



EVM

Setting a standard for the
vaccine supply chain

Effective Vaccine Management (EVM) **continuous Improvement Plan (cIP)** **Development Tool Guide**

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Glossary

Term	Definition
Assessment	EVM assessments are conducted to assess the performance of an immunisation supply chain. In EVM2, an assessment can be customised to meet the exact needs of the national or facility manager by specifying the type, range, and scope of the assessment.
Assessor	A person who assesses a location.
Assign	An assessment questionnaire can be allocated to one or more Assessors.
Category	Determines the necessary inputs, outputs, and performance of the location.
comprehensive Multi-Year Plan (cMYP)	Countries are encouraged to develop their own comprehensive multi-year plans (cMYP) for immunisation. The cMYP process streamlines the immunisation planning process at national level into a single comprehensive and costed plan.
continuous Improvement Plan (cIP)	Helps countries to build a case for supply chain investments and develop an improvement plan that engages relevant stakeholders, which sets the immunisation programme on a path for successful implementation.
Criteria	Determines the operational and management functions the location must perform.
Essential Programme on Immunization (EPI)	The Essential Programme on Immunization (EPI) works in synergy with other public health programmes to control infectious disease and achieve better health for all populations everywhere. To learn more about the EPI: https://www.who.int/teams/immunization-vaccines-and-biologicals/essential-programme-on-immunization
Gavi	Gavi is an international organisation – a global Vaccine Alliance, bringing together public and private sectors with the shared goal of saving lives and protecting people’s health by increasing equitable and sustainable use of vaccines. To learn more about Gavi, please refer to: https://www.gavi.org/
Location	A health facility that stores vaccines or provide immunisation services.
Lowest Distribution point level (LD)	Vaccine stores that receive vaccine from a primary level or a sub-national store and supply vaccine to one or more health facilities.
Manager	The EVM Manager for a country, in charge of creating and managing assessments. Also known as the National Manager.
Primary level (PR)	Vaccine stores that receive vaccine direct from an international vaccine manufacturer or distributors or a local vaccine manufacturer.
Question	Used to determine whether a requirement has been met in an assessment.
Questionnaire	Completed by an Assessor to assess a single location as part of an EVM assessment.
Requirement	EVM is an assessment tool that sets the standard for vaccine management and immunisation supply chain systems. The standard set by EVM is defined by requirements, organised into categories, that a well-functioning immunisation supply chain must meet.
Service Point level (SP)	Facilities that receive vaccine from any higher-level store and supply immunisation services.
Standard Operating Procedure (SOP)	Step-by-step instructions designed to help people conduct routine operations.
Sub-National level (SN)	Vaccine stores that receive vaccine from a primary store or higher level sub-national store. There may be 0, 1, or more SN levels.

Introduction

Effective Vaccine Management (EVM) is a national Essential Program on Immunisation (EPI) planning process endorsed and supported by WHO and UNICEF to assess and prioritise improvements in the immunisation supply chain. EVM is embedded within the Immunisation Supply Chain (ISC) continuous improvement planning process.

EVM was launched in 2009. Drawing on lessons learnt conducting EVM assessments in more than 80 countries, and by leveraging developments in mobile and cloud-based computing, EVM2, released in 2019, builds upon the original EVM assessment tool to provide countries with a broader, more powerful, more agile, and more sustainable solution for improving iSC systems.

This guide provides national EVM Managers with comprehensive guidance on how to use the continuous Improvement Plan (cIP) Development Tool to generate a list of recommendations to address the weaknesses identified in an EVM Assessment.



For guidance on how national, sub-national, and independent EVM Managers can use the EVM website to create and deliver EVM assessments, please refer to the [EVM Manager Guide](#):

<https://www.technet-21.org/en/library/main/6350>

This user guide is organised into the following chapters:

Chapter	Description	See Page
Introduction	This chapter.	5
continuous Improvement Plans (cIPs) in a nutshell	An overview of cIPs and how the cIP Development Tool can be used to develop and manage an ISC cIP in a country.	6
Getting started with the cIP Development Tool	How to download, set up, and use the cIP Development Tool.	9
Identify areas for improvement	How to review EVM assessment scores to identify the areas of a country's immunisation supply chain that need improvement.	13
Create improvement activities	How to create improvement activities to improve low performing assessment scores and meet immunisation supply chain requirements.	18
Review and check improvement activities	How to review the improvement activities created and ensure that all relevant activities have created, and are workable and appropriate.	20
Prioritise and manage improvement activities	How to prioritise the improvement activities, assign owners, targets, and budgetary requirements to them, and manage them through to completion.	23
Troubleshooting	Answers to frequently encountered problems.	26



An Annex is also available for reference at the end of this guide on page 28 that summarises the EVM assessment framework, i.e. how EVM is structured and performance is measured.

This guide does not provide guidance to countries on EVM assessment activities, such as setting up EVM, creating and managing assessments, conducting assessments, or completing assessments.

To share feedback on this guide or to resolve any technical problem, please contact the WHO-UNICEF EVM Secretariat (evmadmin@who.int).

continuous Improvement Plans (cIPs) in a nutshell

This chapter provides an overview of continuous Improvements Plans (cIPs) and how the cIP Development Tool can be used to develop and manage an Immunisation Supply Chain (ISC) cIP in a country.

What is a continuous Improvement Plan (cIP)?

The purpose of an Immunisation Supply Chain (ISC) continuous Improvement Plan (cIP) is to help a country build an evidence-based case for national supply chain investments and to develop an improvement plan that engages relevant stakeholders, thus setting the immunisation programme on a path for successful implementation.

The Effective Vaccine Management (EVM) cIP approach is designed to be strategic and inclusive of a wide set of stakeholders who can help reveal the root causes of supply chain problems and mobilise human and financial resources to address them.

A robust cIP is based on evidence and a strong programming logic, i.e. it focuses investments on activities that together add up to a defined set of objectives and thus help realise the vision of the future and address the deficiencies of the past.

What are the benefits of a cIP?

An evidence-based cIP fulfils a critical function of providing the national Essential Programme on Immunization (EPI) programme with an opportunity to use the EVM initiative as it was intended—as a continuous process for ISC improvement, rather than an assessment that occurs every three to five years without influencing policies or practice.

The advantages of conducting a cIP are:

- **A cIP is strategic and actionable**

The cIP is part of a comprehensive EVM process that enables countries and development assistance partners to learn together which strategies and interventions work. By using the cIP as an ISC investment case, staff can pool resources and opportunities to address priorities that already have strong links to its multi-year national EPI programme and national health sector plans.

- **A cIP can integrated with the broader health system**

The cIP development process ensures that ISC planning for is carried out in conjunction with the EPI programme and other government stakeholders at all levels. Relevant stakeholders are invited to contribute to an analysis of health systems bottlenecks that contribute to, or exacerbate, deficiencies. This builds a powerful advocacy case for systems-level support to ISC.

- **A cIP can be prioritised based on evidence and available funding**

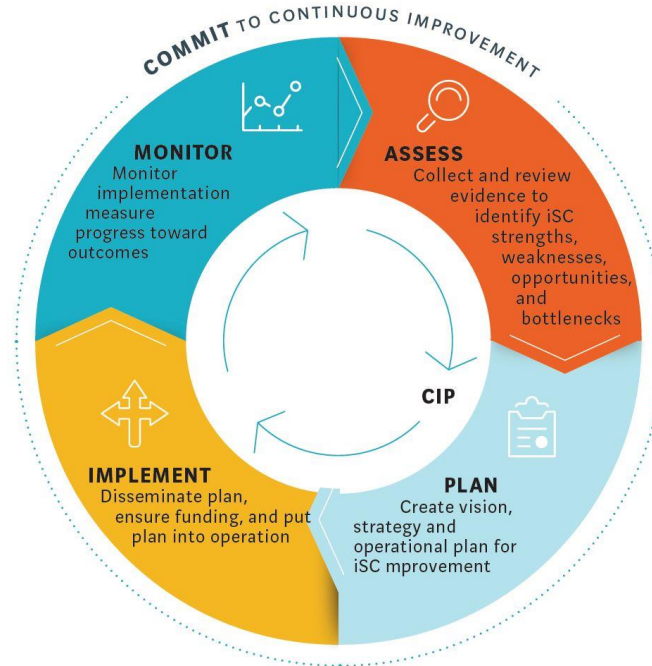
The cIP helps prioritise ISC investments by delivering a costed annual work plan linked to identified funding and prioritising strategies that address the root causes of identified problems. The EVM process also has built-in continuous performance review cycles with flexibility to adjust the plans based on the same rigour that contributed to the initial development of the cIP.

- **A cIP is focused on implementation through joint ownership**

The cIP planning process is deliberately inclusive, starting with a joint review of up-to-date, locally-generated data, and a collective understanding of the contextual factors of the immunisation and health system. This increases the likelihood that those involved will take ownership of the strategic and tactical decisions made, resulting in greater support for implementation. The EVM process also requires countries to identify coordination mechanisms to monitor implementation along performance indicators and annual targets set by the EPI and partners.

How does a cIP fit into the comprehensive EVM approach?

There are four steps to the comprehensive EVM approach which repeat in a cycle of continuous learning and innovation:



1. ASSESS

After orienting the appropriate and agreed stakeholders to EVM, a national EVM assessment is created by a designated National EVM Manager. The assessment uses questionnaires based on defined requirements organised into categories applicable to particular criteria that a well-functioning immunisation supply chain must meet. Designated Assessors visit the country's health facilities at different levels of the immunisation supply chain where they use the assessment questionnaire to assess whether the requirements have been met. The answers determine a score for each requirement, which aggregate into scores for categories, criteria, and finally to a composite score for the EVM assessment.

2. PLAN

Once the national EVM assessment is complete, the Essential Programme on Immunization (EPI) team, with support from the National Logistics Working Group (NLWG) and WHO and/or UNICEF, launches the cIP development process. The EVM assessment scores are reviewed and the areas for improvement identified for low performing requirements. Improvement activities can then be created to mitigate the low performing requirements and improve the immunisation supply chain.

3. IMPLEMENT

Once all required improvement activities have been identified and mutually agreed through workshops and bilateral discussions, the identified improvement activities are prioritised, and then assigned owners, targets, and budgetary requirements. The activities can then be actioned by their assigned owners inline with the agreed targets and budgets.

4. MONITOR

The improvement activities are actively monitored as they progress through to completion. Once complete, the implementation activities are reviewed by the appropriate and agreed stakeholders to determine whether the desired outcomes have occurred or if further activities are required.



For guidance on how to develop a cIP as part of the comprehensive EVM approach, refer to the WHO-UNICEF Guidance Note on [How to Develop a Continuous Improvement Plan \(cIP\)](https://www.technet-21.org/en/library/main/4911):

<https://www.technet-21.org/en/library/main/4911>

How does the cIP Development Tool support cIP development?

The National EVM Manager can download the cIP Development Tool after the national EVM assessment is complete. The cIP Development Tool contains the EVM assessment scores for each requirement/sub-requirement by category and criteria and can be customised to match the country context and the ambition of the cIP by setting an agreed target score.

The appropriate and identified stakeholders in the cIP process can use the cIP Development Tool to review the EVM assessment scores and determine whether improvement activities should be put in place to improve low performing requirements and what those activities should be. These improvement activities can then form the basis for the country's formal cIP.

The cIP Development Tool can be used throughout the cIP development process to:

1. Review the EVM assessment scores and identify low performing requirements and areas for improvement.
2. Create improvement activities to meet immunisation supply chain requirements.
3. Prioritise the agreed improvement activities, relative to cost, available resources, and quantifiable improvements.
4. Assign improvement activities to owners for implementation and management.
5. Assign budgets to improvement activities to enable implementation and management.
6. Assign target start and end dates to guide implementation and management of improvement activities.
7. Assign indicators of activity completion to determine whether the improvement activity has concluded.
8. Monitor all agreed improvement activities through to completion.
9. Track improvement activity sign-off by all relevant stakeholders.



The cIP Development Tool is a support tool. It is not meant as a replacement for the cIP itself. The cIP itself should be fully documented as defined in the WHO-UNICEF Guidance Note on [How to Develop a Continuous Improvement Plan \(cIP\)](#):

<https://www.technet-21.org/en/library/main/4911>

Getting started with the cIP Development Tool

Before you create a continuous Improvement Plan (cIP) for your national Immunisation Supply Chain (ISC), you can first download the cIP Development Tool to support the cIP development process. Before doing so, you must first have completed a full national EVM2 assessment and marked it as 'Complete'. The completed assessment must also have been validated by the EVM Secretariat.



You must be 100% sure that all location questionnaire data in the assessment has been reviewed and validated before downloading the cIP Development Tool, otherwise the data in the tool as downloaded will not be accurate.

Once you have downloaded the cIP Development Tool, you should:

- Select your preferred language for the cIP Development Tool.
- Specify the target score, that is, the threshold at which stakeholders will be considering low-performing requirements.
- Resize sheet columns as required to view cell values more easily, for example, requirements or entered activities.

You can then use the cIP Development Tool to:

1. Identify areas for improvement, that is, low performing requirements.
2. Create improvement activities to improve the identified low performing requirements.
3. Check the activities entered to ensure that all necessary activities have been created and that they are appropriate and workable.
4. Prioritise and manage the improvement activities through to completion.

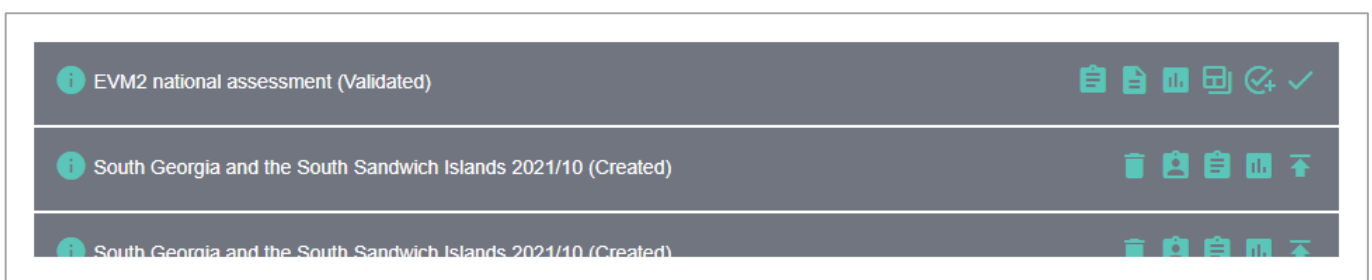
Downloading the cIP Development Tool

You can download the cIP Development Tool from the EVM website.

1. Sign into your EVM account:

<https://extranet.who.int/evm2/web/Public>

2. Ensure that you are viewing the country that you wish to manage.
3. Select the menu in the top left of the screen, then select **Assessment > Manage Assessments**. The *Manage Assessments* screen is displayed, showing a list of all assessments created for the country:



4. Select **Get cIP Development Tool** next to the assessment upon whose scores you want to base the cIP.



5. If the assessment's **Type** is *Full* and the **Sample** is *Multiple*, a *Filter* screen is displayed. Select the Administrative Unit (AU) that you want to cover in the cIP, then select **Confirm**. The cIP Development Tool is automatically downloaded in Microsoft Excel format, containing the scores for that assessment.

- Save the cIP Development Tool to an appropriate place on your organisation’s internal network, so that all relevant contributors to the cIP have the necessary access to it.



Whenever you open the cIP Development Tool after downloading, ensure that **AutoSave** is on so that you do not need to manually save any changes that you make to the plan.


Selecting the cIP Development Tool language

You can change the language of the cIP Development Tool so that it can be used in your preferred language.



Only English and French are currently available.

- Select the **Cover** sheet to display the plan’s summary details:

Continuous Improvement Plan (cIP) Development Tool	
Country	Côte d'Ivoire
Assessment name	GEV2 Côte d'Ivoire Mars 2021
Assessment description	Evaluation de la Gestion Efficace des Vaccins
Start date	22/03/2021
Language	English
Target Score	80%
Plan date	18/06/2021
Completion Status	77.4%
Version 2.2 - October 2021	
 Effective Vaccine Management (EVM) Setting a standard for the vaccine supply chain https://extranet.who.int/evm2/web	

- Using the **Language** drop-down list, select your preferred language.
- Ensure that any changes you have made are saved.

Selecting the target score

The target score is the threshold at which you will be considering low-performing requirements. Scores that are below the target score are considered weaknesses to be addressed and will be displayed in red in the **Category** sheets (**C1**, **C2**, **C3**, **C4**, **C5**, **C6**, **O**, and **P**) of the cIP Development Tool. The red scores should then be addressed with improvement activities.

The higher that the target score is, the more activities you will need to create. The default target score is 80%, which is the EVM benchmark. However, the threshold should be commensurate with the country context and the level of the ambition of the cIP.

- Select the **Cover** sheet to display the plan’s summary details:
- In the **Target Score** field, enter the plan’s overall target score as a percentage, for example, *90%*.



The target score for the plan should never exceed 100%.

- Ensure that any changes you have made are saved.

Resizing columns

You can resize columns to view cell values more easily. This can be useful when reviewing category requirements or improvement activities.

1. Select the sheet whose columns you want to resize.
2. Select the **Review** sheet, then select **Unprotect Sheet**:



3. Resize the columns as required.

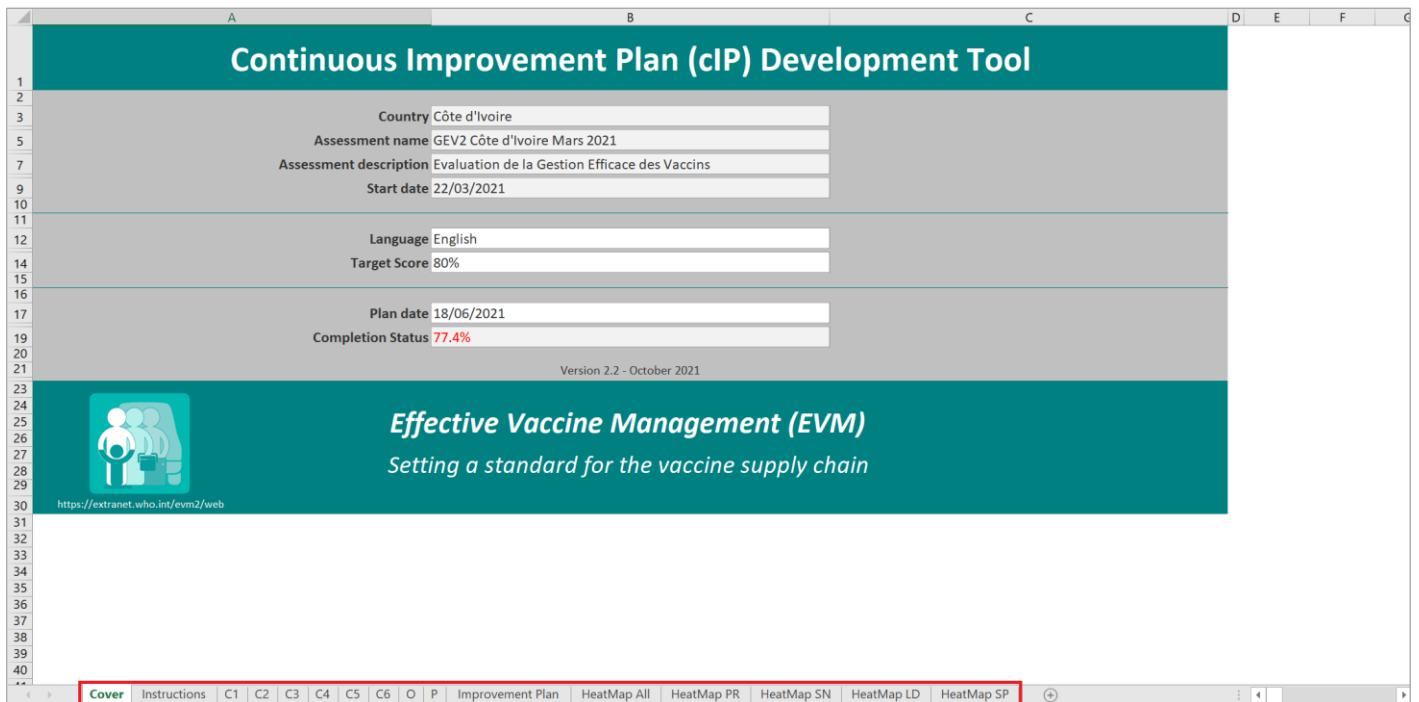


Once you have resized the columns as required, you should re-protect the sheet by selecting the **Review** sheet again, then selecting **Protect Sheet**. This will ensure that any unwanted changes to the sheet are not made.

4. Ensure that any changes you have made are saved.

Navigating the cIP Development Tool

The cIP Development Tool's functions can be accessed by selecting the relevant sheet at the bottom of the tool:



The cIP Development Tool contains the following sheets:

Sheet	Description
Cover	Allows you to manage the general settings of the plan and review the completion status of the cIP (whether all low performing requirements have been mitigated with an improvement activity).

Sheet	Description
Instructions	Provides summary instructions on how to use the cIP Development Tool.
C1, C2, C3, C4, C5, C6	Enables you to review an assessment's category requirements scores and to create activities aimed at improving those scores as part of an overall plan.
O	Enables you to review an assessment's output requirements scores and to create activities aimed at improving those scores as part of an overall plan.
P	Enables you to review an assessment's performance requirements scores and to create activities aimed at improving those scores as part of an overall plan.
Improvement Plan	Enables you to review the activities you have entered on the other sheets as a single overall plan and to assign owners, targets, and budgets to those activities.
HeatMap All	Shows the criteria and category scores for the assessment as a whole in matrix form.
HeatMap PR	Shows the criteria and category scores for the Primary level (PR) of the national supply chain as assessed in matrix form.
HeatMap SN	Shows the criteria and category scores for the Sub-National level (SN) of the national supply chain as assessed in matrix form.
HeatMap LD	Shows the criteria and category scores for the Lowest Distribution level (LD) of the national supply chain as assessed in matrix form.
HeatMap SP	Shows the criteria and category scores for the Service Point level (SP) of the national supply chain as assessed in matrix form.

Using the cIP Development Tool

Once you have set up the cIP Development Tool, you can use it to assist in the development of your national ISC cIP. Employ the following steps to use the tool as part of the cIP development process:

Step	Description	See Page
1. Identify areas for improvement	Review the EVM assessment scores in the Category and HeatMap sheets to identify the areas of your country's immunisation supply chain that need improvement (the low performing requirements).	13
2. Create improvement activities	Create improvement activities in Category sheets that aim to improve those areas identified as low performing.	18
3. Review and check improvement activities	Review the created improvement activities in the Improvement Plan sheet and check them against the completion score, requirement scores, and statuses to ensure that all necessary activities have been put in place.	20
4. Prioritise and manage improvement activities	Prioritise the agreed improvement activities in the Improvement Plan sheet and then assign owners, targets, and budgetary requirements to them, and manage them through to completion.	23

Identify areas for improvement

Review the national EVM assessment’s scores using the **Category** and **HeatMap** sheets of the continuous Improvement Plan (cIP) Development Tool to identify the areas of your country’s Immunisation Supply Chain (ISC) that require improvement. You can then create activities in the cIP Development Tool to improve low performing requirements as part of your country’s ISC cIP.

The **Category** sheets allow you to identify areas for improvement by reviewing the category scores by requirement and supply chain level. The **HeatMap** sheets allow you to identify areas for improvement by reviewing the overall supply chain level scores by category and criterion.

Identifying areas for improvement using the category scores

Select the **Category** sheets (**C1, C2, C3, C4, C5, C6, O, and P**) one by one. A list of the assessment scores for that category by requirement is displayed on the left side of the sheet:

C1 Infrastructure														
Requirement				Scores					Status	Activity				
Cat	Code	Text	PR	SN	LD	SP	All		Requirements	PR	SN	LD	SP	All
C1.1	R0001	The facility has functional means of communication.	100%	75%	75%	66%	72%	I						
C1.1	> R0002	The facility has a functional landline telephone.	100%	22%	0%	5%	7%	I						
C1.1	> R0003	The facility has reliable mobile phone reception.	100%	100%	100%	91%	96%	I						
C1.1	> R0004	The facility has a reliable internet connection.	100%	0%	27%	5%	15%	I						
C1.1	R0005	The facility receives at least eight hours of grid electricity each day.	100%	100%	100%	95%	98%	I						
C1.1	R0006	There is a reliable supply of fuel for vehicles for supervision visits.	100%	100%	100%	100%	100%	I						
C1.1	R0007	The facility has access to water, sanitation and hygiene service (WASH).	100%	89%	80%	73%	79%	I						
C1.1	> R0008	The facility has an adequate water supply.	100%	100%	82%	55%	74%	I						
C1.2	> R0009	The facility has a functional toilet.	100%	78%	64%	70%	69%	I						
C1.2	> R0010	The facility has hand washing or hand sanitizing facilities.	100%	89%	95%	95%	94%	I						
C1.2	R0011	The store manager's office meets minimum requirements.	100%	78%	77%		78%	I						
C1.2	> R0012	The store manager's office is spacious.	100%	89%	64%		72%	I						
C1.2	> R0013	The store manager's office can be locked.	100%	67%	91%		84%	I						
C1.2	R0014	The facility is secure.	100%	96%	93%	80%	89%	I						
C1.2	> R0015	There is a secure perimeter fence or wall around the compound.	100%	89%			90%	I						
C1.2	> R0016	The facility has 24 hour guard/surveillance.	100%	89%			93%	I						
C1.2	> R0017	External doors have locks.	100%	100%	95%	82%	91%	I						
C1.2	> R0018	Windows have locks or grills.	100%	100%	82%	68%	88%	I						
C1.2	> R0020	Cold stores have lighting.	100%	100%	95%		97%	I						
C1.2	R0022	Dry stores meet minimum requirements.		63%	60%	42%	47%	I						
C1.2	> R0023	Dry stores have lighting.	0%	100%	91%		91%	I						

The following columns allow you to review the assessment scores for that category:

Column	Sub-Column	Description
Requirement	Cat	The identifying code for the category to which the requirement belongs.
	Sub	Indicates whether the requirement is a top-level requirement (contains sub-requirements) or sub-requirement. Top-level requirements are blank and sub-requirements are indicated by >.
	Code	The identifying code for the requirement.
	Text	The requirement itself.
Scores	PR	The requirement’s score at the Primary level (PR) of the national supply chain.
	SN	The requirement’s score at the Sub-National level (SN) of the national supply chain.
	LD	The requirement’s score at the Lowest Distribution level (LD) of the national supply chain.
	SP	The requirement’s score at the Service Point level (SP) of the national supply chain.
	All	The overall national score for the requirement.
Status		The status of the requirement. A red ! indicates that the requirement score is below the target score at one or more supply chain levels and should be addressed with one or more activities. A green ✓ indicates that the issue has been addressed by one or more activities.
Criteria	M1	Indicates whether the requirement falls under the ‘Annual needs forecasting’ facility management criteria.

Column	Sub-Column	Description
	M2	Indicates whether the requirement falls under the 'Annual work planning' facility management criteria.
	M3	Indicates whether the requirement falls under the 'Supportive supervision' facility management criteria.
	M4	Indicates whether the requirement falls under the 'ISC performance monitoring' facility management criteria.
	E1	Indicates whether the requirement falls under the 'Vaccine arrivals' facility operations criteria.
	E2	Indicates whether the requirement falls under the 'Temperature management' facility operations criteria.
	E3	Indicates whether the requirement falls under the 'Storage and transport capacity' facility operations criteria.
	E4	Indicates whether the requirement falls under the 'Facility infrastructure and equipment' facility operations criteria.
	E5	Indicates whether the requirement falls under the 'Maintenance' facility operations criteria.
	E6	Indicates whether the requirement falls under the 'Stock management' facility operations criteria.
	E7	Indicates whether the requirement falls under the 'Distribution of vaccines and dry goods' facility operations criteria.
	E8	Indicates whether the requirement falls under the 'Vaccine management' facility operations criteria.
	E9	Indicates whether the requirement falls under the 'Waste management' facility operations criteria.



Use the scroll bar at the bottom of the sheet to see the **Criteria** columns and view the criteria to which each requirement belongs. A ✓ in a **Criteria** column indicates that the requirement falls under that criterion.

Any score in the **Scores** columns (**PR, SN, LD, SP, All**) that is shown in red with a grey background indicates that the score for the requirement at that level of the supply chain is below the target score defined on the **Cover** sheet (see Selecting the target score on page 10) and that it requires one or more improvement activities in order to improve the score and meet the requirement. If any score for one or more levels in the supply chain is below the target score, a red ! is displayed in the **Status** column.

In the following example, all of the scores for the requirement **R0007: The facility has access to water, sanitation and hygiene service (WASH)** either meet or exceed the overall target score of 80%, except for at the Service Point (SP) level which scored 73% in the assessment. As a result, the score in the **All** column is also below the target score and a red ! is displayed in the **Status** column:

Cat	Sub	Code	Text	PR	SN	LD	SP	All	Status
C1.1		R0006	There is a reliable supply of fuel for vehicles for supervision visits.	100%	100%	100%		100%	
C1.1		R0007	The facility has access to water, sanitation and hygiene service (WASH).	100%	89%	80%	73%	79%	!
C1.1		> R0008	The facility has an adequate water supply.	100%	100%	82%	55%	74%	!

This indicates that one or more improvement activities need to be created to meet the **R0007** requirement at the SP level.



Once an improvement activity has been created for a low performing score, the background of the score will turn green. Once all of the low performing scores for a requirement at every level of the supply chain have been mitigated with one or more improvement activities, a green ✓ will be displayed in the **Status** column. See Create improvement activities on page 18.

Viewing category and sub-category descriptions

You can view a summary list of the category that the sheet represents and the sub-categories under that category at any time.

Select the **Category** sheet (**C1, C2, C3, C4, C5, C6, O, or P**) that you are interested in to display a list of the assessment scores for that category by requirement, then place your cursor over cell **B2** to display a pop-up showing the description:

	PR	SN	LD	SP	All	Status	SY	Activity
C1.1	100%	75%	75%	66%	72%	✓		1
C1.1	100%	22%	0%	5%	7%	✓		2
C1.1	100%	100%	100%	91%	96%			3
C1.1	100%	0%	27%	5%	15%	✓		4
C1.1	100%	100%	100%	95%	98%			5
C1.1	100%	100%	100%	100%	100%			6
C1.1	100%	89%	80%	73%	79%	✓		7
C1.1	100%	100%	82%	55%	74%	✓		8
C1.2	100%	78%	64%	70%	69%	✓		9
C1.2	100%	89%	95%	95%	94%			10
C1.2	100%	78%	77%	78%	78%	✓		11
C1.2	100%	89%	64%	72%	72%	✓		12
C1.2	100%	67%	91%	84%	84%			13
C1.2	100%	96%	93%	80%	89%	✓		14
C1.2	100%	89%			90%			15
C1.2	100%	89%			93%			16



If the description is not displaying properly, scroll to the top of the sheet, then place your cursor over cell **B2** again. The full description is displayed.

Filtering columns to identify areas for improvement

You can filter the columns on the **Category** sheets (**C1, C2, C3, C4, C5, C6, O, and P**) to help to identify those areas of the national immunisation supply chain that need improvement.



Clear any filter that you apply when it is no longer required by selecting the **Filter** button (🗑️) next to the filtered column, then selecting **Clear Filter from** "<Column Name>".

Show only requirements of a specific sub-category

1. Select the arrow (▼) next to the **Cat** column to display the filter options.
2. Untick the box next to **(Select All)**.
3. Tick the box next to the code of the sub-category in which you are interested, for example, **C5.4**.
4. Select **OK**. The filter is applied and only the requirements of the selected sub-category selected are displayed.

Show only requirements (hide sub-requirements)

1. Select the arrow (▼) next to the **Sub** column to display the filter options.
2. Untick the box next to >.
3. Select **OK**. The filter is applied and only the requirements are displayed.

Show only requirements of a specific criterion

1. Select the arrow (▼) next to the criterion column in which you are interested to display the filter options, for example, **E5**.
2. Untick the box next to **(Select All)**.
3. Tick the box next to ✓.
4. Select **OK**. The filter is applied and only the requirements of the selected criterion are displayed.

Show only low scores

1. Select the arrow (▼) next to the score column in which you are interested to display the filter options, for example, **SP**.
2. Select **Filter By Color**, then select the red box under **Filter By Font Color**.
3. Select **OK**. The filter is applied and only the low scores are displayed.

Show only unresolved issues

1. Select the arrow (▼) next to the **Status** column.
2. Untick the box next to **(Select All)**.
3. Tick the box next to **!**.
4. Select **OK**. The filter is applied and only the unresolved issues are displayed.

Identifying areas for improvement using the HeatMaps

Select the **HeatMap** sheet in which you are interested, for example:

	Infrastructure	Equipment	Information technology	Human resources	Policies & procedures	Financial resources	OUTPUTS	PERFORMANCE	TOTAL
Vaccine arrival			50	100	72	100	86		81
Temperature management			46	79	52		61	0	63
Storage and transportation capacity	100	70		93	78	100	74	100	78
Facility infrastructure and equipment	71	83	88			100	76		77
Maintenance and repair			35	76	0	100	56	83	70
Stock management			87	83	50		66	51	72
Distribution of vaccines and dry goods		97	74	71	42	100	72	93	72
Vaccine management				77	0		45		61
Waste management		36		78	85	100	40	76	71
Annual needs forecasting				75	0		62	0	60
Annual work planning				71	0	91	38	0	66
Supportive supervision	100	98	0	70	0	100	0		54
ISC performance monitoring			79	68	70		41		58
TOTAL	74	79	70	77	60	93	62	68	70

Heat-map generated	10/07/2021
Country	Côte d'Ivoire
Assessment	GEV2 Côte d'Ivoire Mars 2021 - Evaluation de la Gestion Efficace des Vaccins
Status	Completed
Level	PR
State	AB
District	AB
Location	AB
Locations included	54
Criterion type	Facility operations & management



All of the HeatMap reports follow the same format, with a matrix followed by a summary of what the matrix represents.

The following HeatMap reports are available:

Report	Description
HeatMap All	Shows the criteria and category scores for the assessment as a whole in matrix form.
HeatMap PR	Shows the criteria and category scores for the Primary level (PR) of the national supply chain as assessed in matrix form.
HeatMap SN	Shows the criteria and category scores for the Sub-National level (SN) of the national supply chain as assessed in matrix form.

Report	Description
HeatMap LD	Shows the criteria and category scores for the Lowest Distribution level (LD) of the national supply chain as assessed in matrix form.
HeatMap SP	Shows the criteria and category scores for the Service Point level (SP) of the national supply chain as assessed in matrix form.

Create improvement activities

Once you have identified the areas for improvement, create activities in the continuous Improvement Plan (cIP) Development Tool to improve low performing requirements as part of your country's continuous Improvement Plan (cIP) for its Immunisation Supply Chain (ISC). An issue can be addressed by targeting the specific requirement and the specific supply chain level with an activity, by targeting the parent requirement, or by targeting all supply chain levels together.

1. Select the **C1, C2, C3, C4, C5, C6, O, or P** sheet as required. You can enter activities on the right side of the sheet:

Requirement	Scores	Status	Activity	What is targeted?									
Cat	Code	Text	PR	SN	LD	SP	All	Requirements	PR	SN	LD	SP	All
C1.1	R0001	The facility has functional means of communication.	100%	75%	75%	66%	72%	I					
C1.1	> R0002	The facility has a functional landline telephone.	100%	22%	0%	5%	7%	I					
C1.1	> R0003	The facility has reliable mobile phone reception.	100%	100%	100%	91%	96%	I					
C1.1	> R0004	The facility has a reliable internet connection.	100%	0%	27%	5%	15%	I					
C1.1	R0005	The facility receives at least eight hours of grid electricity each day.	100%	100%	100%	95%	98%	I					
C1.1	R0006	There is a reliable supply of fuel for vehicles for supervisor visits.	100%	100%	100%	100%	100%	I					
C1.1	R0007	The facility has access to water, sanitation and hygiene service (WASH).	100%	85%	80%	78%	79%	I					
C1.1	> R0008	The facility has an adequate water supply.	100%	100%	82%	55%	74%	I					
C1.2	> R0009	The facility has a functional toilet.	100%	78%	64%	70%	69%	I					
C1.2	> R0010	The facility has hand washing or hand sanitizing facilities.	100%	89%	95%	95%	94%	I					
C1.2	R0011	The store manager's office meets minimum requirements.	100%	78%	77%	78%	78%	I					
C1.2	> R0012	The store manager's office is spacious.	100%	89%	64%	72%	72%	I					
C1.2	> R0013	The store manager's office can be locked.	100%	67%	91%	84%	84%	I					
C1.2	R0014	The facility is secure.	100%	96%	93%	80%	89%	I					
C1.2	> R0015	There is a secure perimeter fence or wall around the compound.	100%	89%			90%	I					
C1.2	> R0016	The facility has 24 hour guard/surveillance.	100%	89%			93%	I					
C1.2	> R0017	External doors have locks.	100%	100%	95%	82%	91%	I					
C1.2	> R0018	Windows have locks or grills.	100%	100%	82%	68%	88%	I					
C1.2	> R0020	Cold stores have lighting.	100%	100%	95%		97%	I					
C1.2	R0022	Dry stores meet minimum requirements.	63%	60%	42%		47%	I					
C1.2	> R0023	Dry stores have lighting.	0%	100%	91%		91%	I					
C1.2	> R0024	Dry stores have heating.						I					

2. For each activity that you want to define, enter the following:

- a. In the **Text** field, enter a description of the required activity.

You can view the full text of an entered activity by selecting the activity in the list, then viewing the activity in the formula bar:

Equiper les depots à tous les niveaux en système de sécurité d'incendie (alarmes, détecteur de fumée, extincteur,...)

Requirement	Scores	Status	Activity	What is targeted?									
Cat	Code	Text	PR	SN	LD	SP	All	Requirements	PR	SN	LD	SP	All
C1.1	R0001	The facility has functional means of communication.	100%	75%	75%	66%	72%	I	1				
C1.1	> R0002	The facility has a functional landline telephone.	100%	22%	0%	5%	7%	I	2				
C1.1	> R0003	The facility has reliable mobile phone reception.	100%	100%	100%	91%	96%	I	3				
C1.1	> R0004	The facility has a reliable internet connection.	100%	0%	27%	5%	15%	I	4				
C1.1	R0005	The facility receives at least eight hours of grid electricity each day.	100%	100%	100%	95%	98%	I	5				

- b. In the **Requirements** field, enter the codes for the requirements targeted by the activity, separated by a comma, for example, *R0001, R0004*.
- c. Using the **PR, SN, LD, SP, and All** drop-down lists, select whether that level of the national supply chain is targeted by the activity or the overall national supply chain is targeted by the activity. Select if the level is targeted by the activity.
- d. Using the **All** drop-down list, select whether the overall national supply chain is targeted by the activity. Select if the level is targeted by the activity.
- e. If entering activities on the **O** or **P** sheet, use the **Input Category** drop-down list to select which input category is targeted by the activity.

An improvement activity should target one and only one input category. For example, incomplete stock records could be addressed by:

- New software under **C3: Information Technology**.
- More staff or training of staff under **C4: Human Resources**.
- better Standard Operating Procedures (SOPs) under **C5: Policies & Procedures**.
- increasing salary under **C5: Policies & Procedures**.

If the activity does not target a specific input category, for example, 'Conduct a Temperature Monitoring Study,' select *NA Not Applicable* from the **Input Category** drop-down list.

3. Ensure that any changes you have made are saved.

Once an improvement activity has been created, the background of the score will turn **green**. If all of the low performing scores for a requirement at every level of the supply chain have been mitigated with one or more improvement activities, a green ✓ will be displayed in the **Status** column.

For example, once an improvement activity has been created for the requirement **R0007: The facility has access to water, sanitation and hygiene service (WASH)** to improve the score at the Service Point (SP) level, the background of the SP score turns green and a green ✓ is displayed in the **Status** column indicating that all low performing scores for that requirement have been mitigated with an improvement activity:

Cat	Sub	Code	Text	PR	SN	LD	SP	All	Status
C1.1		R0006	There is a reliable supply of fuel for vehicles for supervision visits.	100%	100%	100%		100%	
C1.1		R0007	The facility has access to water, sanitation and hygiene service (WASH).	100%	89%	80%	73%	79%	✓
C1.1		> R0008	The facility has an adequate water supply.	100%	100%	82%	55%	74%	✓

Review and check improvement activities

After the areas for improvement have been identified and activities have been created to improve them and meet the requirement, the improvement activities should be reviewed with the appropriate and identified stakeholders in the continuous Improvement Plan (cIP) process using workshops and/or bilateral reviews as required to ensure that activities have been created for all low performing requirements and that they are appropriate, workable, and aligned to the vision, goals, and anticipated outcomes for the national Immunisation Supply Chain (ISC).

Using the cIP Development Tool, you can review all of the defined activities in the one place to confirm that all low performing requirements have been addressed, that the activities are relevant and appropriate to the national ISC, and to finalise the objectives and outcomes of the national cIP. Use the cIP Development Tool to check the following:

- That the completion status of the cIP is 100%.
- That all the low requirement scores have turned green and the status of the requirement is ticked.
- That the activities created are clearly defined, actionable, and appropriate for the requirement.

Checking the completion status

Select the **Cover** sheet to display the cIP plan’s summary details:

	A	B	C	D	E	F	G
1	Continuous Improvement Plan (cIP) Development Tool						
2							
3		Country	Côte d'Ivoire				
5		Assessment name	GEV2 Côte d'Ivoire Mars 2021				
7		Assessment description	Evaluation de la Gestion Efficace des Vaccins				
9		Start date	22/03/2021				
10							
11							
12		Language	English				
14		Target Score	80%				
15							
16							
17		Plan date	18/06/2021				
19		Completion Status	77.4%				
20							
21							
23							
24							
25							
26							
27							
28							
29							
30							
31							

In the **Completion status** field, check the completion status score:

	Plan date	18/06/2021
	Completion Status	77.4%

If the completion status score does NOT equal 100%, not all of the low performing requirements have been addressed with an improvement activity and you should check the requirement scores and status to see where improvement activities are missing.

Checking the requirement scores and status

Select the **C1**, **C2**, **C3**, **C4**, **C5**, **C6**, **O**, and **P** sheets one by one to check whether any low performing requirements do not have an improvement activity created for them to improve the score and meet the requirement. A list of the assessment scores for the category is displayed on the left side of the sheet:

Requirement							Scores					Status	Activity					What is targeted?				
Cat	Code	Text	PR	SN	LD	SP	All															
C1.1	R0001	The facility has functional means of communication.	100%	75%	75%	66%	72%	✓														
C1.1	> R0002	The facility has a functional landline telephone.	100%	22%	0%	5%	7%	✓														
C1.1	> R0003	The facility has reliable mobile phone reception.	100%	100%	100%	91%	96%	✓														
C1.1	> R0004	The facility has a reliable internet connection.	100%	0%	27%	5%	15%	✓														
C1.1	R0005	The facility receives at least eight hours of grid electricity each day.	100%	100%	100%	95%	98%	✓														
C1.1	R0006	There is a reliable supply of fuel for vehicles for supervision visits.	100%	100%	100%	100%	100%	✓														
C1.1	R0007	The facility has access to water, sanitation and hygiene service (WASH).	100%	89%	80%	73%	79%	!														
C1.1	> R0008	The facility has an adequate water supply.	100%	100%	82%	55%	74%	!														
C1.2	> R0009	The facility has a functional toilet.	100%	78%	64%	70%	69%	✓														
C1.2	> R0010	The facility has hand washing or hand sanitizing facilities.	100%	89%	95%	95%	94%	✓														
C1.2	R0011	The store manager's office meets minimum requirements.	100%	78%	77%	78%	78%	✓														
C1.2	> R0012	The store manager's office is spacious.	100%	89%	64%	72%	72%	✓														
C1.2	> R0013	The store manager's office can be locked.	100%	67%	91%	84%	84%	✓														
C1.2	R0014	The facility is secure.	100%	96%	93%	80%	89%	✓														
C1.2	> R0015	There is a secure perimeter fence or wall around the compound.	100%	89%	89%	90%	90%	✓														
C1.2	> R0016	The facility has 24 hour guard/surveillance.	100%	89%	89%	93%	93%	✓														
C1.2	> R0017	External doors have locks.	100%	100%	95%	82%	91%	✓														
C1.2	> R0018	Windows have locks or grills.	100%	100%	82%	68%	88%	✓														
C1.2	R0019	Cold stores meet minimum requirements.	100%	94%	95%	95%	95%	✓														
C1.2	> R0020	Cold stores have lighting.	100%	100%	95%	97%	97%	✓														
C1.2	> R0021	Cold stores have ventilation.	100%	89%	89%	90%	90%	✓														
C1.2	R0022	Dry stores meet minimum requirements.	63%	60%	42%	47%	47%	✓														
C1.2	> R0023	Dry stores have lighting.	0%	100%	91%	91%	91%	✓														
C1.2	> R0024	Dry stores have heating.	0%	11%	32%	25%	25%	✓														
C1.2	> R0025	Dry stores have adequate air conditioning.	0%	11%	32%	25%	25%	✓														
C1.2	> R0026	Dry stores are protected from direct sunlight.	100%	0%	14%	13%	13%	✓														
C1.2	> R0027	Dry stores have shelves, pallets or pallet racks.	100%	89%	23%	44%	44%	✓														
C1.2	R0028	The facility has sufficient dry goods storage capacity to accommodate the e	99%	100%	100%	100%	100%	✓														
C1.2	R0029	Packing and loading area(s) areas meet minimum requirements.	100%	89%	89%	90%	90%	✓														
C1.2	> R0030	The vaccine packing area has sufficient space.	100%	100%	100%	100%	100%	✓														
C1.2	> R0031	The vaccine packing area is close to the vaccine storage areas.	100%	100%	100%	100%	100%	✓														
C1.2	> R0032	The vaccine packing area is close to the vehicle loading area.	100%	78%	80%	80%	80%	✓														
C1.2	> R0033	The vehicle loading dock is raised.	100%	29%	38%	38%	38%	✓														
C1.2	R0034	Storage buildings have fire alarm systems.	0%	11%	10%	10%	10%	✓														
C1.2	> R0035	Storage buildings have manual fire alarms.	0%	11%	10%	10%	10%	✓														
C1.2	> R0036	Storage buildings have smoke alarms.	0%	11%	10%	10%	10%	✓														
C1.2	R0037	Storage buildings have functional certified fire extinguishers.	100%	61%	8%	3%	17%	✓														
C1.2	R0038	Buildings have guttering and drainage for rain water.	100%	78%	18%	38%	38%	✓														



You can use filters to show only low scores or unresolved issues on the sheet. See [Filtering columns to identify areas for improvement](#) on page 15 .

Any score in the **Scores** columns (**PR**, **SN**, **LD**, **SP**) that is shown in **red** with a **grey** background indicates that the score for the requirement at that level of the supply chain is below the target score defined on the **Cover** sheet (see [Selecting the target score on page 10](#)) and no improvement activities have been created in order to improve that score and meet the requirement. Additionally, if a **red !** is displayed in the **Status** column, the score for the requirement is below the target score for one or more levels in the supply chain.

In the following example, all of the scores for the requirement **R0007: The facility has access to water, sanitation and hygiene service (WASH)** meet or exceed the overall target score of 80%, except for at the Service Point (SP) level which scored 73% in the assessment. As a result, a **red !** is displayed in the **Status** column:

Cat	Code	Text	PR	SN	LD	SP	All	Status
C1.1	R0006	There is a reliable supply of fuel for vehicles for supervision visits.	100%	100%	100%	100%	100%	✓
C1.1	R0007	The facility has access to water, sanitation and hygiene service (WASH).	100%	89%	80%	73%	79%	!
C1.1	> R0008	The facility has an adequate water supply.	100%	100%	82%	55%	74%	!

This indicates that no improvement activity has been created to meet the R0007 requirement at the SP level and therefore, not all of the low performing requirements have been addressed in the **C1 category**. Create an improvement activity for any low performing requirement that is without an improvement activity (see [Create improvement activities on page 18](#)).

Scores in **red** with a **green** background indicate that an improvement activity **HAS** been created to improve that score and meet the requirement. If all of the low performing scores for a requirement at every level of the supply chain have been mitigated with an improvement activity, a **green ✓** will be displayed in the **Status** column.

In the following example, once an improvement activity has been created for the requirement **R0007: The facility has access to water, sanitation and hygiene service (WASH)** to improve the score at the Service Point (SP) level, the background of the SP score turns green and A green ✓ is also displayed in the **Status** column indicating that all low performing scores for that requirement have been mitigated with an improvement activity:

Cat	Sub	Code	Text	PR	SN	LD	SP	All	
C1.1		R0006	There is a reliable supply of fuel for vehicles for supervision visits.	100%	100%	100%		100%	
C1.1		R0007	The facility has access to water, sanitation and hygiene service (WASH).	100%	89%	80%	73%	79%	✓
C1.1		> R0008	The facility has an adequate water supply.	100%	100%	82%	55%	74%	✓

Checking the activities

Select the **Improvement Plan** sheet to display a list of all of improvement activities created on the **C1, C2, C3, C4, C5, C6, O,** and **P** sheets in response to low requirement scores :

Continuous Improvement Plan (cIP) Development Tool			Côte d'Ivoire				18/06/2021			
#	Cat	Activity	Priority	Responsibility	Budget	Target start	Target end	Completion indicator	State	Sign off date
1	C1	Doter chaque depot de region et de district en moyens de communication et de transmission des données (modem, data, credit de communication,...)								
2	C1	Réhabiliter les infrastructures sanitaires au niveau régional, district et ESPC (accès à l'eau, assainissement, bureaux, sécurisation, mise aux normes des magasins secs,...)								
3	C1	Equiper les depots à tous les niveaux en système de sécurité d'incendie (alarmes, detecteur de fumée, extincteur,...)								
4	C1	Assurer la maintenance des infrastructures sanitaires des niveaux central, regional,district et ESPC (batiments, sanitaires, espaces verts, climatisation, matériel de sécurité des incendies, groupe électrogène)								
5	C2	Installer un système de contrôle de température à distance qui comprend alarmes pour porte ouverte et coupure d'électricité sur chacune des chambres froides.								
6	C2	Assurer la maintance des chambres froides y compris le remplacement des joints de portes non etanches.								
7	C2	Equiper chaque réfrigérateur/congélateur pour vaccins non pourvu d'un regulateur de tension								
8	C2	Acquérir des équipements de froid (chambres froide, réfrigérateur) selon le plan de réhabilitation								
9	C2	Equiper chaque district non pourvu d'un generateur de secours d'une puissance appropriée et d'une reserve de carburant suffisante.								
10	C2	Réhabiliter les locaux pour générateur en respectant notamment les normes d'aération et de sécurité.								

The following columns allow you to review the improvement activities:

Column	Description
Cat	The code of the category that the activity was defined for. For the definition of each category, refer to the relevant Category sheet (C1, C2, C3, C4, C5, C6, O, or P).
Activity	An activity entered in the Category sheets (C1, C2, C3, C4, C5, C6, O, and P, as required).

Review the list of improvement activities and ensure that they are clearly defined, actionable, and appropriate.



You cannot change the categories or activities on the **Improvement Plan** sheet. If you want to change an activity, select the category sheet where the activity was originally entered and make any updates as required in the **Activity** column in that sheet. The activity will then automatically update in the **Activity** column on the **Improvement Plan** sheet.

Prioritise and manage improvement activities

Once the activities have been reviewed, checked, and mutually agreed by all parties involved in the continuous Improvement Plan (cIP) process using the cIP Development Tool, they should be prioritised and assigned to activity owners, with a defined budget, completion target timeline, and indicators of activity completion. Again, this should be conducted with the participation and involvement of the appropriate and identified stakeholders in the cIP process to help to ensure a collaborative approach, cross-functional agreement, and oversight of the cIP as a whole.

You can then use the cIP Development Tool to manage and monitor all agreed activities through to completion and sign-off by all relevant stakeholders in the cIP process.

Prioritising activities

The agreed plan activities should be prioritised by all relevant stakeholders in the cIP process based the cost of activity against the resources and funding available and the quantifiable improvements that activity completion will bring to the Immunisation Supply Chain (ISC). You can use the cIP Development Tool to keep track of and document the priority assigned to each activity.

For each activity:

1. Select the **Improvement Plan** sheet to display a list of the plan activities already defined in the category sheets:

Continuous Improvement Plan (cIP) Development Tool				Côte d'Ivoire							18/06/2021			
#	Cat	Activity	Priority	Responsibility	Budget	Target start	Target end	Completion indicator	State	Sign off date				
1	C1	Doter chaque depot de region et de district en moyens de communication et de transmission des données (modem, data, credit de communication,...)												
2	C1	Réhabiliter les infrastructures sanitaires au niveau régional, district et ESPC (accès à l'eau, assainissement, bureaux, sécurisation, mise aux normes des magasins secs,...)												
3	C1	Equiper les depots à tous les niveaux en système de sécurité d'incendie (alarmes, detecteur de fumée, extincteur,...)												
4	C1	Assurer la maintenance des infrastructures sanitaires des niveaux central, regional, district et ESPC (batiments, sanitaires, espaces verts, climatisation, matériel de sécurité des incendies, groupe electrogène)												
5	C2	Installer un système de contrôle de température à distance qui comprend alarmes pour porte ouverte et coupure d'électricité sur chacune des chambres froides.												
6	C2	Assurer la maintenance des chambres froides y compris le remplacement des joints de portes non etanches.												
7	C2	Equiper chaque réfrigérateur/congélateur pour vaccins non pourvu d'un regulateur de tension												
8	C2	Acquérir des équipements de froid (chambres froide, réfrigérateur) selon le plan de réhabilitation												
9	C2	Equiper chaque district non pourvu d'un generateur de secours d'une puissance appropriée et d'une reserve de carburant suffisante.												
10	C2	Réhabiliter les locaux pour générateur en respectant notamment les normes d'aération et de sécurité.												

2. Using the **Priority** drop-down list in the row next to the activity that you want to prioritise, select **High**, **Medium**, or **Low** as agreed between stakeholders in the cIP process.
3. Ensure that any changes you have made are saved.

Assigning activities to owners

Each agreed plan activity should have one or more named owners that will be responsible for the implementation of the activity. This ensures support for implementation and enables tracking of activity progress through regular reporting. You can use the cIP Development Tool to document the owner(s) assigned to each activity.

For each activity:

1. Select the **Improvement Plan** sheet to display a list of the plan activities already defined in the category sheets.
2. In the **Responsibility** field next to the activity that you want to assign owners to, enter the name of the individuals, teams, departments, or organisations that will own and manage the activity through to completion as agreed between stakeholders in the cIP process.
3. Ensure that any changes you have made are saved.

Assigning budgets to activities

The necessary financing to enable the completion of each agreed plan activity should be identified and agreed by all relevant stakeholders in the cIP process to enable the activity owner(s) to implement the activity without exceeding available resources. You can use the cIP Development Tool to document the budget assigned to each activity.

For each activity:

1. Select the **Improvement Plan** sheet to display a list of the plan activities already defined in the category sheets.
2. In the **Budget** field next to the activity, enter the budgetary amount that you want to assign to the activity.
3. Ensure that any changes you have made are saved.

Assigning targets to activities

Timelines for the completion of each agreed plan activity should be identified and agreed by all relevant stakeholders in the cIP process as a target for the activity owner(s). You can use the cIP Development Tool to document the activity target start and end dates.

For each activity:

1. Select the **Improvement Plan** sheet to display a list of the plan activities already defined in the category sheets.
2. In the **Target start** field next to the activity, enter the target date for the activity to commence in DD/MM/YYYY format.
3. In the **Target end** field next to the activity, enter the target date for the activity to conclude in DD/MM/YYYY format.
4. Ensure that any changes you have made are saved.

Assigning completion indicators to activities

One or more completion indicators should be identified and agreed by all relevant stakeholders in the cIP process for each agreed plan activity to enable the activity owner(s) to implement the activity in an appropriate manner to achieve quantifiable improvement to the Immunisation Supply Chain (ISC) and to provide a clear indication of successful activity implementation. You can use the cIP Development Tool to document the activity completion indicators.

For each activity:

1. Select the **Improvement Plan** sheet to display a list of the plan activities already defined in the category sheets.
2. In the **Completion Indicator** field next to the activity, enter the indicator(s) that you want to assign to the activity.
3. Ensure that any changes you have made are saved.

Monitoring activities

Once all plan activities have been mutually agreed by all relevant stakeholders in the cIP process, the activities should be actively monitored by the plan owner to ensure that they are being conducted and to identify any issues that need to be resolved. You can use the cIP Development Tool to keep track of and document activity progress.

For each activity:

1. Select the **Improvement Plan** sheet to display a list of the plan activities already defined in the category sheets.
2. Using the **State** drop-down list next to the activity, select one of the following as appropriate:
 - **Not started:** no work has been conducted in relation to the activity.

- **In progress:** work has started in relation to the activity.
 - **Completed:** the activity has been complete.
3. Ensure that any changes you have made are saved.

Signing off activities

Once a plan activity is considered completed by its owner(s), all relevant stakeholders in the cIP process should review the activity against its defined completion indicator(s), and agree whether the activity is 'signed-off.' You can use the cIP Development Tool to keep track of and document activity completion and sign-off.

For each activity:

1. Select the **Improvement Plan** sheet to display a list of the plan activities already defined in the category sheets.
2. Using the **State** drop-down list next to the activity that you want to mark as signed off, ensure that **Completed** is selected.
3. In the **Sign off Date** field next to the activity, enter the date that the activity was signed off in DD/MM/YYYY format.
4. Ensure that any changes you have made are saved.

Troubleshooting

This chapter provides solutions for common continuous Improvement Plan (cIP) Development Tool issues. The following issues are covered:

Issue	See Page
I've forgotten my EVM account email address	26
I've forgotten my EVM account password	26
I cannot resize the columns	26
I cannot see all of a sub-category description	27
I cannot view the scores at the same time as the activity list	27



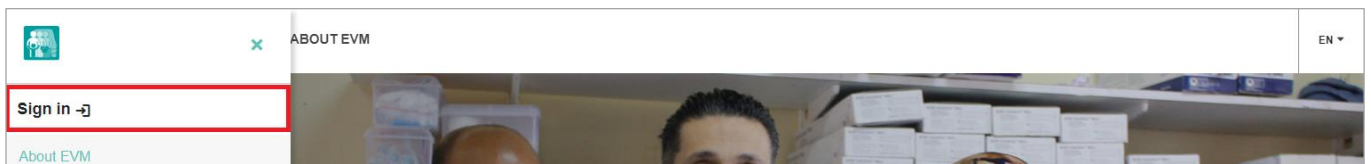
If you are experiencing an issue not described here or the solution described does not work for you, please escalate the issue to the EVM Global Administrator by emailing them at evmadmin@who.int.

I've forgotten my EVM account email address

Contact the EVM Global Administrator at evmadmin@who.int with your name, organisation, and job title. The EVM Global Administrator will review your request and notify you of the email address registered for your EVM account.

I've forgotten my EVM account password

1. Open the EVM website:
<https://extranet.who.int/evm2/web/Public>
2. Select the menu in the top left of the screen, then select **Sign in**:



3. If you have more than one Microsoft account, select the email address that you used to request EVM access or select **Use another account** to enter the email address.
4. Select **Forgotten my password**:



5. Follow the on-screen instructions to reset your password.

I cannot resize the columns

You need to unprotect the sheet whilst the cIP Development Tool is open in Microsoft Excel. See Resizing columns on page 10.

I cannot see all of a sub-category description

The following is caused by the column heading rows being 'frozen' so that they remain in place as you scroll down the sheet.

	A	B	D	E	F	G	H	I	J	K	L	A
1												
2		C2		C2 Equipment								
3				C2.1 Storage equipment								
4				C2.1.1 Cold storage equipment								
5				Require	- cold rooms and freer rooms							
6				Cat	- refrigerator and freezers							
73		C2.3	> R0106	The waste burial site has clear warning signs.					0%	0%	0%	✓
74		C2.3	> R0107	The burial pit site is not subject to flooding.					67%	33%	44%	✓

Scroll to the top of the sheet, then mouseover cell B2 again. The full description is displayed.

I cannot view the scores at the same time as the activity list

This is caused by the sheet being split, with certain columns 'frozen' in place to ensure that they remain on-screen. To view all of the columns on a sheet at the same time, use Microsoft Excel's zoom functionality to zoom out until all of the sheet's columns are shown on-screen:

Alternatively, duplicate the cIP Development Tool file and open the two copies at the same time so that you can view the scores in one copy whilst viewing the activity list in the other copy.

Annex 1: The EVM assessment framework

The EVM assessment framework defines the way in which vaccine supply chain systems are assessed. It is organised by:

- **Criteria:** the operational or management functions that health facilities must perform.
- **Categories:** the necessary inputs, outputs and performance of health facilities.
- **Requirements:** the attributes that a well-functioning immunisation supply chain must have.
- **Questions:** the means of ascertaining whether requirements have been met.

Requirements and questions are also organised according to their applicability at the supply chain level of the health facility being assessed. Scoring in EVM is determined by this assessment framework.

Supply chain levels

EVM assesses four levels of a supply chain:

Level	Description
Primary level (PR)	Vaccine stores that receive vaccine direct from an international vaccine manufacturer or distributors or a local vaccine manufacturer.
Sub-National level (SN)	Vaccine stores that receive vaccine from a primary store or higher level sub-national store. There may be 0, 1, or more SN levels.
Lowest Distribution level (LD)	Vaccine stores that receive vaccine from a primary level or a sub-national store and supply vaccine to one or more health facilities.
Service Point level (SP)	Facilities that receive vaccine from any higher-level store and supply immunisation services.

Some countries may have a supply chain that corresponds exactly to these four levels. However, many others may employ a different system, i.e. either fewer or greater levels than four. To standardise assessment of supply chain levels across countries, EVM enables countries to define up to eight levels in their supply chain:

- Primary
 - Primary (1)
 - Primary (2)
- Sub-National
 - Sub-National (1)
 - Sub-National (2)
 - Sub-National (3)
- Lowest Distribution
- Service Point
 - Service Point (1)
 - Service Point (2)



For reporting purposes, where there are more than four levels these are aggregated.

Requirements

The standard set by EVM is defined by requirements, organised into categories, that a well-functioning immunisation supply chain must meet. There are over 300 requirements and more than 500 sub-requirements. The applicability of a requirement at a health facility is determined by its level in the supply chain and the immunisation services it provides.

To assess whether a health facility meets an applicable requirement, an EVM Assessor visits a facility and answers questions using the EVM app. The EVM Assessor:

- Inspects records and equipment,
- Assesses staff knowledge,
- Checks if systems for routine monitoring and evaluation are in place and operational,
- Promotes and supports quality management principles, and
- Is supported by in-app guidance, supporting documents, and supplementary tools.

There are over one thousand questions in EVM. However, no single facility will encounter this number, because only applicable questions are asked. Question applicability is determined by supply chain level and answers to previous questions.

In summary, the EVM framework is defined by criterion, categories, requirements, and questions:

- **Criteria** determine the operational and management functions the health facility must perform.
- **Categories** determine the necessary inputs, outputs, and performance of the health facility's operational and management functions.
- **Requirements** define the minimum standards for each input, output and performance category of the health facility's operational and management functions.
- **Questions** are asked to assess whether a requirement has been met.

Criteria

EVM assesses supply chain functions at each level. These supply chain functions represent EVM criteria. The assessment by criteria is conducted as follows:

- A representative sample of sites is selected at each level of the supply chain.
- EVM criteria is assessed at each supply chain level by observation, infrastructure and records inspection, and staff interviews.
- Inputs, process and performance indicators are evaluated in each area at each level.
- Indicator scores are combined to give criterion scores for each area at each level.
- An area of vaccine management is considered 'Effective' if its criterion score is greater than or equal to 80%.

EVM criteria are organised into three groups:

- Facility operations (E1-9)
- Facility management (M1-4)
- Immunisation programme management (ST & R1-R6)

The EVM criteria for facility operations and facility management are listed in the following tables.

Facility operations criteria (E1-E9)

Code	Criteria	Sub-Criteria
E1	Vaccine arrivals	E1.1 Inspection of shipments E1.2 Custom clearance & transition facilities E1.3 Transport from port of entry to primary store
E2	Temperature management	E2.1 Temperature management in storage E2.2 Temperature management during transportation
E3	Storage and transport capacity	E3.1 Capacity of infrastructure and equipment E3.2 Utilisation of available capacity
E4	Facility infrastructure and equipment	E4.1 Quality of infrastructure E4.2 Quality of equipment
E5	Maintenance	E5.1 Maintenance & repair of buildings E5.2 Maintenance & repair of cold chain equipment E5.3 Maintenance & repair of vehicles
E6	Stock management	E6.1 Replenishment E6.2 Receipt and put-away E6.3 Inventory management E6.4 Release and dispatch E6.5 Managing returns, damaged & expired stock
E7	Distribution of vaccines and dry goods	E7.1 Distribution planning E7.2 Transportation of vaccines
E8	Vaccine management	E8.1 The shake test E8.2 Use of freeze-dried vaccines E8.3 Multi-dose vial policy
E9	Waste management	E9.1 Handling of syringes after use E9.2 Storage of immunisation waste E9.3 Disposal of immunisation waste

Facility management criteria (M1-M4)

Code	Criteria	Sub-criteria
M1	Annual needs forecasting	M1.1 Forecasting vaccine needs M1.2 Forecasting dry goods needs
M2	Annual work planning	M2.1 Preparing an annual work plan M2.2 Budgeting activities of the plan M2.3 Recording income and expenditure M2.4 Monitoring the implementation of the annual work plan
M3	Supportive supervision	M3.1 Planning supervision visits M3.2 Recording supervision visits M3.3 Providing supportive feedback
M4	ISC performance monitoring	M4.1 Monitoring ISC key performance indicators M4.2 Reporting ISC performance data M4.3 Monitoring reporting rates M4.4 Reviewing ISC performance

The EVM criteria for immunisation programme management are only assessed at the national level and therefore are not relevant to individual health facilities.

Immunisation programme management (ST, R1-R6)

Code	Name	Description
ST	Strategic planning	Developing a strategic ISC improvement plan and monitoring its implementation
R1	Infrastructure management	Providing and procuring utilities and services, constructing vaccine storage buildings and immunisation locations
R2	Equipment management	Procuring, installing and decommissioning cold chain equipment
R3	IT systems management	Providing and managing basic IT equipment, procuring and installing data management systems
R4	Human resources management	Recruitment and training
R5	Knowledge management	Gathering evidence to inform policy development and supply chain strategy, policy development, developing and managing SOPs - Developing training materials - Managing private service provider contracts
R6	Financial resources management	Funding supply chain operations and development, recording funds received and expenditure

Categories

EVM criteria are organised into the following categories:

- Inputs (C1 to C6): what is required
- Outputs (O): what is done
- Performance (P): what are the key outcomes of the input and output

There are six input categories:

Code	Category	Sub-categories
C1	Infrastructure	C1.1 Utilities & services C1.2 Buildings & amenities
C2	Equipment	C2.1 Storage equipment (cold & other storage equipment) C2.2 Transportation equipment (vehicles & Insulated containers) C2.3 Waste management equipment
C3	Information technology	C3.1 General IT equipment (telephone, computers, printers) C3.2 Data management technology (standard data collection forms, software, reporting forms)
C4	Human resources	C4.1 Staffing (availability and quality) C4.2 Training C4.3 Knowledge & understanding
C5	Policies & procedures	C5.1 Evidence generation (studies, reviews and assessments) C5.2 Policies/Strategies C5.3 SOPs/guidance C5.4 Contracts

Code	Category	Sub-categories
C6	Financial resources	C6.1 Salaries C6.2 Funds for operations C6.3 Funds for new equipment C6.4 Funds for training

The O (Output) category cover deliverables dues from the staff in the implementation of each EVM function/criterion. These outputs include, records, charts, or reports produced by staff while implementing the supply chain functions and provide traceability to the root causes of supply chain performance.

The P (Performance) category cover the outcome from proper implementation of supply chain functions (e.g. no stock out, no close vial wastage, full functionality of the CCE, no injury from immunisation waste).

System indicators

The EVM P (Performance) category aligns with the achievement of the three supply chain objectives: availability of vaccines, quality of vaccines, and efficiency of the vaccine supply chain.

- **Availability:** ensuring that vaccines and dry goods are available where and when required.
- **Quality:** ensuring that any damaged vaccine is not being administered to recipient; this implies the ability of identifying and removing any damage vaccine from the supply chain.
- **Efficiency:** eliminating wastage (vaccines and dry goods) in the supply chain (e.g. close vials wastage, damaged vaccines due to expiry, physical damage, temperature damage).

Questions

An EVM questionnaire is composed of 36 sections. To make data collection easier, many sections relate to a physical location or asset in a health facility, such as the store manager’s office, the electricity generator, the refrigerated vehicle, and the cold room. However, some sections may be inapplicable for certain health facilities. To address this, the EVM questionnaire is presented dynamically based on your responses to questions. For example, you may be asked the following question:

16. Does the facility have any vaccine refrigerators and/or freezers? 🗨️

Yes

No

If you answer ‘No’, then the section on refrigerators and freezers will be marked as inapplicable and all questions relating to refrigerators and/or freezers will be disabled (hidden) from the questionnaire. Inapplicable sections will still be shown in the questionnaire menu; however, they are not given a percentage completion score as they do not contain any questions:

○ L14 Cold/freezer room |||| 0%

No

○ L15 Refrigerator/freezer

If you return to the same question and change your answer to ‘Yes’, all related questions will be re-enabled (displayed).

Assessment scoring

EVM assesses the required inputs, the expected outputs and the performance of EVM functions (criteria). Inputs, outputs, and performance of the EVM criteria are organised into categories. EVM defines minimum requirements (standards) for each category, applicable to particular criteria. Each EVM requirement is given a weighting (1 or 5), depending on the supply chain level. EVM questions are used to assess whether a requirement has been met. If a requirement is met, it scores one (1), otherwise it scores zero (0). EVM scoring is then based on a multilayer aggregation of the requirement scores to the scores for categories, criteria and finally to the composite score for the EVM assessment.

Non-applicable requirements are not scored and do not affect the composite scoring of the correspondent category and criterion. The applicability defines whether the requirement is relevant to given level and location.

There are two type of requirement scores:

- The maximum score possible = weight x applicability
- The total score recorded = weight x applicability x binary score

Category scores

A category score = the total score recorded / maximum score possible, where:

- The total score recorded = sum over requirements (maximum score x applicability x binary score)
- The maximum score possible = sum over requirements (maximum score x applicability)



The sum over requirements = sum over requirements for the selected category, including sub-categories (Cn.1, Cn.2, etc.).

Criterion scores

A criterion score = the total score recorded / maximum score possible, where:

- The total score recorded = sum over requirements (maximum score x applicability x binary score)
- The maximum score possible = sum over requirements (maximum score x applicability)



The sum over requirements = sum over requirements for the selected criterion, including its sub-criteria (En.1, En.2, ...).

Composite requirement scores

This is a single percentage score that:

- For a location questionnaire is obtained by aggregating E1-9 and M1-4 criteria scores.
- For an EVM assessment is obtained by aggregating E1-9, M1-4 and R1-6 criteria scores.

If you want a single indicator to reflect location or assessment performance, this is it.

A composite requirement score = the total score recorded / maximum score possible, where:

- The total score recorded = sum over requirements (maximum score x applicability x binary score)
- The maximum score possible = sum over requirements (maximum score x applicability)



A composite requirement score is applicable if any of its sub-requirements are applicable, and that composite requirement applicability = maximum of sub-requirement applicability.
