacities and empower the vaccine store manager in the cold chain network in vaccine delivery, management and procurement.

Capacity building of vaccine cold chain handlers and vaccine store managers through intensive training programs forms an integral component of eVIN. These handbooks are intended to assist learning and encourage efficient use of the eVIN technology. A complete guide on how to use the mobile and web versions of the eVIN application, monitor vaccine storage temperatures on the temperature logger, standard operating procedures and guidelines on processes, these handbooks are intended for the convenience of eVIN users, committed to improved immunization coverage in the country.

I envision an effective use of these handbooks by the target readers in understanding and implementing eVIN improved vaccine cold chain systems.

(Vandana Gurnani)
FOREWORD

It gives me great pleasure to present the comprehensive handbook for the users of Electronic Vaccine Intelligence Network (eVIN).

The Universal Immunization Program (UIP) of the Government of India (GoI) is one of the largest of its kind in the world. The availability of quality vaccines counts as one of the key factors for the success of this program. The e-VIN is an integral component of the UIP that is run by the Ministry of Health and Family Welfare (MoHFW). It is a technological intervention in digital format so that the Government’s current and future interventions of effective vaccine and supply chain management can be strengthened. By providing real-time information on vaccine storage temperatures and vaccine stocks and flows, e-VIN will be a significant tool to inform policy making and programming decisions at the State and National level in UIP. In addition to introducing technology in the sphere of vaccine management, e-VIN also empowers the vaccine store managers across the country by building their capacities, bringing about a transparency in the system and building accountability at higher levels of vaccine supply chain management.

The comprehensive set of handbooks on e-VIN aims to guide the vaccine store managers on the use of the e-VIN software application. These will support the vaccine store managers as guidebooks on how to use the e-VIN app and aid learning. I am positive that the handbooks will be of immense help to all the users of mobile and web-based e-VIN application in the districts and states till the last cold chain points.

(Dr. Pradeep Haldar)
KEY MESSAGE

The partnership between the Government of India (GoI) and United Nations Development Programme (UNDP) for implementation of the Electronic Vaccine Intelligence Network (eVIN) is a significant step towards strengthening health systems in the country. It is a stepping stone for revolutionizing and upgrading the vaccine logistics management to support the Universal Immunization Programme of the government. Led by the Ministry of Health and Family Welfare (MoHFW), eVIN engages a remarkable system of product, processes and people that optimizes decision making and augments improved HR performance leading to an efficient and effective Universal Immunization Program (UIP) in India.

Whilst eVIN system is powered by a state of the art technology and software, it has a very simple and easy to understand front-end smartphone interface that is very user-friendly to use. Our Vaccine Cold Chain Handlers (VCCH) are finding it simple to work with and enter vaccine stock data through the mobile phone which is critical for the uptake of eVIN at the end-user level i.e. cold chain point.

This composite set of handbooks on eVIN application is a useful resource for the health-workers and I am confident that it will prove to be a helpful companion to our UIP staff in the States and Districts.

(Dr. M.K. Aggarwal)
I congratulate the Ministry of Health and Family Welfare for this series of handbooks that demonstrate how cold chain handlers and vaccine store managers, at the frontlines of India’s universal health coverage efforts, can effectively use eVIN, a technological innovation designed to improved immunization in the country.

India’s Universal Immunization Programme aims to secure the future of the world’s largest birth cohort. Much of the success of this effort will depend on an effective supply chain system that ensures an efficient and robust mechanism for vaccine flow, right from the manufacturer, to every last family, woman and child on the ground. Vaccines must be available in adequate supply, and be safe for all.

Under the leadership of the Ministry of Health and Family Welfare and implemented by the United Nations Development Programme and supported by partners, eVIN is a technological innovation that aims to address the challenges of infrastructure and human resources in achieving universal immunization in the country.

We hope that these comprehensive and easy-to-understand tools, guide easy adoption and implementation of eVIN in the country. In doing so, we hope to empower frontline health workers that are critical to achieving India’s ambitions.

We look forward to supporting the Government of India in the up-scaling of eVIN to strengthen the country’s health systems.

Jaco Cilliers
UNDP Country Director
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GLOSSARY

Cold chain handler: Any regular or contractual staff performing the responsibility of vaccine and cold chain management at any level of vaccine stores and cold chain network is known as a vaccine cold chain handler. This is not a designated but an assigned position by the facility in-charge. Any staff working as pharmacist, store keeper, paramedical staff, health supervisor or auxiliary nurse midwife (ANM) looking after the vaccine and cold chain management of a particular health facility is referred to as the vaccine cold chain handler for that facility.

Minimum stock level: Also known as the reorder level, the least quantity that should be available in stock or the level which, when reached, initiates a re-order. This is usually expressed as the numbers of weeks/months of supply. It is an amount of stock which is used during the time period between placing and receiving the order plus the buffer stock. The minimum stock level is the level below which the stock should never drop without having placed an order.

Maximum stock level: The minimum stock plus the amount of stock used between orders i.e. the working stock. The maximum level is set to prevent instances of excess stock which results in loss of vaccines to expiry before use.

Lead time: Time between indenting of vaccine and receipt of vaccine. The lead time varies, depending upon the speed of deliveries, availability and reliability of transport, and other factors like weather.

For instance, if the monthly requirement of DPT at a PHC is 280 doses, the buffer stock will be 25% of 280 i.e. 70 doses. If the lead time is one week, then the minimum stock will be buffer stock plus requirement for lead time (70 doses) i.e. 70+70=140 doses.

Hot alarm: An alarm raised when there is an instance of breach of vaccine storage temperature as it goes above 8 degrees centigrade for ice-lined refrigerator and -15 degrees centigrade for deep freezer.

Cold alarm: An alarm raised when there is an instance of breach of vaccine storage temperature as it goes below 2 degrees centigrade for ILR and -25 degrees centigrade for deep freezer.
**Net utilisation:** Difference between the total closed vials issued for the routine immunization (RI) session and the total closed vials received after the completion of RI session; always measured in doses.

**Inventory:** Total stock of a specific material available at the vaccine store or cold chain point.

**Receiving store:** Store to which the vaccines are issued.

**Issuing store:** Store that issues the vaccines.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>App(s)</td>
<td>Application(s)</td>
</tr>
<tr>
<td>ANM</td>
<td>Auxiliary Nurse and Midwife</td>
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<tr>
<td>BCG</td>
<td>Bacillus Calmette Guerin</td>
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<tr>
<td>bOPV</td>
<td>bivalent Oral Polio Vaccine</td>
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<tr>
<td>BSNL</td>
<td>Bharat Sanchar Nigam Limited</td>
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<tr>
<td>CCE</td>
<td>Cold Chain Equipment</td>
</tr>
<tr>
<td>CCH</td>
<td>Cold Chain Handler</td>
</tr>
<tr>
<td>CCP</td>
<td>Cold Chain Point</td>
</tr>
<tr>
<td>CCT</td>
<td>Cold Chain Technician</td>
</tr>
<tr>
<td>CHC</td>
<td>Community Health Centre</td>
</tr>
<tr>
<td>DIO</td>
<td>District Immunization Officer</td>
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<tr>
<td>DPT</td>
<td>Diphtheria, Pertussis, Tetanus</td>
</tr>
<tr>
<td>DVS</td>
<td>District Vaccine Store</td>
</tr>
<tr>
<td>DVSM</td>
<td>District Vaccine Store Manager</td>
</tr>
<tr>
<td>eVIN</td>
<td>Electronic Vaccine Intelligence Network</td>
</tr>
<tr>
<td>FEFO</td>
<td>First Expiry First Out</td>
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<tr>
<td>GMSD</td>
<td>Government Medical Store Depot</td>
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<tr>
<td>GoI</td>
<td>Government of India</td>
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<tr>
<td>HSS</td>
<td>Health System Strengthening</td>
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<tr>
<td>ID</td>
<td>Identity Document</td>
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<tr>
<td>ILR</td>
<td>Ice Lined Refrigerator</td>
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<tr>
<td>IPV</td>
<td>Inactivated Polio Vaccine</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>JE</td>
<td>Japanese Encephalitis</td>
</tr>
<tr>
<td>Max</td>
<td>Maximum</td>
</tr>
<tr>
<td>Min</td>
<td>Minimum</td>
</tr>
<tr>
<td>MIS</td>
<td>Management Information System</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>MoHFW</td>
<td>Ministry of Health and Family Welfare</td>
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<tr>
<td>OTP</td>
<td>One Time Password</td>
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<tr>
<td>PHC</td>
<td>Primary Health Centre</td>
</tr>
<tr>
<td>PO</td>
<td>Project Officer</td>
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<tr>
<td>RI</td>
<td>Routine Immunization</td>
</tr>
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<td>RVS</td>
<td>Regional Vaccine Store</td>
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<td>RVSM</td>
<td>Regional Vaccine Store Manager</td>
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<td>SCCO</td>
<td>State Cold Chain Officer</td>
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<td>SEPIO</td>
<td>State Expanded Programme Immunization Officer</td>
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<tr>
<td>SIO</td>
<td>State Immunization Officer</td>
</tr>
<tr>
<td>SOP</td>
<td>Standard Operating Procedures</td>
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<td>SVS</td>
<td>State Vaccine Store</td>
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<tr>
<td>SVSM</td>
<td>State Vaccine Store Manager</td>
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<tr>
<td>TT</td>
<td>Tetanus Toxoid</td>
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<td>TL</td>
<td>Temperature Logger</td>
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<td>UIP</td>
<td>Universal Immunization Programme</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>VCCM</td>
<td>Vaccine and Cold Chain Manager</td>
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<tr>
<td>WIC</td>
<td>Walk in Cooler</td>
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<td>WIF</td>
<td>Walk in Freezer</td>
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INTRODUCTION

Over 26,000 vaccine store managers across the country are committed to the immunization programme in their regions. To enhance the immunization coverage and ensure equity, sustained availability and accessibility to quality vaccines is a prerequisite.

The absence of comprehensive and instant information on vaccine logistics often limits effective management of vaccines. For streamlining the immunization supply chain, it is essential to empower the vaccine store managers and cold chain handlers with a management information system, which equips them with the ability to view and assess data on vaccine stocks and storage temperatures.

The Electronic Vaccine Intelligence Network (eVIN), introduced by the Ministry of Health and Family Welfare and implemented by the United Nations Development Programme, enables real-time visibility of vaccine inventories by digitizing details of stock and storage temperature. In doing so, eVIN provides an integrated solution to address constraints of infrastructure, monitoring and human resources, often resulting in inadequate vaccine stocks and related challenges.

By leveraging a unique combination of:

- Technology - through mobile and web software applications and SIM-enabled temperature loggers;
- Human resource - through vaccine and cold chain managers for support and supervision;
- Governance - through standard operating procedures (SOPs) and systemizing processes for record-keeping and vaccine management;

eVIN aims to build capacities and provide a robust decision-making tool for cold chain managers.
With eVIN, cold chain and vaccine managers can:

- View the real-time availability of vaccine stocks
- Forecast and estimate monthly and weekly requirements
- Ensure appropriate storage temperatures and check if the vaccines are safe
- Get immediate alerts in case of temperature breach
- Get an overview of vaccine replenishment times, supply and consumption patterns
- Reallocate vaccine inventories
- Plan for emergencies and special programmes
LEARNING OBJECTIVES

- To understand the use of eVIN web application for vaccine and cold chain managers at district level
- To understand all the features, components and functions of the eVIN web application for vaccine and cold chain managers
- To understand the management of master data and assets through the eVIN application and generate reports for monitoring on periodic basis
- To understand methods to view trends for stocks, issues, receipts, discards and transfers of vaccines used for routine immunization, campaigns and as open vials
- To understand the process of inventory management through analysis of information from cold chain points in the district with the help of the online dashboards
- To understand the standard operating procedures of eVIN
- To learn about basic troubleshooting in the eVIN application, reset passwords for users and communicate with them through eVIN
- To be able to independently use the eVIN web application
1.0 ROLE OF VACCINE AND COLD CHAIN MANAGER (VCCM)

The chapter highlights the key roles and responsibilities of a vaccine and cold chain manager including record-keeping, managing reports, monitoring and lending supportive supervision.
1.1 KEY ROLES AND RESPONSIBILITIES

The primary role of a Vaccine and Cold Chain Manager (VCCM) is to enable effective functioning of an immunisation supply chain in a district.

A VCCM ensures maintenance of updated digital records of all the vaccines issued/received across cold chain points (CCPs) through periodic entries made in the eVIN. Reports generated from eVIN using this data will provide valuable inputs on how the vaccine distribution planning can be improved and streamlined for a strengthened vaccine supply chain.

Key responsibilities of the VCCM are described below.

**Record Keeping**
- During the visit to a CCP, review stock registers for:
  - Completeness - Check if all the data entries are done.
  - Timeliness – Check if all the transaction details are updated.
  - Accuracy – Check if there are any mistakes in calculation/mismatch between the existing stocks and those in the records maintained in the stock and distribution registers.
- Regularly review the stock/distribution registers at the District Vaccine Store as well as the Syringe Store for completeness, timeliness and accuracy.
- Review the distribution registers at the CCPs for correct data entries. Check for any mathematical errors in the ‘total’ and ‘net utilisation’ columns.
- Ensure that the entry of ‘issue’ and ‘return’ of open vials are made in vials only.
- Match the ‘net utilisation’ of vaccines of the last session with the quantity recorded in the stock registers for each vaccine.
- Check the stock registers regularly for record of quantity and reason of discards made.

**Supportive Supervision**
- Visit each CCP at least once in two months.
- Prioritise CCPs on the basis of support and handholding required, new staff positioned, new CCP created etc. Plan frequent visits to high priority CCPs.
During the visit, perform the following activities:

- Review registers and provide guidance to the Cold Chain Handler (CCH) in rectifying the mistakes.
- Perform a physical stock count of all the vaccines present in the CCP and confirm with the stocks recorded in the registers and entered in the eVIN mobile application.
- Perform a stock count of all items and update the data in mobile using ‘Enter Stock Count’ option if there is any discrepancy. Similarly, update the stock registers with the available quantity.
- Document every visit and action points. Maintain a log and share whenever required.
- Re-orient the CCH on proper storage of vaccines, diluents and syringes and explain arrangement of ice packs in deep freezer.
- Check the inventory of cold chain equipments and update the changes, if any
- Make a separate list of inventories which are missing in a particular CCP.
- Check the batch numbers and expiry dates of the existing stock during each visit to CCPs, and direct the CCHs to follow First Expiry First Out (FEFO) rule while issuing the vaccines.
- VCCM should also support the district store in-charge/ manager at the time of issuing the vaccines to the CCPs to follow FEFO rule.
- VCCM should be aware of the minimum and maximum level of vaccines for each CCP and support the district store in-charge in ensuring that the levels are maintained at the time of issuing vaccines to them.

Data Entry in eVIN Application

Monitoring Data Entry at Cold Chain Point

- Review the web interface (https://evinonline.in) - the online portal for timely data entry of all vaccines and syringes at CCPs after each immunisation session.
1.1 KEY ROLES AND RESPONSIBILITIES

Note – Time limit for data entry by the CCHs should be within 24 hours from the end of the last session. For example, for an immunisation session held on Wednesday, data should be entered by the CCH before Thursday evening.

- Refer to the immunisation schedule for all CCPs and revert to those who have not completed data entry within the stipulated time period. Note down the reasons for the delay in data entry or the absence of a session at a particular CCP.
- Ensure accurate data capture by personnel at CCPs by checking the following:
  - ‘Net utilisation’ of vaccines after each session is entered using the option – ‘Enter issues/Net utilisation – RI Vaccines’.
  - Open vials distributed are entered using the option – ‘Enter issues / Net utilisation – Open Vials’ and return of any open vials are entered using option – ‘Enter receipts – Open Vials’.
  - For materials such as BCG, Measles and JE, the quantity of vaccines issued should match with the quantities of diluents issued.
  - In case of OPV, the number of droppers issued should match with the number of vials issued.
  - Discards entered in eVIN should specify the reason for discard. For example, VVM Unusable, Expired, Broken, and Frozen amongst others.
- In the event that the personnel at CCP are not adhering to the above guidelines, VCCM should contact the CCP concerned and verify.
- Check the stock levels (vaccines/syringes/diluents/droppers) after each immunisation session and identify CCPs which have stocks below the minimum and above the maximum values.
- Entries (issues/receipts/discards) of RI (Routine Immunisation) vaccines in eVIN should be in multiples of doses that each vial contains.
Number of Doses per Vial for RI Vaccines

<table>
<thead>
<tr>
<th>S.no.</th>
<th>Vaccine name</th>
<th>Number of doses per vial</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>BCG (dose)</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>BCG diluent (dose)</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>DPT</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Hep B</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>IPV</td>
<td>10/50/5/25 (as per the state guidelines)</td>
</tr>
<tr>
<td>6</td>
<td>Measles (dose)</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Measles diluent (dose)</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>OPV</td>
<td>20</td>
</tr>
<tr>
<td>9</td>
<td>Pentavalent</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>JE (dose)</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>JE diluent (dose)</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>TT</td>
<td>10</td>
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Monitoring Data Entry at District Vaccine Store

- All materials received at the district store from a region/division should be entered in the web interface on the same day.
- All RI vaccines and syringes transferred from the district vaccine store to CCPs should be updated on the web interface by batch immediately.
- Ensure that the early expiry stocks are issued first while distributing the vaccines and are entered on the web interface.
- Ensure that the expiry date, batch number and VVM status are correctly entered into the website each time a data entry is made.
- Check the stock levels (vaccines/syringes/diluents/droppers) after each immunisation session and identify the District Vaccine Store (DVS) with stocks below the minimum and above the maximum values.

Training

- Ensure the accuracy of data captured by cold chain handlers (CCHs) at the cold chain points (CCPs) through periodic trainings and supportive supervision.
- In the event of any application update, ensure that CCH and DVS managers are adequately informed and trained with respect to the new features.
1.1 KEY ROLES AND RESPONSIBILITIES

Troubleshooting
- Provide clarifications to CCHs and DVS managers by referring to the ‘Trouble Shoot Guide’ in case of specific user-case scenarios.
- Update an ‘Issue Log’ which documents the key concerns faced by CCH and DVS managers while capturing data in eVIN.
- Follow up with CCH and DVS managers to ensure that all concerns are addressed within the minimum turn around time prescribed.

Hardware Related Support
- Help the CCHs to configure the mobile devices and install the application.
- Refer to the ‘Trouble Shoot Guide’ and address hardware related concerns put forth by CCHs.

Coordination
- Coordinate with the DVS managers to ensure effective use of eVIN across CCPs managed by them.
- Coordinate with the customer helpline to seek clarifications regarding unresolved issues / technical glitches.

Distribution Planning/Stock Management
For stock management at the CCPs, the following points should be taken care of:
- VCCM should always have a copy of the minimum/maximum level that should be maintained at each CCP.
- Regularly check for the CCPs where the stocks are falling below minimum and those with stocks above maximum limit.
- VCCM should contact the CCHs before the stock goes in to minimum range and inform them accordingly about collection of vaccines.
- VCCM should ensure that CCHs are issuing vaccines to session sites in appropriate quantity even when the stocks are low.
- VCCM should also provide each CCP with a re-order level and ensure that vaccines/syringes/diluents/droppers are replenished before they reach the cut-off level.
• VCCM should ensure that adequate amount of all vaccines and diluents are also available in the district vaccine store and stock should be re-ordered from the divisional store before it reaches the minimum level.
• VCCM should regularly analyse the consumption patterns, wastage rates, and the monthly reports.

Maintaining the Immunisation Session Format:
• Fill up the MS Excel sheet after each immunisation session day, when the data entry is completed through eVIN.
• Write Yes/No against each CCP on whether RI session was held or not.
• If no immunisation session was held in one or many of the CCPs, note down the reason/s for it.
• Note down all possible errors/mistakes that CCHs made while entering data for their CCPs.
• Note down any repetitive entries made.

Asset Management and Temperature Monitoring
• Maintain the updated metadata for all the cold chain equipment in the district.
• Facilitate the installation of temperature loggers for all functional ice-lined refrigerators (ILRs) in the district and for all functional deep-freezers as well at the district level.
• Facilitate installation of temperature logger for cold chain equipment that is on stand-by, under repair, beyond repair, condemned or in packed condition.

Stand-by:
Stand-by equipment is a working equipment on a given date and time which is not in use for storing vaccines due to various reasons.

Types of stand-by equipment:
Stand-by fixed: Temperature logger should be installed on stand-by cold chain equipment which is being used in a health facility for emergency management, campaigns and contingency plan. However, VCCM should ensure that the
logger is switched off in such case when the equipment is not in use and switched on once the equipment is in use. The VCCM should ensure that the SIM card is not removed while switching off the logger.

Stand-by floating: Temperature logger should not be installed for stand-by equipment which is in the health facility. This could be an equipment:

- Kept at SVS/RVS/DVS to be supplied to lower nodes as and when required
- Sent to DVS/RVS/SVS for repair work and maintenance

Temperature loggers should not be installed on such equipment. However, extra loggers and SIM cards should be available at the state/district warehouse for installation as and when required.

Under Repair:

Temperature logger should not be installed on the equipment if it is under repair. However, extra loggers and SIM cards should be available at the state/district warehouse for installation as and when required.

Beyond Repair:

Temperature logger should not be installed on the equipment if its status reads ‘Beyond repair’.

Condemned:

Temperature logger should not be installed on the equipment if its status reads ‘Condemned’.

Packed equipment:

Temperature logger should not be installed on the equipment that is packed and stored. However, extra loggers and SIM cards should be available at the state/district warehouse for installation as and when required.

- Associate the temperature logger with the corresponding equipment.
- After the installation of remote temperature loggers, monitor cold chain performance on the web interface and follow the SOPs for remote temperature monitoring.
• In case of any breakdown, lend support to the district refrigerator mechanic to ensure timely repair of the cold chain equipment.
• Provide supportive supervision and handholding of CCHs in instances of temperature breach.
• Lend support to the District Immunisation Officer (DIO) in day-to-day monitoring and implementation, and for site visits to all CCPs.
• Provide assistance to the DIO in organising review meetings for CCHs.
• Conduct training sessions and capacity building activities for CCHs to update them on add-on activities or addition of new items.
1.2 DISTRICT REPORTS

The VCCM is required to review the District Daily Report which helps in monitoring inventory information across all entities, enabling the VCCM to flag key areas of concern, contact CCHs and resolve issues at the earliest.

The District Daily Report comprises three components:

- CCP Activity Worksheet
- CCP Inventory Worksheet
- CCP Abnormal Stock Worksheet

**CCP Activity Worksheet**

The CCP Activity Worksheet is classified into two sections:

- RI Vaccines
- Open Vials and Campaigns

For each category, the worksheet extracts data from eVIN and updates the daily activity. The worksheet reflects the number of issues/receipts/discards and stock counts performed for all materials across entities. In case, there is an error/specific event, the cell will be highlighted in a different colour. This serves as an indicator for the VCCM to identify the error and contact the CCH for immediate resolution.

Below is a sample of the CCP Activity Worksheet in the District Daily Report:

![Sample CCP Activity Worksheet](image)

The CCP Activity Worksheet will highlight errors/events in the following scenarios:

- CCP has made a receipt of RI vaccines (cell highlighted in purple)
- CCP has discarded RI vaccines (cell highlighted in blue)
- CCP has made a stock count (cell highlighted in yellow)
• CCP has entered issues in non-multiples of doses/vials (cell highlighted in red)
• CCP has entered issues for vaccine and diluent in different quantities (cell highlighted in mustard)
• CCP has entered issues for OPV dropper different from that for OPV vials (cell highlighted in mustard)

The errors listed above require the VCCM to contact the CCH and resolve the issue at hand or to seek adequate justification for a particular event (e.g. stock count/not entering data in eVIN).

Note – Refer to the sample worksheet that highlights cells in various colours depending upon the nature of the error. Refer to the table - Number of Doses per Vial for RI Vaccines.

**CCP Inventory Worksheet**

The CCP Inventory Worksheet is classified into two sections:

• RI Vaccines
• Open Vials and Campaigns

For each category, the worksheet extracts data from the eVIN and updates the daily activity. The worksheet reflects the inventory and the last updated date for all materials across entities. In case, there is an error/specific event, the cell will be highlighted in a different colour. This serves as an indicator for the VCCM to identify the error and contact the CCH for immediate resolution.

Below is a sample of the CCP Inventory Worksheet in the District Daily Report:
1.2 DISTRICT REPORTS

The CCP Inventory Worksheet will highlight errors/events in the following scenarios:

- CCP inventory is not in the multiples of doses per vial (cell highlighted in purple).
- CCP inventory of vaccine does not match with the diluent (cell highlighted in mustard).
- CCP inventory of OPV dropper does not match inventory of OPV vials (cell highlighted in mustard).
- CCP inventory is more than seven days old (cell highlighted in grey).

The errors listed above require the VCCM to contact the CCH and resolve the issue at hand or to seek adequate justification for a particular event (e.g. inventory is more than seven days old).

**Note** – Refer to the sample worksheet that highlights cells in various colours depending upon the nature of the error. Refer to the table - Number of Doses per Vial for RI Vaccines.

**CCP Abnormal Stock Worksheet**

CCP Abnormal Stock Worksheet is classified into two sections:

- RI Vaccines
- Open Vials, Syringes and Campaigns

For each category, the worksheet extracts data from eVIN and updates the daily activity. The worksheet will reflect the inventory for all materials across entities and highlight those stocks that are at zero stock level, less than minimum stock level, greater than maximum stock level and inventory which has not been updated for more than seven days. This serves as an indicator for the VCCM to identify the error and contact the CCH for immediate resolution.
Below is a sample of the CCP Abnormal Stock Worksheet in the District Daily Report:

<table>
<thead>
<tr>
<th>CCP Abnormal Stock Worksheet will highlight errors/events in the following scenarios:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- CCP inventory is at zero stock level.</td>
</tr>
<tr>
<td>- CCP inventory is below the minimum stock level.</td>
</tr>
<tr>
<td>- CCP inventory is above the maximum stock level.</td>
</tr>
<tr>
<td>- CCP inventory is more than seven days old (cell highlighted in grey).</td>
</tr>
</tbody>
</table>

The above scenarios require the VCCM to contact the CCH and resolve the issue at hand or to seek adequate justification for a particular event (e.g. zero stock level at an entity).

**Note** – Refer to the sample worksheet that highlights cells in various colours depending upon the nature of the error. Refer to the table - Number of Doses per Vial for RI Vaccines.

In the event that no issues are entered even after RI day at the entity, the VCCM will contact the respective CCH and seek adequate justification regarding lack of issues as per the prescribed cycle and document the reasons.
2.0 GETTING STARTED

The chapter guides the user to login and manage password, view information on dashboards and navigate through the eVIN web application.
1. Using a web browser, go to www.evinonline.in.
2. Enter the username and password provided to you by the administrator.
3. Click on the Login button.
4. Prior to login, ensure that you select the relevant language from the drop down menu at the top right corner of the screen.
5. You will be directed to the Management console dashboard, which provides the main menu for further navigation.

6. Select the relevant tab in the main menu based on your requirement. Each tab has sub-tab menus for further navigation.
7. **Shortcuts** are available on the right side of the screen to facilitate easy navigation.

8. Links to download versions of the application are also provided on the dashboard under **Mobile apps**.

9. Click on the **Help** icon provided at the top right corner of the screen if you need Help. This will direct you to the **Help index** that contains guidelines to navigate through the web interface.
2.2 SHORTCUTS

1. Click on the link on the upper right hand corner of the screen to access the shortcuts.
2. Click on the required shortcut, i.e., Inventory transactions.
3. A new webpage will open displaying all the transactions that have taken place.

4. You can view the same information under the Transaction sub-tab of inventory.
2.3 FORGOT PASSWORD

1. In case you forget your eVIN password, click **Forgot password** given below the Login button.
2. You will be directed to another screen as displayed below.
3. Enter the eVIN user ID/name in the box provided.
4. Click Send password and select option for via SMS or Email.
5. Click Generate OTP in case you select via SMS.
6. You will receive a ‘one time password’ on your registered mobile number.
7. Enter this OTP in the box provided.
8. Click Reset password to reset password or click Cancel to cancel the activity.
9. You will receive another SMS on your registered mobile number which will contain your new password.
10. Use this new password for eVIN login.
2.4 SIGNING OUT

1. Click **Logout** on the upper right hand corner of the screen to log out of eVIN.
2.5 DASHBOARD

1. Login to the web interface. The Management Control Dashboard appears, displaying the following data:

   **Activity:**

2. The **Inventory** pie-chart displays the percentage of normal inventory in green colour, zero stock in red colour, less than minimum stock in yellow colour and greater than maximum stock in blue colour. This is a combination of materials and stores.

3. The **Activity** pie-chart displays the number of active users in green colour with percentage and inactive users in red colour with percentage.

4. The **Temperature** pie-chart displays the normal temperature range/status in green colour, low temperature in blue colour, high temperature in red colour and unknown temperature in grey colour for installed temperature loggers.

5. The **Inventory List** can be viewed by location and by material (by default it displays normal stock).

6. Click on [ ] to download the pie-chart and bar chart details in JPEG, PNG and PDF formats.
3.0 INVENTORY MANAGEMENT

The chapter provides information on how to view transactions and stocks using various filters and export this information using the eVIN web application.
**Inventory management**

Inventory Management helps to ensure that all transactions are adequately recorded in the system for regular monitoring and management of inventory.

**Colour code**

- The following colour codes are used to indicate the stock levels of all materials across the domain:

<table>
<thead>
<tr>
<th>Stock Levels</th>
<th>Colour code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero stock</td>
<td>●</td>
</tr>
<tr>
<td>&lt; Min (minimum stock)</td>
<td>●</td>
</tr>
<tr>
<td>&gt; Max (maximum stock)</td>
<td>●</td>
</tr>
</tbody>
</table>

**Note** – In the event that the inventory of any material is equal to the minimum or maximum stock, the item will be highlighted in the system with the colour corresponding to < Min (minimum stock) and > Max (maximum stock) respectively.
3.1 VIEW STOCK LEVELS

Stock levels can be filtered and viewed by:

- Store
- Material
- Expires before

You can also view stock levels of materials by exporting inventory information to your registered email address.
3.1 VIEW STOCK LEVELS

Filter by store (Entity/CCP)

1. Click on the Inventory tab in the main menu.
2. Select the Stock views sub-tab from the available options in the menu.
3. Enter the CCP name in the Store field
   - A list of related entities will appear in the dropdown list based on the keywords.
   - Select the CCP that you want to view stock levels for, e.g. CHC Bagru. The screen will display the current stock levels of all materials at the CCP in a tabular format.
4. Click Reset if you want to view stock levels for another CCP.
5. The inventory listing will also display the following fields:
   • Current stock
   • Min (Minimum stock)
   • Max (Maximum stock)
   • Last updated (Date and time)
6. Materials highlighted in red are at Zero stock level. (There are no stockouts in the example above).
7. Materials highlighted in yellow are equal to or less than Minimum stock level.
8. Materials highlighted in blue are equal to or more than Maximum stock level.
3.1 VIEW STOCK LEVELS

Filter by material

1. Click on the **Inventory** tab in the main menu.
2. Select the **Stock views** sub-tab from the available options in the menu.
3. Enter the material name in the **Material** field
   - A list of materials will appear in the dropdown list based on the keywords.
   - Select the material that you want to view stock levels for, e.g. BCG (dose). The screen will display the current stock levels of BCG (dose) across all entities in a tabular format.
4. Click **Reset** if you want to view stock levels for another material.
5. The inventory listing will also display the following fields in a tabular format:
   - Store
   - Current stock
   - Min (Minimum stock)
   - Max (Maximum stock)
   - Last updated (Date and time)

6. Materials highlighted in red are at Zero stock level. (There are no stockouts in the list above).

7. Materials highlighted in yellow are equal to or less than minimum stock level. (There are no stocks below the Minimum levels in the list above).

8. Materials highlighted in blue are equal to or more than Maximum stock level.

9. If Store tags are displayed, you can also browse stock levels by entity (CCP) tags.
3.1 VIEW STOCK LEVELS

Filter by expiry

1. Click on the **Inventory** tab in the main menu.
2. Select the **Stock views** sub-tab from the available options in the menu.
3. Click in the *Expires before* field and select the expiry date from the dropdown calendar. For example, 1 February 2017.

4. Click *Reset* if you want to select another date.
5. The current stock levels of all materials which will expire before February 2017 will be displayed.

6. The screen will display the following fields for each material item in a tabular format:
   - Material
   - Store (CCP)
   - Batch number
   - Expiry date
   - Manufacturer
   - Manufactured date
   - Current stock
   - Last updated (Date and time)

7. If the material and entity (CCP) tags are displayed, you can also browse stock levels by material and entity tags.
Store-wise (CCP-wise) view on map

1. Click on the **Inventory tab** in the main menu.
2. Select the **Stock views** sub-tab from the available options in the menu.
3. Click on the map icon 🌐 on the right side of the screen.
4. A map appears with all the entities which have been geo-tagged.

5. The entities may be clustered on the map for better visibility. Enable the Do not cluster points checkbox below the map to get an uncluttered view of the map with entities.

6. Click on any of the entities (CCP) to view material information (pertaining to the CCP) in a tabular format. For example, Chavandiya PHC, Jaipur Rajasthan.
3.1 VIEW STOCK LEVELS

7. The displayed material information will include current, minimum and maximum stock levels, and the last date and the time of update.
Material-wise view on map

1. Click on the Inventory tab in the main menu.
2. Select the Stock views sub-tab from the available options in the menu.
3. Enter the material name in the Material field. For example, BCG (dose).
4. Click on the map icon on the right side.
5. A map appears displaying BCG (dose) stock levels across locations.

Note – The following colour coding is used to indicate various stock levels:
- < Min (Minimum quantity)
- > Max (Maximum quantity)
- Stock outs
- Normal
6. Click on any of the entities (CCP) to view material information (pertaining to the CCP) in a tabular format. For example, Gathwadi PHC.

7. The displayed material information will include the current, minimum and maximum stock levels, and the last date and time of update.
3.2 EXPORT INVENTORY

1. Click on the Inventory tab in the main menu.
2. Select the Stock views sub-tab from the available options in the menu.
3. The inventory can be viewed and exported using the following filters:
   a) Complete inventory of all materials across all facilities:
      • Without batch  • With batch
   b) Inventory of all materials of a specific entity:
      • Without batch  • With batch
   c) Inventory of a specific material across all entities:
      • Without batch  • With batch
   d) Inventory of a specific material across all entities for a specific batch.
   e) Inventory of a specific material across all entities before a specific expiry date across batches.
Export information on inventory managed across all facilities

1. Click on Export without selecting any filter.
2. A pop-up box will appear to confirm whether you want to export the inventory.

3. In the event that you
   3a. Do not seek batch details, do not check ‘Include batch details’ box; or
   3b. Seek batch details, check the ‘Include batch details’ box.

4. Click OK to export data or click Cancel to select another option.
3.2 EXPORT INVENTORY

5. A confirmation message will appear and the CSV file will be exported to your registered email address. You can view the CSV file in Microsoft Excel.
Export information on all materials for a specific entity

1. Enter the CCP name in the **Store** field and select the entity from the dropdown list. For example, Bagwada PHC.
2. Click **Export** after selecting the appropriate filter.
3. A pop-up box will appear seeking confirmation whether you want to export the inventory.

4. In the event that you
   4a. Do not seek batch details, do not check “Include batch details” box; or
   4b. Seek batch details, check the ‘Include batch details’ box.

5. Click OK to export data or click Cancel to select another option.
A confirmation message will appear and the CSV file will be exported to your registered email address. You can view the CSV file in Microsoft Excel.
**Export information of a specific material for a specific entity**

1. Enter the material name in the **Material** field and select from the dropdown list. For example, BCG (dose).
2. Click on Export after selecting the appropriate filter.
3. A pop-up box will appear seeking confirmation whether you want to export the inventory.

4. In the event that you
   4a. Do not seek batch details, do not check “Include batch details’ Box; or
   4b. Seek batch details, check the ‘Include batch details’ box.

5. Click OK to export data or click Cancel to select another option.
6. A confirmation message will appear and the CSV file will be exported to your registered email address. You can view the CSV file in Microsoft Excel.
Export information on inventory of a specific material across all entities for a specific batch

1. Enter the material name in the Material field and select from the dropdown list. For example, JE Vaccine (dose).
2. Enter the batch number in the Batch field. For example, 201404C10-1.
3. Click Go.
4. Click Export after selecting the appropriate filter.
5. A pop-up box will appear seeking confirmation whether you want to export the inventory.

**Note**—There is no need to check the ‘Include batch details’ box as the purpose of this function is to export details of a specific batch.

6. Click **OK** to export data or click **Cancel** to select another option.
3.2 EXPORT INVENTORY

7. A confirmation message will appear and the CSV file will be exported to your registered email address. The CSV file can be viewed in Microsoft Excel.
Export information of inventory of a specific material across all entities before a specific expiry date across batches

1. Enter the material name in the Material field and select from the dropdown list. For example, Hepatitis B (dose).

2. Select the date in the Expires before field. For example, 15 December 2017.
3. Click Export after selecting the appropriate filter.
4. A pop-up box will appear seeking confirmation whether you want to export the inventory.

5. Click OK to export data or click Cancel to select another option.
6. A confirmation message will appear and the CSV file will be exported to your registered email address. The CSV file can be viewed on Microsoft Excel.
Abnormal stock refers to materials with the following stock levels:

- Zero stock
- Less than or equal to minimum stock
- More than or equal to maximum stock
3.3 ABNORMAL STOCK

**View abnormal stock**

1. Click on the **Inventory** tab in the dashboard menu.
2. Select the **Abnormal stock** sub-tab from the available options in the menu.
3. By default, an inventory list of all the items with zero stock level will be displayed.
4. Click on the material name to view the recent zero stock incidents.
5. In order to view materials for which:
   - Stock level is less than or equal to the minimum stock, or
   - More than or equal to the maximum stock
Select the appropriate option from the dropdown list.

6. Sort materials by entity (CCP), material or stock level by clicking on the column headers. For example, Entity (CCP) – Barkat Nagar.
3.3 ABNORMAL STOCK

7. To apply store tag, click on Store tags.
8. A dropdown list will appear with ALL, CCP, DVS as options.
9. Click on the tag which you want to select for view.
10. The list of abnormal stocks will be displayed, if any.
11. To apply material tag, click on Material tags.

12. A dropdown list will appear with All, Campaign, Open vials, RI vaccines and Syringes as options.

13. Click on the tag you want to view details for.
3.3 ABNORMAL STOCK

Export information of abnormal stock

1. Click on the Inventory tab in the dashboard menu.
2. Select the Abnormal stock sub-tab from the available options in the menu.
3. Select the appropriate option from the dropdown list depending upon the type of abnormal stock report that you require (zero stock, less than minimum stock, more than maximum stock). For example, Zero stock.

4. Click Export.
5. A pop-up box will appear seeking confirmation whether you want to export the abnormal stock data. Click OK to export specific list/complete list of abnormal stock to your registered email address or click Cancel to select another option.
6. A confirmation message will appear and the CSV file will be exported to your registered email address. You can view the CSV file in Microsoft Excel.
4.0 MANAGING REPORT

The chapter lists various kinds of reports on vaccine inventories and how to access and manage these on the eVIN application.
Based on inventory information, a series of reports can be generated to facilitate on-going monitoring and decision-making.

Multiple reports can be extracted from eVIN for the following:

- Inventory trends
- Replenishment response time
- Transaction history
- User activity
- Custom report

For each of the following heads, you can view customised reports using the material, entity, entity group and state filter options available.
4.1 INVENTORY TRENDS-OVERVIEW

1. Click on the **Reports** tab in the main menu.
2. Select the **Inventory trends** sub-tab from the available options in the **Reports** tab.
3. A list of available reports will appear on the left side of the screen under the Reports tab.

4. Select the Inventory trends sub-tab from the list of reports.

5. The screen will display the various filter options available (material, entity, state, district /county, duration etc) to extract specific information.

6. Click Reset to change filter criteria.
7. Enter the material name in the Material field.

**Note** – Fields highlighted with an asterix (*) are mandatory fields

- List of materials will appear in the dropdown list based on the key words.
- Select the material you want to view stock levels for. For example, BCG (dose); the screen will display the current stock levels of BCG (dose) across all entities in a chart format.

8. Apply the filter and click Get report.
9. The overview will display material information in a chart format. Information will include number of issues, receipts, discards and closing stock values over a few months.

10. Click on the bar graph for any month to obtain daily trends for that month. For example, June 2015.
11. The daily trends will reflect the number of transactions across all heads in the specific month.

12. To obtain a tabular view, click the Table icon provided.

13. Click Download as CSV to obtain a copy of material information that can be opened in Microsoft Excel.

Note – Always use “Download as CSV” for viewing daily trends.
14. The tabular format will include additional heads of information such as Opening Stock, Closing Stock, Stock Adjustment, Minimum and Maximum Stock Levels and Transfers.

15. Click Download as CSV to obtain a copy of material information that can be viewed in Microsoft Excel.

16. Click on the Chart icon to switch back to the graph view.
17. Click on the icon provided above the chart to download it in the following formats:

- JPEG image
- PNG image
- PDF document
- SVG vector image
Inventory trends – Stock

1. Click the Stocks sub-tab from the Inventory trends menu for the same material. For example, BCG (dose).
2. The chart will highlight the closing stock and stock adjustments for BCG (dose) over a specific duration of time.
3. Click on the bar graph for any month to view the daily trends for that month.
4. To obtain a tabular view, click on the Table icon.
5. Click Download as CSV to obtain a report that can be viewed in Microsoft Excel.
6. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PNG image
   - PDF document
   - SVG vector image
Inventory trends - Issues

1. Click on the **Issues/Net utilization** sub-tab from the Inventory trends menu for the same material. For example, BCG (dose).

2. The chart will highlight the number of issue transactions for BCG (dose) over a specific duration of time.

3. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PNG image
   - PDF document
   - SVG vectorimage
4.1 INVENTORY TRENDS-OVERVIEW

Inventory trends – Receipts

1. Click on the Receipts sub-tab from the Inventory trends menu for the same material. For example, BCG (dose).
2. The chart will highlight the number of receipts for BCG (dose) over a specific duration of time.
3. Click on the bar graph for any month to view the daily trends for that month.
4. To obtain a tabular view, click on the Table icon.
5. Click on Download as CSV to obtain a report that can be viewed in Microsoft Excel.
6. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PDF document
   - PNG image
   - SVG vector image
Inventory trends – Discards

1. Click on the Discards sub-tab from the Inventory trends menu for the same material. For example, BCG (dose).
2. The chart will highlight the number of discards for BCG (dose) over a specific duration of time.
3. Click on the bar graph for any month to view the daily trends for that month.
4. To obtain a tabular view, click on the Table icon.
5. Click on Download as CSV to obtain a report that can be viewed in Microsoft Excel.
6. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PDF document
   - PNG image
   - SVG vector image
4.1 INVENTORY TRENDS-OVERVIEW

Inventory trends – Transfers
1. Click on the Transfers sub-tab from the Inventory trends menu for the same material. For example, BCG (dose).
2. The chart will highlight the number of transfers for BCG (dose) over a specific duration of time.
3. Click on the bar graph for any month to view the daily trends for that month.
4. To obtain a tabular view, click on the Table icon.
5. Click on Download as CSV to obtain a report that can be opened in Microsoft Excel.
6. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PDF document
   - PNG image
   - SVG vector image

Note – You can download reports for issues, receipts, discards and transfers without using any filter; the inventory report will be the same. You can get the report for all the variables for daily trends with a single click.
Inventory trends – Use of primary and secondary filters (Store / Store tag)

1. Go to Inventory trends sub-tab from the list of reports.
2. The screen will display the various filter options available (material, entity, state, district /county, duration etc.) to extract specific information.
3. Enter the material name which is a mandatory primary filter. For example, BCG (dose).
4. Apply a secondary filter and provide an entity. For example, Charchuma PHC.
5. Click Get report.
6. The overview will display material information (here, BCG (dose) across Charchuma) in a chart format. The information will include the number of issues, receipts, discards and closing stock values over a few months.

7. Click on the bar graph for any month to view the daily trends for that month. For example, Jan 2016.
8. To obtain a tabular view, click on the Table icon.

9. Click on Download as CSV to obtain a report that can be opened in Microsoft Excel.

10. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PNG image
   - PDF document
   - SVG vector image
4.1 INVENTORY TRENDS-OVERVIEW

11. You can also use the entity tag filter to view material information specific to a particular entity.
4.2 REPLENISHMENT RESPONSE TIME

Response replenishment time – Material filter

1. Click on the Reports tab in the main menu.
2. Select the Response replenishment time sub-tab from the available options in the menu.
3. A list of available reports will appear on the left side of the screen under the Reports tab.

4. Select the Replenishment response time sub-tab from the list of reports.

5. The screen will display the various filter options available (material, entity, state, district /county, duration etc) to extract specific information.

6. Click Reset to change the filter criteria.
7. Enter the material name in the **Material** field
   - A list of materials will appear in the dropdown list based on the key words.
   - Select the material that you want to view stock levels for. For example, BCG (dose). The screen will display the current stock levels of BCG (dose) across all entities in a chart format.

8. Apply the filter and click **Get report**.
4.2 REPLENISHMENT RESPONSE TIME

9. The overview will display the material information in a chart format. The information will include the average replenishment response time (from zero stock to normal stock level) for every month across the duration.

10. Click on the Table icon to view information in a tabular format.
11. Click on **Download as CSV** to obtain a report that can be viewed in Microsoft Excel.

12. Click on the **Graph icon** to switch back to the graph view.
13. Click on the icon above the chart to download the chart in the following formats:

- JPEG image
- PNG image
- PDF document
- SVG vector image
Replenishment response time - < Minimum stock

1. Click on the < Min sub-tab from the Replenishment response time menu for the same material. For example, BCG (dose).
2. The chart will highlight the average replenishment response time (from < minimum stock level to normal stock level) for BCG (dose) over a specific duration.
3. To obtain a tabular view, click on the Table icon.
4. Click on Download as CSV to obtain a report that can be viewed in Microsoft Excel.
5. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PNG image
   - PDF document
   - SVG vector image
4.2 REPLENISHMENT RESPONSE TIME

**Replenishment response time - > Maximum stock**

1. Click on the > Max sub-tab from the Replenishment response time menu for the same material. For example, BCG (dose).
2. The chart will highlight the average replenishment response time (from > maximum stock level to normal stock level) for BCG (dose) over a specific duration.
3. To obtain a tabular view, click on the Table icon.
4. Click on Download as CSV to obtain a report that can be viewed in Microsoft Excel.
5. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PNG image
   - PDF document
   - SVG vector image
Replenishment response time – Entity filter

1. Enter the entity name in the Store field
   - A list of entities will appear in the dropdown list based on the key words
   - Select the entity that you want to view replenishment response time for. For example, Charchuma PHC.
2. Apply the filter and click Get report.
3. The screen will display the average replenishment response time (from zero stock level to normal stock level) for materials at Charchuma for a specific duration.
4. Click on the <Min and > Max tabs to view average replenishment response time in relation to minimum and maximum stock levels.
5. To obtain a tabular view, click on the Table icon.
6. Click on Download as CSV to obtain a report that can be viewed in Microsoft Excel.
7. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PDF document
   - PNG image
   - SVG vector image
4.2 REPLENISHMENT RESPONSE TIME

Replenishment response time – State filter
1. Enter the state in the *State name* field
   - A list of states will appear in the dropdown list based on the key words
   - Select the state that you want to view replenishment response time for. For example, Rajasthan.
2. Apply the filter and click *Get report*.
3. The screen will display the average replenishment response time (from zero stock level to normal stock level) for materials in Rajasthan for a specific duration of time.
4. Click on the *<Min* and *Max* tabs to view average replenishment response time in relation to minimum and maximum stock levels.
5. To obtain a tabular view, click on the *Table icon*.
6. Click on *Download as CSV* to obtain a report that can be viewed in Microsoft Excel.
7. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PDF document
   - PNG image
   - SVG vector image
Replenishment response time – District / County filter

1. Enter the district/county in the District/County field
   - A list of entities will appear in the dropdown list based on the key words
   - Select the entity that you want to view replenishment response time for. For example, Kota.
2. Apply the filter and click Get report.
3. The screen will display the average replenishment response time (from zero stock level to normal stock level) for materials at Kota for a specific duration.
4. Click on the <Min and >Max tabs to view average replenishment response time in relation to minimum and maximum stock levels.
5. To obtain a tabular view, click on the Table icon.
6. Click on Download as CSV to obtain a report that can be viewed in Microsoft Excel.
7. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PDF document
   - PNG image
   - SVG vector image
4.3 TRANSACTION COUNTS

Transaction counts – Material filter

1. Click on the Reports tab in the main menu.
2. Select the Transaction counts sub-tab from the available options in the menu.
3. A list of available reports will appear on the left side of the screen under the **Reports** tab.

4. Select the **Transaction counts** sub-tab from the list of reports.

5. The screen will display the various filter options available (material name, store, state name, district, duration and store group etc.) to extract specific information.

6. Click **Reset** to change the filter criteria.
7. To apply filter material name, enter the material name in the Material name field
   - A list of materials will appear in the dropdown list based on the keywords.
   - Select the material that you want to view stock levels for. For example, BCG (dose). The screen will display the current stock levels of BCG (dose) across all entities in a tabular format.

8. Repeat the same steps to apply other filters like store, state name, district, and store group.

9. Apply the filter and click Get report.
10. The overview will display transaction information in a chart and tabular formats. This will include the number of issues, receipts, stock counts, discards and transfers made till date.

11. A month-wise detailed chart with information on transactions can also be obtained.
12. To obtain a tabular view, click on the Table icon.

13. Click on Download as CSV to obtain a report that can be viewed in Microsoft Excel.

14. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PNG image
   - PDF document
   - SVG vector image
**Transaction counts – Material filter (Issues)**

1. Click on the **Issues/Net utilization** sub-tab from the **Transaction counts** menu for the same material. For example, BCG (dose).
2. The chart will highlight the number of issue transactions for BCG (dose) over a specific duration.
3. Click on the bar graph of any month to view the daily trends for that month.
4. To obtain a tabular view, click on the **Table icon**.
5. Click on **Download as CSV** to obtain a report that can be viewed in Microsoft Excel.
6. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PDF document
   - PNG image
   - SVG vector image
4.3 TRANSACTION COUNTS

Transaction counts – Material filter (Receipts)
1. Click on the Receipts sub-tab from the Transaction counts menu for the same material. For example, BCG (dose).
2. The chart will highlight the number of receipt transactions for BCG (dose) over a specific duration.
3. Click on the bar graph for any month to view the daily trends for that month.
4. To obtain a tabular view, click on the Table icon.
5. Click on Download as CSV to obtain a report that can be viewed in Microsoft Excel.
6. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PDF document
   - PNG image
   - SVG vector image
**Transaction counts – Material filter (Stock counts)**

1. Click on the Stock counts sub-tab from the Transaction counts menu for the same material. For example, BCG (dose).
2. The chart will highlight the number of stock counts for BCG (dose) over a specific duration.
3. Click on the bar graph for any month to view the daily trends for that month.
4. To obtain a tabular view, click on the Table icon.
5. Click on Download as CSV to obtain a report that can be viewed in Microsoft Excel.
6. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PDF document
   - PNG image
   - SVG vector image
### Transaction counts – Material filter (Discards)

1. Click on the **Discards** sub-tab from the **Transaction counts** menu for the same material. For example, BCG (dose).
2. The chart will highlight the number of discards for BCG (dose) over a specific duration.
3. Click on the bar graph for any month to view the daily trends for that month.
4. To obtain a tabular view, click on the **Table icon**.
5. Click on **Download as CSV** to obtain a report that can be viewed in Microsoft Excel.
6. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PDF document
   - PNG image
   - SVG vector image
**Transaction counts – Material filter (Transfers)**

1. Click on the Transfers sub-tab from the Transaction counts menu for the same material. For example, BCG (dose).
2. The graph will highlight the number of transfers for BCG (dose) over a specific duration.
3. Click on the bar graph for any month to view the daily trends for that month.
4. To obtain a tabular view, click on the Table icon.
5. Click on Download as CSV to obtain a report that can be viewed in Microsoft Excel.
6. Click on the icon above the chart to download the chart in the following formats:
   - JPEG Image
   - PDF document
   - PNG image
   - SVG vector image
4.4 USER ACTIVITY

1. Click on the Reports tab in the main menu.
2. Select the User activity sub-tab from the available options in the menu.
3. A list of available reports will appear on the left side of the screen under the **Reports** tab.

4. Select the **User activity** sub-tab from the list of reports.
5. Use the cursor to see the value of a transaction/variable on any of the bar graphs.
User activity - Logins

1. Enter the user ID in the User name field.

Note – Fields marked with an asterix (*) are mandatory fields.

2. Click Get report.
3. The screen will display the number of logins by the user for a specific duration.
4. Click Reset to view details for another user.
5. Click on the bar graph for any month to view daily trends for that month.
6. To obtain a tabular view, click on the Table icon.
7. Click on Download as CSV to obtain a report that can be viewed in Microsoft Excel.
8. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PDF document
   - PNG image
   - SVG vector image
4.4 USER ACTIVITY

User activity – Inventory

1. Click on the **Inventory** sub-tab from the **User activity** menu for the same user. For example, Achamma Mathew.

2. The screen will display the number and nature of transactions entered by the user in a chart format for a specific duration.

3. Click on the bar graph for any month to view the daily trends for that month.

4. Click on Download as CSV to obtain a report that can be viewed in Microsoft Excel.

5. Click on the icon above the chart to download the chart in the following formats:
   - JPEG image
   - PNG image
   - PDF document
   - SVG vector image

6. To obtain a tabular view, click on the Table icon.
7. Click on the Chart icon to switch back to the chart view.
4.5 CUSTOM REPORT

Custom report overview
1. Click on the Reports tab in the main menu.
2. Click on the Custom reports sub-tab from the main menu.
3. A list of custom reports appear on the screen.
4. Click on Download to view the system-generated report.
5. You can view the date of export, status and list of recipients in that sub-tab.
6. To download the custom report, click **Download**.

7. A Microsoft Excel file will be downloaded to your computer.
8. Custom Reports have summary of the day for a) activity b) Inventory and c) Abnormal which helps you in planning daily follow-ups with Cold-Chain Handlers and action points for maintaining adequate stock in the district.

- For example, the screen given above (a) Activity
- For example, the screen given above (b) Inventory
For example, the screen given above (c) Abnormal
5.0 MANAGING ASSETS

The chapter guides the user to view and manage information related to cold chain equipment and vaccine storage temperatures.
5.1 ASSETS OVERVIEW

1. Click on the Assets tab in the main menu.
2. The data on assets will appear on the screen. Assets can be viewed by using one of the two filters:
   - Store
   - Serial number
3. Click on Reset to change the search criteria.
A list of assets will appear on the screen with three filters:

- Type
- Working status
- Alarms
5.1 ASSETS OVERVIEW

1. Asset type will display ILR as default selection. Click on **Type** to view a dropdown list with the following options:
   - All
   - ILR
   - Walk-in cooler
   - Deep freezer
   - Temperature logger
   - Walk-in freezer

2. Click on **Working status** to view a dropdown list with the following options: All, Working, Under repair, Beyond repair, Condemned, Stand-by and Defrosting.

3. To apply a specific filter, click on the same.

4. Click on **Alarm** to get information about temperature alarms, no data and normal items.
1. Click an asset type to view all assets mapped under that category. For example, ILR.
2. On clicking any asset in the list, all details of that particular asset will be displayed including:
   
   2a. Temperature of all sensors attached to the cold chain equipment.
   
   2b. Location of the entity.
   
   2c. Type of asset.
   
   2d. Condition of asset.
   
   2e. Edit option for asset.
   
   2f. Edit option for condition of asset.
3. Hover the cursor on a temperature breach shown by the sensor. A pop-up window appears with the warning status and initiation time of the warning.
5.1 ASSETS OVERVIEW

4. You can view more details about the asset:
   4a. Temperature [by default this will show Temperature from B (middle) sensor]
   4b. Sensor wise
   4c. Power availability
   4d. Recent activity
   4e. Day wise filter
   4f. Switch to pin mode
   4g. Export chart
   4h. Events of temperature breach of any particular sensor and since when
5. Click on day-wise filter to view a calendar which can be used to select a specific date for which observations are to be obtained.
6. You can click and drag the temperature line to view day-wise temperature as it zooms in on the temperature line for better visibility.

7. The temperature range is marked by a straight line: a red line at the top marked at 8°C and a blue line at the bottom marked at 2°C.

8. Another icon to Reset chart also appears on zooming in on the temperature line.
9. You can further zoom in the temperature line by double clicking on it and view the detailed temperature range for hourly temperature fluctuations on the asset.
10. You can view the asset capacity and capacity metrics by clicking the Information tab.
11. You can view the Monitoring point, Sensor and Related Asset by clicking the **Relationship** tab.
12. Click Related asset. A new page opens up with further details on the Related Asset.

13. It displays the asset type.

14. It also displays the condition of the asset.
15. The **Summary** section displays:
   15a. Temperature of the asset on a timeline
   15b. Power availability
   15c. Recent activity
5.1 ASSETS OVERVIEW

16. The **Information** section displays:

16a. Asset GSM information
16b. Firmware
16c. IMEI number
16d. SIM ID
17. The Configuration section displays the following:

17a. Edit option
17b. Push configuration
17c. High alarm configuration
17d. Low alarm configuration
17e. High warning configuration
17f. Low warning configuration
5.1 ASSETS OVERVIEW

17g. Communication configuration
17h. Alarm frequency notification
17i. Locale configuration
17j. Sensor specific configuration
17k. High and low alarm configuration
17l. High and low warning configuration
17m. Communication configuration
5.1 ASSETS OVERVIEW

18. The **Relationship** section displays:

18a. Monitoring point
18b. Sensor
18c. Related asset
19. The **Statistics** section displays:

19a. Day wise filter
5.2 FILTER ASSETS BY STORE AND SERIAL NUMBER

1. Click on the Assets tab in the main menu.
2. Enter the store name in the Store field. For example, Aandhi CHC.
3. A second filter for serial number can also be applied.
4. Enter the serial number of an asset, if known, in the Serial number field.
5. The requisite details for the selected asset will appear.
6. Click Reset to modify the search criteria.
7. Other filters that can be used to view details are:


7b. **Actual Working status**—Working, Under repair, Beyond repair, Condemned, Stand-by, Defrosting.

7c. **Alarms**—Temperature alarm, No data, Normal items.
6.0 UNDERSTANDING SETUP

The chapter outlines the process to create, edit and organize details of the domains, users, stores, inventories and manage system configuration on the eVIN application.
6.1 MANAGING USERS

To filter user
1. Click on the Setup tab in the main menu.
2. Click on the Users sub-tab.
3. There are four filters under the Users tab.
4. You can use any one filter out of four at a time i.e., you can search either by First name, Mobile number, Role or Username.
5. The screen will display User name, Role, Contact details, Time of last login, Status, Sent by and option to Send a message to a specific user in a tabular format.
To send message

1. Click on the Setup tab in the main menu.
2. Click on the Users sub-tab.
3. Search for and select the users (i.e. CCHs) that you want to send a message to.
4. Click **Send message**.
5. Type the message in 160 characters.
6. Click **Submit**.
7. A pop-up box confirming that the message was sent successfully will appear on the screen.
Reset CCH password

1. Click on Setup tab in the main menu.
2. Click on Users.
3. A list of users appears. Select the user whose login password you want to change.
4. Click **Reset** password to reset the password, on request raised by the user.

5. To edit personal details, click **Edit**, change the details, as required and save the changes.

6. Click on **Force logout** on mobile to log out a CCH user from the mobile app for a specific reason.

**Note** – This option is not to be used by the VCCM at present.
To create users

1. Click on Setup tab in the main menu.
2. Click on Create user.
3. Fill the required fields with relevant details.
4. Click Save.

Note – This option is not to be used by the VCCM at present.
6.1 MANAGING USERS

For upload in bulk
1. Click on Setup tab in the main menu.
2. Click on Users.
3. Click Download data file format for Users; a Microsoft Excel file will be downloaded to your computer.
4. Enter details of all users in the downloaded Microsoft Excel file in the given format.
5. Browse and select the filled-in format from your computer and click **Upload**.
To check sent message status
1. Click on Setup tab in the main menu.
2. Click Sent message status.
3. The following file will display the status for all sent messages.
6.2 MANAGING ASSETS

Monitored Assets
Any active cold chain equipment or device which is used to store vaccines and require monitoring is referred to as monitored assets.

Cold Chain Equipment
The equipment which is used to store vaccines at a cold chain point and vaccine stores is referred to as cold chain equipment, such as ice-lined refrigerator and deep freezers.

Temperature Loggers
Temperature logger is a device used to monitor the temperature of cold chain equipment that stores vaccines.

Excursion
It is an event when the temperature inside a monitored asset goes out of the recommended range.

Incursion
The return of a temperature of a sensor placed in a cold chain equipment from the state of excursion to the normal or recommended temperature range is known as incursion.

Alarms
The instances of temperature excursion are known as alarms; these are usually sent by SMS, email or buzzer.
6.2 MANAGING ASSETS

Set up the assets
1. Click on Setup tab in the main menu.
2. Click Assets.
3. The screen will display three tabs - Assets, Create asset and Upload in bulk.
   The system selects the Assets tab by default.
View assets

1. Enter the **Serial number** of the asset to view its details.
2. Select the **Type** of asset from the dropdown list.
3. Click **Export** to receive details of all assets of the current domain in a spreadsheet format on the registered email address.
4. Click **Reset** to clear all the filters applied.
5. Click on the **Arrow** button to go to the next page.
6. Click on the **Serial number** of the asset to view asset details.
7. Click on the **Store** name to view store details.
8. Click the **Edit icon** to edit the asset details.
6.2 MANAGING ASSETS

Edit assets details - Temperature logger

1. The Asset information screen appears on clicking the Edit icon in the Assets sub-tab under Setup in the main menu. The Asset type, Serial number of asset, Manufacturer name and the Asset model number details will be pre-filled as per the asset selected to edit from the View asset screen.

2. Enter the store name in the Store field.

3. Select the owner name from the dropdown list provided under Owners.

4. Select the maintainer’s name from the dropdown list provided under Maintainers.
Edit assets details - Asset GSM information
1. In the Asset information screen, under Asset GSM information section, enter the mobile number of the SIM inserted in the temperature logger.
2. Enter the SIM ID of the inserted SIM.
3. Enter the name of network provider of the inserted SIM.
4. Enter the alternate number of the second SIM inserted in the temperature logger.
5. Enter the ID of the alternate SIM (second SIM) inserted in the temperature logger.
6. Enter the name of the network provider of second SIM inserted in the temperature logger.
7. The system will automatically select the IMEI number of the primary SIM (first SIM).
8. The system will itself select the firmware version of the temperature logger.
9. The system will itself select the GSM module version of the temperature logger.
10. Click Update to make the necessary changes.
11. Click Cancel to go back to the view page.
6.2 MANAGING ASSETS

Create assets - Temperature logger

1. Select the type of asset from Asset type tab.
2. Enter the unique serial number of the asset in the **Serial number** field.

3. Select the **Manufacturer** name from the dropdown list; only Nexleaf is available in the system at present.

4. Select the **Asset model** from the dropdown list; only eVIN Temperature logger is available in the system at present.

5. Enter the store name in the **Store** field.

6. Select the owner’s name from the dropdown list provided under **Owners**.

7. Select the maintainer’s name from the dropdown list provided under **Maintainers**.
6.2 MANAGING ASSETS

Create assets - Temperature logger - Asset GSM information
1. Enter the mobile number of the primary SIM (first SIM) inserted in the temperature logger.
2. Enter the SIM ID of the inserted primary SIM.
3. Enter the name of network provider of the inserted primary SIM.
4. Enter the alternate number of the second SIM inserted in the temperature logger.
5. Enter the ID of the alternate SIM (second SIM) inserted in the temperature logger.
6. Enter the name of the network provider of the second SIM inserted in the temperature logger.
7. Enter the IMEI number of primary SIM (first SIM).
8. Enter the firmware version of the temperature logger.
9. Enter the GSM module version of the temperature logger.
10. Click Update to make the necessary changes.
11. Click Cancel to go back to the view page.
12. Select from the options ‘Push default configuration to device’ or ‘Don’t push configuration to device’ to send the configuration information to the system or not, respectively.

Note – Ensure that the option ‘Don’t push configuration to device’ is always checked.
Select a receiving store from the list below.

Ahmedabad DH
Ahmedabad, Ahmedabad
7.0 STANDARD OPERATING PROCEDURES FOR ABNORMAL STOCK SITUATION

The chapter provides standard operating procedures for abnormal vaccine stock situations.
<table>
<thead>
<tr>
<th>Abnormal Stock Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Excess stock</strong></td>
</tr>
<tr>
<td>Check if this is because of any campaign emergency requirement or increase in consumption because of migration etc.</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Make a note and include as remark in microplan.</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Check any with stock out or inadequate stock and arrange transfer of vaccine.</td>
</tr>
<tr>
<td><strong>Less than minimum stock (Between 50% to 25%)</strong></td>
</tr>
<tr>
<td>Check if the indent is raised from district or from CCP to supply vaccine.</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Make a note and ensure necessary follow-up</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Ensure that the health facility has raised the indent with correct quantity.</td>
</tr>
<tr>
<td><strong>Inadequate stock</strong></td>
</tr>
<tr>
<td>Check if the indent is raised from district or from CCP to supply vaccine.</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Keep note of it and do the necessary follow-up. Note down the reason for exceeding lead time.</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Ensure that indent is raised and vaccines are distributed on priority (with no regular lead time).</td>
</tr>
<tr>
<td><strong>Stock out</strong></td>
</tr>
<tr>
<td>Check if the indent is raised from district or from CCP to supply vaccine and whether shipment is on its way.</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Ensure necessary follow-up for timely arrival of shipment</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Check if there is a CCP with excess stock or normal stock. Arrange load balancing from CCP to CCP. Inform district authority and DIO.</td>
</tr>
</tbody>
</table>
8.0 ESCALATION MECHANISM FOR REMOTE TEMPERATURE MONITORING

The chapter provides standard operating procedures on escalation mechanism for instances of breach of vaccine storage temperature.
8.1 MONITORING TEMPERATURE LOGGERS

Scenario
You detect the ‘Sensor is disconnected’ alarm on eVIN.

Action
a. Ensure that the wire connection of the corresponding sensor is securely fastened to the device.

b. After the connection is secured, the 'disconnected' alarm will disappear within an hour from the eVIN web view.

If the alarm does not disappear, escalate the problem to the State Project Officer-IT.

Scenario
You detect the ‘Battery is low’ warning/alarm on eVIN.

Action
a. Check the power availability to the device and ensure that it is plugged in correctly.

b. Once this is done, check whether the battery warning still remains, and/or there is an indication that the battery is now charging, on the eVIN web application.

If the battery is still not charging, escalate the issue to the State Project Officer-IT.
Scenario
You detect the ‘Device is inactive’ warning/alarm on eVIN.

Action
a. Check the network signal strength.

b. Check that the SIM card of the device has the correct data plan and is within the data limits to send data. Ensure that the SIM card is active and not disabled.

c. Check if the device is switched off due to a drained battery. Check the power source or power adapter for the device, and if it is faulty, undertake necessary actions.

d. Check whether the memory (SD) card is correctly in place in the device.

If any replacement is needed or there is any outstanding issue with the logger, contact the State Project Officer-IT.

Scenario
Upon configuration of the logger, the ‘Device ready’ confirmation is not displayed on tsevinonline.in.

Action
Retry the configuration push up to three times, at different times of the day.

If the configuration push fails after all three attempts, escalate the issue to the State Project Officer-IT.
8.2 UPDATING WORKING STATUS OF COLD CHAIN EQUIPMENT

**Scenario**
A cold chain equipment (CCE) is not working.

**Action**
Notify the Cold Chain Technician immediately and schedule the CCE for repair. The status of the CCE has to be updated in the eVIN system within 24 hours of detecting a change in the working status of the CCE.
8.3 UPDATING WORKING STATUS OF THE TEMPERATURE LOGGER

**Scenario**
A temperature logger is not working

**Action**
Update working status of the temperature logger on eVIN within 24 hours.

A faulty temperature logger has to be notified to the State Project Officer- IT immediately after the fault is detected.

**Scenario**
A temperature logger has not sent data for two days.

**Action**

a. Change its working status on eVIN to ‘Not working’.

b. After all the given troubleshooting procedures have been tried and the device is still unable to send data, escalate the problem to State Project Officer- IT. After doing this, change the working status of the device to ‘Under repair’.

c. Once the device comes back to working state, update the status as ‘Working’.
8.4 REPLACEMENTS

**Scenario**
The temperature logger has been replaced.

**Action**
Any replacement of temperature logger has to be updated in the eVIN web application within 24 hours of the change.

**Scenario**
The CCE has been replaced.

**Action**
Any replacement of CCE in a store/facility has to be updated in the eVIN web application within 24 hours of the change.
8.5 TEMPERATURE BREACH

**Scenario**
You receive an SMS/email notification about a temperature breach.

**Action**
Call the Cold Chain Handler to perform a physical verification of the CCE, the temperature logger and the power source of the CCE.

**Scenario**
You notice a temperature breach during the weekly review of the temperature status of CCEs.

**Action**
Call the Cold Chain Handler to perform a physical verification of the CCE, the temperature logger and the power source of the CCE.

**Note** – If the temperature breach persists for 8 hours, then call the Cold Chain Technician and follow up with him/her to ensure that the CCE is repaired or fixed.
8.6 MANAGING QUERIES

Scenario
You receive a query from the Cold Chain Handler on the temperature logger.

Action
a. Keep a record of all the queries/ issues asked by Cold Chain Handler in the weekly report and categorize the queries/ issues as temperature logger queries.

b. Try basic troubleshooting of temperature logger. Visit the Cold Chain Point, if required.

c. Escalate all unresolved queries to the Project Officer-IT.
9.0 STANDARD OPERATING PROCEDURES FOR REMOTE TEMPERATURE MONITORING

The chapter defines standard operating procedures related to installation of temperature loggers, monitoring temperatures in cold chain equipment and asset management.
Overview

Remote temperature monitoring (or RTM) of Cold-Chain Equipment (CCE) in eVIN involves remote monitoring of cold-chain equipment to ensure their proper functioning. The monitored equipment includes Vaccine Ice-lined Refrigerators (ILRs), Walk-in coolers, Walk-in freezers, and Deep freezers. In this context, a GSM-enabled temperature logger device will be installed for CCE, which has multiple sensors to sense temperatures, and a transmitter with a SIM card to send the data over a mobile network to the eVIN application. The eVIN web application can be used for monitoring the temperature and working condition of CCEs as well as the temperature loggers. Alarm conditions of CCE overheating (high temperatures) or freezing (low temperatures) will be signaled on the web application, as well as notified over SMS/email. Raw temperatures from the devices can be viewed along with dashboards indicating potential problems. The functioning of the temperature loggers, including its data transmission activity, sensor connections, device’s memory (SD) card, power and battery status can be monitored remotely.

This document provides an overview of the responsibilities and procedures to be followed across the entire lifecycle of remote temperature monitoring, with an ultimate aim of ensuring that the cold-chain is working well across all levels in the vaccine supply chain.

Responsibilities

The Vaccine Cold-Chain Manager (VCCM) is ultimately responsible for ensuring that the cold chain equipment is performing adequately and that temperatures are maintained between 2-8 degrees at all times. Should there be any problems, the VCCM, along with the Cold-Chain Handler (CCH) and the Cold-Chain Technician (CCT), is responsible for coordinating the repair/replacement of devices (be it the CCE or the temperature logger).

Specifically, the VCCM has the following responsibilities on RTM:

Temperature logger installation

1. Verify master-data readiness before site installation.
   a. Verify that relevant CCE master data exists before visiting site for installation.
2. Sign-off temperature logger installation.
   a. Post installation of the temperature logger, ensure that it is displaying proper temperatures and sending temperature data to the eVIN server.

3. Associate the temperature logger with the CCE.
   a. Use the eVIN web application to associate the correct temperature logger with the CCE against which it is installed.

**Cold-chain equipment (CCE) and temperature logger monitoring**

4. Monitor CCEs and temperature loggers on an on-going basis.
   a. Monitor the CCE and temperature logger on-demand as well as periodically, on an on-going basis.
   b. Update the ‘working status’ of the CCEs and temperature loggers, as required.

**On-going maintenance of assets**

5. Update the configuration of a temperature logger.
   a. For certain cold-chain equipment, esp. deep freezer and walk-in freezer, the factory configuration of temperature logger may not be suitable. In this case, the configuration of the logger has to be changed and pushed to the device from the eVIN web application.

6. Update/maintain the master-data in eVIN web application once the temperature logger is installed.
   a. Update/maintain asset master on an on-going basis, say, when either a CCE or temperature logger is replaced.
   b. Register a CCE or similar asset, or a temperature logger, in case it was not already in the system.

**Procedures**

**Verify master-data readiness before site installation**

The master data is ready if: (a) the corresponding store data is available in the eVIN application, and (b) the corresponding cold-chain equipment is registered and associated with the given store.
This can be verified as follows:

1. Login to eVIN web application (evinonline.in).
2. Look up the store/facility under Setup > Stores. Click to the store details page.
3. Click on the Assets tab and verify that the appropriate cold-chain equipment (e.g. ILRs, deep freezers, etc.) are associated with the store/facility. The following types of cold-chain equipment are expected to be available and associated with stores at different levels of the supply chain:
   a. Last-mile cold-chain points (PHC/CHC): ILRs
   b. District stores: ILRs and Deep freezers

At higher levels, district and above, other types of CCEs including ILR, Deep freezer, Walk-in cooler, and Walk-in freezer may be available. This can be verified by selecting the corresponding Type filter in this view.

This has to be done for all stores/facilities for which temperature monitoring is required. The best practice would be to verify this across all stores, say, in a district as soon as the master-data is made available in the system. Once the master-data is verified, send an email to the Regional PO and PO-IT confirming the readiness of asset master data.

This procedure has to be done at least 1 week before installation is scheduled for that facility. Any discrepancies (e.g. CCE metadata not found in system) have to be notified to the Regional PO.

**Sign-off temperature logger installation**

The VCCM has to be present along with the technician who installs the temperature logger at the site to achieve a sign-off of the device installation. There are two independent sign-offs required:

1. Temperature logger installation sign-off: The temperature logger is installed correctly at the site and fully functioning.
2. Temperature logger data transmission sign-off: The temperature logger is sending temperature data to the eVIN server.
Once the temperature logger technician has installed the device, verify the installation at the site using the procedures described below.

**Preparation before a site visit**

Before a site visit, please carry the following things with you:

1. A properly charged laptop with a functioning network dongle.
   a. This will be required to make required for installation verification changes in eVIN web application.

2. A properly charged mobile phone with a working data plan, which allows you to access the Internet and make calls.
   a. This will be required as a backup network access for installation verification, and to call the PO-IT for remote verification, where required.

3. A spreadsheet of master-data of assets for all the relevant stores, downloaded from the eVIN web application on to the laptop.
   a. This will be required to note changes or additions to asset master. It is also required to enter any data offline, if network is not available at the site to access the eVIN web application.
   b. This can be done by going to the 'Assets' listing page (from Assets > Assets) in the main menu and clicking the 'Export' button. The asset master data will be emailed to one’s registered email address, and can be downloaded from the email or from the eVIN web application under 'My exports'.

**Temperature logger installation sign-off**

To sign-off that the temperature logger is installed correctly, the following things need to be verified:

1. The temperature logger is mounted securely on the wall, with the screen visible.

2. The logger’s antenna is pointed up.

3. The device is charging from a power source.

4. All sensors are firmly connected to the temperature logger and placed at the correct monitoring positions in the CCE.

5. The temperature logger is powered on and functioning, and showing required information in the display screen.
6. Most importantly, the temperature logger is showing valid temperatures for all connected sensors. The temperature of each of the sensors A, B, C, D and E (in case of Walk-in coolers and Walk-in freezers) have to be verified.

Refer to the temperature logger’s user guide for instructions on verifying each item in the checklist above, including the verification of valid temperatures for each of the sensors.

Note – If logger installation is complete, the technician will ask for signature on mobile phone app. Complete this step before moving to next sign-off.

**Temperature logger data transmission sign-off**

The temperature data from the logger can be reviewed on a light-weight the web page in a browser either on the computer or a mobile phone.

The review page can be accessed as follows:

1. Go to mobile-friendly page ts.evinonline.in in a browser on a computer or mobile phone.
2. Enter the temperature logger’s IMEI number and click ‘Get’.
3. The response page shows the device’s details.

Verify that the temperature logger has sent temperature data to the eVIN server. The device’s details should display the following:

1. Device ready confirmation, including when the device ready confirmation came to the server is shown in the first table in the page. This should display the following:
   a. **Device ready** received time, which is the time when the server received the ‘device ready’ confirmation from the device. This implies that the device has correctly configured itself using the factory defaults or a configuration that was pushed from the eVIN application.
   b. The correct phone number of the SIM card in the device (if there are two SIMs in a device, the numbers of of both are required).
Note – If the phone number is not showing, this implies that the device has been unable to send the phone number to the server. Please note down the phone number against the device’s serial number in the spreadsheet in the column “SIM-1 phone number”, so that it can be updated later on in the eVIN web application for this device (if there is a second SIM, the same procedure has to be followed for the “SIM-2 phone number”). The phone number is essential to push any configuration changes to the device in future.

2. The most recent temperatures for each sensor are shown in the ‘Temperatures’ section. If a recent temperature is shown against a sensor (such as A, B, C, D or E), then it implies that the device is transmitting temperature data and has been sent to the server. This means that the installation has worked completely.

Note – If the temperature data is not being shown on the page, then the device has NOT been able to send data to the server yet. Check the following:
   i. SIM card is activated.
   ii. Device’s battery is showing charge and the power connections are proper.
   iii. Signal strength shown on the device is reasonable. If there is no GSM signal, then the device will not be able to send data to the server.

3. Device alarms, if any, are shown in the ‘Device alarms’ section. Ensure that there are no alarms shown for any of the required sensors. If there is any alarm (such as ‘Inactive’ or ‘Disconnected’, coordinate with the logger technician for appropriate procedures to fix this).

Note – Any sensor that is not used (e.g. sensor E, in some cases) or not sending data, will be shown as ‘Inactive’ in this section.
In case network is not available on laptop or phone

In case the network on laptop or mobile phone is poor at the site, then call the PO-IT, so that they can verify that the device is sending data by logging into the eVIN web application and using the same procedure as enumerated here for verification.

**Associate temperature logger with the CCE**

The temperature logger asset has to be associated with the CCE asset in eVIN. This can be done through the eVIN web application on a web browser. This is a two-step process, involving: (1) CCE verification, and (2) temperature logger association:

1. In the eVIN web application, verify that the correct CCEs are associated with the store. The serial number of the CCE in the store should be the same as that displayed in the eVIN web application. If not, this has to be corrected.
2. Associate the temperature logger with the CCE in the eVIN web application. This can be done as follows:

1. Log into the eVIN web application in a browser (evinonline.in).
2. Go to **Setup > Stores**. Lookup / browse for the required store.
3. In the resulting store listing, click on the specific store. The store’s profile page is shown with all details of that store.
5. A list of CCEs at this store/facility is shown, by default (if you are at a walk-in coldroom, then select the correct type of asset using the Type filter above).
6. Verify correctness of CCE by cross-checking the equipment’s actual serial number (on the equipment) with that registered in the eVIN application.
   a. Review the CCE’s serial number in this list and ensure that it is the same as that of the actual CCE in the facility. If the serial numbers are correct, then it implies that the CCEs are specified correctly.

**Note** – If the correct CCE is not displayed in the above list, then you have to register the actual CCE using the procedure described in the section “A new asset is commissioned”. While registering a CCE, ensure that the Store field is correctly selected so that the CCE is associated with the store.

7. Associate the temperature logger with the CCE.
   a. Click on the desired CCE (which has the same serial number as that of the CCE at the store/facility).
   b. In the ensuing page, click on the ‘**Relationships**’ tab.
   c. In the ‘Related asset’ field, start typing the temperature logger serial number. A list of pre-registered temperature logger numbers are shown. Select the correct temperature logger from the drop-down list, which has the same serial number of the actual temperature logger being installed for this CCE.
Note – If the temperature logger is not pre-registered in the system, then it will not shown in the related asset selection list. In this case, you have to register it using the procedure described in the section “A new asset is commissioned”.

8. Once selected, the sensor wires (e.g. A, B, C, D, E) are already associated with the correct monitoring points of the CCE (e.g. top, middle, bottom, ambient, and so on). If this mapping is incorrect, then edit the mapping of the sensor wires (A, B, C, D or E) to the monitoring points (e.g. top, middle, bottom) of the CCE and its ambience.

9. Click Save to save this association.

This temperature logger is now associated with the CCE. Verify this by reviewing the mapping of the monitoring points of the CCE to the sensor wires of the temperature logger under the ‘Relationships’ tab. Be sure to cross-verify that you have associated the temperature logger with the correct CCE.

The screenshot below shows the association of CCEs with a store:
Complete the data entry within 24 hours of installation

If there is not network at the site, note the temperature logger serial number against the CCE in the spreadsheet provided, and make the association in the eVIN web application within 24 hours of installation of temperature logger (at the next available network point).

Monitor the CCEs and temperature loggers on an on-going basis

CCEs and temperature loggers have to be monitored on an on-going basis – both on-demand and on a periodic basis. This is required to ensure the proper functioning of both the CCEs and the temperature loggers that are monitoring the CCEs. Any problems in either asset have to be detected in a timely fashion and appropriate procedures have to be followed to fix them (including basic troubleshooting, scheduling repairs and/or replacements).

Monitor CCEs

SMS/email notifications will be sent once there is a breach of temperature. The breach will be flagged in the web interface as well. There are two instances when monitoring is required:

1. On-demand, when an SMS/email notification on a temperature breach is received.
2. Periodic, wherein on a weekly basis, a review of the temperature status of CCEs is performed using the eVIN dashboards. This review should also include normal CCEs selected at random for inspection of temperature patterns over time.

A CCE’s temperature status can be verified as follows:

1. Get a bird’s eye view of the temperature alarms or inactive temperature loggers using the Assets Dashboard.
   a. The Assets Dashboard provides an overview of the number of CCEs in temperature alarm state, normal state or unknown state (which is when no data is coming from the CCE). Clicking on any of these counts leads one to a listing of assets that have the particular state.

2. Review the list of CCEs in ‘alarm’ condition and ‘unknown’ condition. These two conditions of an equipment requires immediate attention, in that order. This list can be seen by either of the following actions:
   a. Click on the corresponding counts of ‘alarm’ or ‘unknown’ states in the dashboard, OR,
b. Go to the asset listing page under the main Assets menu, and select ‘Temperature alarms’ or ‘No data’, respectively, in the ‘Alarms’ filter.

3. The listing shows the temperature status of all the CCEs under the ‘Status’ column.
   a. For each CCE, the temperature for each of the monitoring points (e.g. top, middle, bottom and ambient) are shown. Normal temperatures are shown in green, alarmingly high temperatures (overheating) are flagged in red, alarmingly low temperatures (freezing) are flagged in blue, a recent temperature excursion (but not yet an alarm condition) is shown in orange, and no data coming for that CCE is shown in gray.
   b. The time of the last known temperature is shown.

4. One can click into a CCE (hyperlink) and review the temperature data in the details page as well. The temperature graph can be reviewed to understand the pattern of temperatures over time in this CCE.
   a. Detailed review of temperature patterns is recommended for CCEs in alarm condition, but can also be done at random for CCEs in normal condition to understand the pattern of excursions and/or consistency of the temperature data transmission from the logger.

Handling temperature breaches
If there is any breach in temperature (high/low temperature alarms), do the following:

1. Call the Cold-Chain Handler (CCH) to perform a physical verification of the CCE, the temperature logger and the power source of the CCE.

2. If the temperature breach persists for 8 hours, then call the Cold-chain technician and follow up with him/her to ensure the CCE is repaired or fixed.

Note – If the temperature status of a CCE is unknown, then the corresponding temperature logger is not sending data to the server. Troubleshoot the temperature logger as per the procedures given in the device’s “Troubleshooting and Escalation Process” guide.
Update a CCE’s working status

If the CCE is deemed to be not working, then schedule the CCE for repair, and update the ‘working status’ of the CCE in the eVIN web application as it evolves until the CCE comes to a working state.

The ‘working status’ of a CCE can be updated in eVIN as follows:

1. Look up the CCE asset details page
   a. Under Assets look up the CCE asset by serial number, or
   b. Go to the store page and browse assets in that store.

2. Edit the ‘Working status’ as follows:
   a. If the CCE is scheduled for repair, change the working status to ‘Under repair’.
   b. Once the CCE comes back to working state, update this state as ‘Working’.
   c. If the CCE is deemed not repairable, then change the working status to ‘Beyond repair’.

Update CCE’s working status in eVIN within 24 hours

A faulty CCE has to be notified to the cold-chain technician immediately after the fault is detected. The status of the CCE has to be updated in the eVIN system within 24 hours of detecting a change in the working status of the CCE.

Monitor temperature loggers

Temperature loggers that are monitoring the CCEs also need to be monitored to ensure that they are working and sending data correctly.

Three types of alarms are possible on these devices: (a) sensor is disconnected, (b) battery is low, or (c) device is inactive (i.e. not sending data). These can be reviewed on the temperature logger listing page or device detail pages in eVIN as follows:

1. Log in to the eVIN web application.
2. Go to the Assets listing page and select the Type as ‘Temperature logger’.
3. The alarms associated with the temperature loggers are shown in the ‘Status’ column. More specifically, the specific temperature logger that may have a particular type of problem will be indicated (as ‘Inactive’, ‘Disconnected’) and so on. Or, a ‘Battery warning’ or ‘Battery alarm’ will be indicated.
4. The ‘Status’ column indicates the following alarms:
   a. By sensor: whether sensor wire is disconnected ("Disconnected"), and whether it is ‘inactive’ ("Inactive").
   b. General: Low battery warnings ("Battery warning") and alarms ("Battery alarm") for the device, depending on how low the charge is on the battery.

Perform these procedures if one of these conditions is detected (refer the device troubleshooting guide for more details):

1. Sensor is disconnected
   a. Ensure that the corresponding sensor wire connection is securely fastened to the device.
   b. After the connection is secured, within an hour the ‘disconnected’ alarm should disappear from the eVIN web view. If it does not, then escalate the problem to the PO-IT.

2. Battery is low (i.e. a battery warning or alarm is detected)
   a. Check the power to the device, and ensure that it is plugged in correctly without any loose contact.
   b. Once done, check on the eVIN web applications as to whether the battery warning goes away, and/or there is an indication that the battery is now charging.

3. Device is ‘inactive’ (i.e. not sending data)
   a. Check the network signal strength, and ensure that the signal strength is adequate.
   b. Check that the SIM card of the device has the correct data plan and is within the data limits to send data. If SIM data plan appears limited or the SIM account is not recharged, then top-up the SIM plan. Ensure that the SIM card is active and not disabled.
   c. Check if the device is off due to a drained battery. Check the power source or power adapter for the device, and if faulty, undertake necessary repairs/replacements.
   d. Check whether the memory (SD) card is correctly in place in the device. If not, take necessary steps of finding the replacement for this card.
e. Follow any other procedures from the device’s troubleshooting guide.

If the device problems cannot be resolved using the procedures and troubleshooting guide, then escalate the problem to the PO-IT (who may in-turn provide a resolution or escalate it to the call-center). On receiving a confirmation from the PO-IT, update the device’s working status in the eVIN web application as ‘Not working’, as explained in the section “Update temperature logger’s working status”. Call the logger device technician to repair/replace the device, and once confirmed, the working status of the logger device can be changed to ‘Under repair’.

For details on troubleshooting the problems with the temperature logger, refer to the device’s “Troubleshooting and Escalation Process” guide.

**Update a temperature logger’s working status**

If a temperature logger is deemed to be not working, then change the ‘working status’ of the device to ‘Not working’, as follows:

1. Lookup the temperature logger’s details page.
   a. Under Assets, use the temperature loggers serial number or browse assets of the specified store.

2. Edit the ‘Working status’ as follows:
   a. If the device is not sending data for over 2 days, it is considered to be inactive - change its working status to ‘Not working’.
   b. After all the given troubleshooting procedures have been tried, and the device is still unable to send data, then call the device’s technician to repair or replace the device. At this time, change the working status of the device to ‘Under repair’.
   c. Once the device comes back to working state, update this state as ‘Working’.

**Update temperature logger’s working status in eVIN within 24 hours**

A faulty temperature logger has to be notified to the PO-IT immediately after the fault is detected. The status of the temperature logger has to be updated in the eVIN system within 24 hours of knowing the actual working state of the device.
Update the configuration of a temperature logger

A temperature logger’s temperature limits are configured to be 2-8 degrees by default. However, for deep freezers and walk-in freezers, the temperature limits have to be -25 to -15 degrees. This has to be updated only for the temperature loggers associated with freezers by:

(a) editing the logger device’s configuration and (b) pushing the configuration to the logger devices.

The configuration of a temperature logger can be updated remotely using the eVIN web application as follows:

1. Log in to the eVIN web application (evinonline.in).
2. Go to the temperature logger’s detail/profile page.
   a. Go to Assets > Assets, and lookup the appropriate temperature logger using its serial number.
3. Click on the ‘Configuration’ tab. The current configuration of the device is shown.
4. Battery is low (i.e. a battery warning or alarm is detected)
   a. Check the power to the device, and ensure that it is plugged in correctly without any loose contact.
   b. Once done, check on the eVIN web applications as to whether the battery warning goes away, and/or there is an indication that the battery is now charging.
5. Device is ‘inactive’ (i.e. not sending data)
   a. Check the network signal strength, and ensure that the signal strength is adequate.
   b. Check that the SIM card of the device has the correct data plan and is within the data limits to send data. If SIM data plan appears limited or the SIM account is not recharged, then top-up the SIM plan. Ensure that the SIM card is active and not disabled.
   c. Check if the device is off due to a drained battery. Check the power source or power adapter for the device, and if faulty, undertake necessary repairs/replacements.
d. Check whether the memory (SD) card is correctly in place in the device. If not, take necessary steps of finding the replacement for this card.

e. Follow any other procedures from the device’s troubleshooting guide.

If the device problems cannot be resolved using the procedures and troubleshooting guide, then escalate the problem to the PO-IT (who may in-turn provide a resolution or escalate it to the call-center). On receiving a confirmation from the PO-IT, update the device’s working status in the eVIN web application as ‘Not working’, as explained in the section “Update temperature logger’s working status”. Call the logger device technician to repair/replace the device, and once confirmed, the working status of the logger device can be changed to ‘Under repair’.

For details on troubleshooting the problems with the temperature logger, refer to the device’s “Troubleshooting and Escalation Process” guide.

**Update a temperature logger’s working status**

If a temperature logger is deemed to be not working, then change the ‘working status’ of the device to ‘Not working’, as follows:

1. Click the ‘Edit’ button, and change ONLY the high and low temperature limits for this device.
   a. Update the temperature in the ‘High alarm configuration’ to -15 degrees Celsius.
   b. Update the temperature in the ‘Low alarm configuration’ to -25 degrees Celsius.
   c. Do NOT change any other configuration parameters.

2. Click ‘Save’ to save the configuration.

3. Click ‘Push configuration’ to push the configuration to the temperature logger (the configuration is immediately pushed to the logger over SMS).

4. Verify that the configuration was received by the temperature logger, as below:
   a. After receiving the configuration, the temperature logger will reconfigure itself and send the server a ‘device ready’ confirmation. This can take up to 30 minutes, given the configuration SMS may delivered to the device after some delay.
b. After a few minutes, review the Configuration tab of the logger detail page. On the top-right, the confirmation from the device should be displayed as: “Device confirmed/ready at <time>” at the top-right of the configuration. Check to ensure that the time displayed for this confirmation is after the time of pushing the configuration. If so, then the configuration push is successful.

c. If the ‘device ready’ confirmation is not shown, then retry the configuration push up to 3 times, at different times of the day. If the configuration push fails after all these attempts, escalate the issue to the PO-IT (who, in turn, may try this from his account, and on repeated failure, can escalate the issue to the call-center).

**Update/maintain master data on CCEs and temperature loggers**

Temperature loggers and CCEs may need to be repaired/replaced at different points in time. It is important to ensure that the master data for these are kept up to date in the eVIN application. Procedures for a couple of important scenarios are given below.

**Temperature device is replaced**

When a temperature logger is replaced with another device, then the new device would have to be registered and associated with the CCE in the eVIN web application, as per the procedure outlined in the ‘Associate temperature logger with the CCE’. Disassociate the older device from the CCE before associating a new device to the same CCE.

Any replacement of temperature logger has to be updated in the eVIN web application within 24 hours of the change.

Refer to the eVIN web application User’s Guide to understand how to accomplish this procedure using the eVIN application.

**CCE is replaced**

When a CCE is replaced at a given store/facility, then remove the association of this CCE with the specified store/facility in the eVIN web application, and associate the new CCE with the store/facility. The temperature logger would now have to be disassociated from the old CCE and associated with the new CCE as per the procedure outline in ‘Associate temperature logger with the CCE’.

Any replacement of CCE in a store/facility has to be updated in the eVIN web application within 24 hours of the change.
Refer to the eVIN web application User's Guide to understand how to accomplish this procedure using the eVIN application.

**A new asset is commissioned**

A new CCE or temperature logger that been commissioned or is not yet registered in the eVIN web application has to be registered. This can be registered as follows:

1. Log in to the eVIN web application (evinonline.in).
2. Click on the ‘Setup > Assets’ sub-menu.
3. In the ensuing page, click on the ‘Create asset’ tab. The asset registration form is shown.
4. Select the correct asset type depending on whether the asset was a Fridge, Deep freezer, Walk-in cooler, Walk-in freezer or Temperature logger.
5. Enter or selected values for all the mandatory fields (marked with a *), and all other known optional fields.
6. If the Store is known, type the store name in the ‘Store’ field, and select the correct store shown in the pop-up list of stores. This will associated this asset with the store.

**Note** – If you wish to associate the asset with the store later, then edit the asset using the ‘Edit’ button on the asset detail page and enter the store name in the Store field.

7. Click ‘Save’ after filling up the form.

The new asset is registered as well as associated with the corresponding store. Verify this by visiting the store’s profile page (under Setup > Stores) and clicking on the Assets tab of the store. The asset just associated with the specified store should be listed under this tab.

Any new asset has to be registered and associated within **24 hours** of its commissioning.