
Coordinating forecasting and supply planning:

The forecasting and supply
planning team

**Guidance Manual
on Forecasting and
Supply Planning**

for Vaccines and other
Immunization Supplies

Contents

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The forecasting and supply planning team

This guidance manual provides an overview of the forecasting and supply planning (FSP) team, including the roles and responsibilities of the team, governance structure, operational procedures, and guidelines for setting up and strengthening an FSP team. The document is organized into the following sections.

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Acronyms

Acronym	Definition
EPI	Expanded Programme on Immunization
FSP	Forecasting and supply planning
KPI	Key performance indicator
MOH	Ministry of Health
NLWG	National logistics working group
PSM TWG	Procurement and supply management technical working group
SMART	Specific, measurable, achievable, realistic, time-bound

Definition of terms

Term	Definition
Expanded Programme on Immunization (EPI) team	The team responsible for coordination of the national immunization programme to ensure equitable access to life-saving vaccines.
Forecasting and supply planning (FSP) team	The government-led team responsible for coordinating all forecasting and supply planning-related activities.
FSP review	The process by which programmes review a forecast and supply plan, including previous recommendations, to determine whether corrective actions are required for uninterrupted product availability.
Key performance indicator (KPI)	An objective measure of performance that indicates current performance and can be used to monitor progress towards the achievement of set targets over time.
National logistics working group (NLWG) or procurement and supply management technical working group (PSM TWG)	The committee or team responsible for coordinating national logistics and supply chain activities as well as supply chain investments made by government agencies and development partners. The NLWG or PSM TWG provides guidance, expertise and technical assistance on all matters concerning supply chain operations and improvement initiatives.
Supply planning	The process used to determine when, where and how many doses of each vaccine should be delivered to ensure adequate stock levels are maintained throughout the supply chain based on the forecasted consumption, stock status and inventory policies. The supply planning process estimates the total vaccine requirements.
Terms of reference	A document that outlines the purpose, roles and responsibilities, membership, governance structure and operational procedure of a committee or project to facilitate the achievement of defined goal(s).
Total vaccine requirements	The quantity of each vaccine needed to meet the forecasted consumption and ensure that adequate stock levels within the supply chain are maintained to ensure continuous vaccine supply at the immunization service level.

Overview of the forecasting and supply planning team

All FSP activities, from compiling data and assumptions to implementing the FSP improvement plan, require strong coordination. The FSP team is the government-led team that should coordinate these activities, and it can have members from relevant national immunization partners. The FSP team will have three to five members with expertise in immunization supply chain management and experience in health programme planning and implementation. Further, the team should be able to collaborate with individuals, organizations and ministries with requisite skills and expertise that are external to the team as needed. Individuals with the following skills and expertise can be part of the FSP team or can be externally consulted: forecasting; supply planning; finance and budgeting; procurement; warehouse, cold chain and stock management; data analysis and management (both supply chain and programme data); and immunization programme management and implementation, including routine and supplementary immunization activities and outbreak response. Given the role of timely fund disbursement in ensuring timely procurement, it is highly recommended that representatives from the Ministry of Finance and Treasury are part of the FSP team or are consulted. Finally, a major requirement for institutionalization is a clearly written, government-endorsed and operationalized terms of reference (see toolbox for sample).

Roles and responsibilities of the forecasting and supply planning team

The FSP team may have responsibilities such as:

- **Developing a work plan** for FSP activities
- **Organizing and completing preparatory activities** for FSP exercises, including programme description, scope definition, data gathering, obtaining stakeholders' inputs through consultations and finalization of essential data and assumptions
- **Generating forecasts and supply plans**, supporting resource mobilization and eventual operationalization of the forecast and supply plan

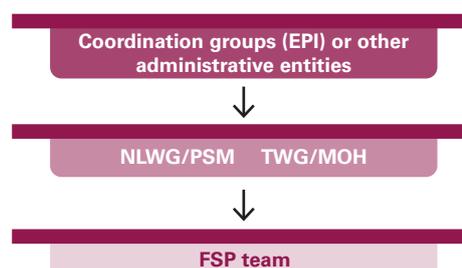
- **Reviewing and monitoring FSP performance**, including the development of improvement plans
- **Advocating for the definition and adoption of FSP procedures**, team members' training and adoption of applicable innovations
- Liaising with and **leveraging skills and expertise available in other programme areas** to ensure alignment and integration
- Supporting the programme to **introduce or switch products or programmatic approach**

Governance structure for the forecasting and supply planning team

Ideally, the FSP team should directly report to the NLWG or any other government-led (integrated) procurement and supply management technical working group (PSM TWG) or a designated unit within the Ministry of Health (MOH) (Figure 1). The activities and outputs of the FSP team must be communicated to higher-level coordination groups or administrative entities, such as the Expanded Programme on Immunization (EPI) team and/or other specialized responsible entities within the MOH. This will ensure that the responsible authorities are aware of the team's activities and endorse and use the FSP outputs (such as placing orders per plans), and will also enable them to provide the required support to the FSP team, when/if needed. Other teams that use the FSP outputs include the procurement unit, finance unit, central medical stores, etc.

In instances where there is no functional NLWG or PSM TWG, there should be a deliberate effort to set up and/or strengthen the group, given its critical role in coordinating supply chain management activities.

Figure 1: FSP team governance structure



The forecasting and supply planning team's operational procedures

Table 1 lays out the key operational procedures for the FSP team, including communication and collaboration considerations. FSP team should coordinate

all procedures in collaboration with other immunization partners under the leadership of NLWG, PSM TWG and MOH depending on the country context.

Table 1: FSP team's operational procedures

Procedure	Activities	Responsible	Stakeholders	Output	Guidance
Planning					
FSP assessment and improvement planning	<ul style="list-style-type: none"> – Advocate for assessment – Coordinate assessment – Coordinate improvement planning – Disseminate assessment and improvement planning reports – Advocate for implementation of improvement plan, including integration into existing plans/strategies 	FSP team	NLWG, PSM TWG, MOH and other immunization partners	FSP assessment report disseminated FSP improvement plan disseminated	
Work planning	<ul style="list-style-type: none"> – Develop costed work plan that is informed by FSP improvement plan – Disseminate and advocate for integration of work plan activities into broader EPI plans 	FSP team	NLWG, PSM TWG, MOH and other immunization partners	Costed work plan developed, disseminated and integrated	<p>Countries are expected to develop an annual and/or multiyear work plan that is reviewed regularly (quarterly or semi-annually).</p> <p>The timelines for activities should be fixed such that they are completed on time (for example, to meet the country's budgeting, procurement and fund release timelines, etc.).</p> <p>Each activity in the plan should have specific, measurable, achievable, realistic and time-bound (SMART) key performance indicators (KPIs) and realistic targets.</p> <p>The team should assess if they need an evaluation and include it in the work plan.</p>

Procedure	Activities	Responsible	Stakeholders	Output	Guidance
Work plan implementation					
FSP	<ul style="list-style-type: none"> – Define the scope of FSP – Collect, clean, adjust and aggregate FSP data – Collaborate and collect inputs from relevant stakeholders – Coordinate consultation meetings, including FSP workshop – Facilitate finalization of FSP data and assumptions – Estimate forecast and develop supply plan – Disseminate FSP results 	FSP team	NLWG, PSM TWG, MOH and other immunization partners	Forecast and supply plan	<p>The FSP team needs to collect inputs from relevant subject matter experts through individual consultations and/or through stakeholders' consultation workshops, such as an FSP workshop.</p> <p>Ideally, such consultations should involve individuals with experience across all the levels of the immunization supply chain and other functional areas such as procurement, finance and budgeting, data analysis and management (both supply chain and programme data), and immunization programme management and implementation, to ensure all programmatic realities are considered.</p> <p>The consultation with the Ministry of Finance and Budgeting is particularly important, given its role in ensuring that commodity requirements are funded.</p>
FSP monitoring	<ul style="list-style-type: none"> – Conduct regular FSP reviews – Revise forecast and supply plan where applicable – Disseminate revised forecast and supply plan 	FSP team	NLWG, PSM TWG, MOH and other immunization partners	Forecast and supply plan reviewed, revised and disseminated where applicable	While reviewing FSP, the team should identify the underlying causes of observed performance and where applicable put in place measures to improve or maintain performance.
Other activities	<ul style="list-style-type: none"> – Implement other activities such as capacity-building and support to introduce or switch products or programmatic approach 	FSP team	NLWG, PSM TWG, MOH and other immunization partners	Other activities implemented	

Procedure	Activities	Responsible	Stakeholders	Output	Guidance
Monitoring and evaluation					
Monitoring and evaluation (see Chapters 8 'Forecasting and supply planning review' and 9 'Forecasting and supply planning performance monitoring' for details)	<ul style="list-style-type: none"> – Track KPIs – Plan and coordinate evaluation 	FSP team	NLWG, PSM TWG, MOH and other immunization partners	KPIs tracked Evaluation report	While tracking the KPIs, the team should identify the underlying causes of observed performance and put in place measures to improve or maintain performance

The operational procedure for the FSP team, including but not limited to work plan development, meetings proceedings, documentation and decision-making processes, should be clearly documented. A generic

terms of reference is available in the toolbox for consideration and adaptation.



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Guidelines for setting up and strengthening the forecasting and supply planning team

Setting up the forecasting and supply planning team

A summary of the steps involved in setting up the FSP team is presented in Table 2.

Table 2: Summary of the steps involved in setting up the FSP team

Steps	Description	Guidance
1	Identify institutionalization of the FSP team as a priority	The FSP team has been proven to play a key role in improving FSP performance. Countries are therefore recommended to set up and institutionalize the FSP team. Once consensus to set up a team is reached by all stakeholders, this activity should be added to the responsible entity's work plan.
2	Draft terms of reference	A generic terms of reference is available in the Immunization FSP toolbox for adaptation.
3	Agree on the primary reporting line	Ideally, the FSP team should directly report to the NLWG or any other government-led (integrated) PSM TWG or a designated unit within the MOH. The activities and outputs of the FSP team must be communicated to higher-level coordination groups or administrative entities such as the EPI team and/or other specialized responsible entities within the MOH.
4	Review and adopt terms of reference	This should be done by the responsible government entity (for example, a specialized entity within the MOH).
5	Nominate and formally appoint FSP team members	The entity responsible for leadership oversight should identify, nominate and appoint team members from the government. They should also collaborate with partners to identify additional team members. Among the FSP team members, the chairperson and the secretary should be identified to coordinate the team's activities. The chairperson should be a government official, while the secretary can come from immunization partners.
6	Implement FSP activities	The FSP team's activities should be guided by a work plan and continuous improvement plan where applicable.
7	Appraise the FSP team's performance periodically	Ideally, the FSP team's performance should be evaluated and a continuous improvement plan implemented to address any observed gaps. The appraisal can be conducted using the questions in Table 3 (Rapid FSP team assessment questions).

Strengthening the forecasting and supply planning team

Weaknesses in the operation of the FSP team can be identified through a formal assessment, and an improvement plan should be developed from the gaps identified. UNICEF’s FSP assessment tool can be used for this purpose, as it has questions that specifically

address the functionality of the FSP team (see Chapter 10 ‘Assessing forecasting and supply planning and planning for improvements’).

Countries may find the questions in Table 3 useful for a rapid assessment. A “no” to any of these questions indicates a weakness that should be addressed (see Table 3 for recommended actions).

Table 3: Rapid FSP team assessment questions and recommended actions

S/N	Question	Recommended action (if the answer to the question is no)
1	Does the FSP team have formal terms of reference that include the team’s roles and responsibilities, members’ competencies, and other essential details?	Develop and adopt a terms of reference
2	Does the FSP team have a resource work plan that is integrated into the broader work plan of the entity responsible for leadership oversight?	Develop a costed work plan and advocate for its integration into broader programme work plans and strategies
3	Does the FSP team have access to resources required for the implementation of FSP activities?	Advocate for provision of resources required for the implementation of FSP activities
4	Are the FSP team’s proposed changes to the forecast and supply plan reflected in the country’s procurement plans?	Advocate for the consideration and implementation of the FSP team’s proposed changes to the forecast and supply plan Institutionalize the use of proposed changes to the forecast and supply plan to inform procurement plans through applicable policy statement and/or development of a standard operating procedure
5	Does the FSP team monitor work plan implementation using agreed indicators?	Review work plan implementation using indicators specified in the work plan
6	Does the FSP team hold regular meetings with evidence of minutes and communication of relevant recommendations to decision makers?	Institutionalize the use of indicators to track the frequency of meetings as defined in the work plan and track the implementation of recommendations
7	Does the FSP team review FSP performance using agreed indicators?	Institutionalize the review of FSP performance using selected FSP KPIs (see Chapter 9 ‘Forecasting and supply planning performance monitoring’ for potential KPIs)





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Key takeaways

- The **FSP team is a government-led team** responsible for coordinating all FSP-related activities.
- The FSP team should (1) develop a **work plan** for FSP activities, (2) organize and complete FSP **preparatory activities**, (3) develop **forecast and supply plan**, (4) ensure **FSP monitoring and implementation** of a continuous improvement plan, (5) **lead standardization of FSP processes** and training of members, (6) liaise with and leverage skills and expertise available in other programme areas to **ensure alignment and integration**, and (7) **support other innovative activities** such as new vaccine introduction.
- **All FSP teams should have a formal terms of reference** that include their functions, operational procedures, and performance-monitoring.
- The **FSP team should develop a costed work plan and advocate for its integration into broader programme work plans and strategies.**
- **UNICEF's FSP assessment tool can be used to assess the functionality of the FSP team** to facilitate the development and implementation of an improvement plan.

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