

Gavi NVS Application Form

Submitted by

The Government of **Senegal**

Date of submission: 08 September 2016

Deadline for submission:

i. **09 September 2016**

ii. 1st May 2015

iii. 9 September 2015

Select Start and End Year of your Comprehensive Multi-Year Plan (cMYP)

Start Year 2014 End year

Form revised in 2016

(To be used with guidelines dated November 2015)

Note: Please ensure that the application has been received by Gavi on or before the day of the deadline.

2018

Gavi GRANT TERMS AND CONDITIONS

FUNDING USED SOLELY FOR APPROVED PROGRAMMES

The applicant country ("Country") confirms that all funding provided by Gavi will be used and applied for the sole purpose of fulfilling the programme(s) described in the Country's application. Any significant change from the approved programme(s) must be reviewed and approved in advance by Gavi. All funding decisions for the application are made at the discretion of the Gavi Board and are subject to IRC processes and the availability of funds.

AMENDMENT TO THE APPLICATION

The Country will notify Gavi in its Annual Progress Report if it wishes to propose any change to the programme(s) description in its application. Gavi will provide the necessary documents for the approved change, and the country's request will be duly amended.

RETURN OF FUNDS

The Country agrees to reimburse to Gavi all funding amounts that are not used for the programme(s) described in its application. The country's reimbursement must be in US dollars and be provided, unless otherwise decided by Gavi, within sixty (60) days after the Country receives Gavi's request for a reimbursement and be paid to the account or accounts as directed by Gavi.

SUSPENSION/ TERMINATION

Gavi may suspend all or part of its funding to the Country if it has reason to suspect that funds have been used for purposes other than for the programmes described in this application, or any Gavi-approved amendment to this application. Gavi reserves the right to terminate its support to the Country for the programme(s) described in this proposal if Gavi receives confirmation of misuse of the funds granted by Gavi.

ANTI-CORRUPTION

The Country confirms that funds provided by Gavi shall not be offered by the Country to any third person, nor will the Country seek in connection with its application any gift, payment or benefit directly or indirectly that could be construed as an illegal or corrupt practice.

AUDITS AND RECORDS

The Country will conduct annual financial audits, and share these with Gavi, as requested. Gavi reserves the right, on its own or through an agent, to perform audits or other financial management assessment to ensure the accountability of funds disbursed to the Country.

The Country will maintain accurate accounting records documenting how Gavi funds are used. The Country will maintain its accounting records in accordance with its government-approved accounting standards for at least three years after the date of last disbursement of Gavi funds. If there is any claims of misuse of funds, Country will maintain such records until the audit findings are final. The Country agrees not to assert any documentary privilege against Gavi in connection with any audit.

CONFIRMATION OF LEGAL VALIDITY

The Country and the signatories for the Country confirm that its application, and Annual Progress Report, are accurate and correct and form legally binding obligations on the Country, under the Country's law, to perform the programmes described in its application, as amended, if applicable, in the APR.

CONFIRMATION OF COMPLIANCE WITH Gavi's TRANSPARENCY AND ACCOUNTABILITY POLICY

The Country confirms that it is familiar with Gavi Transparency and Accountability Policy (TAP) and complies with the requirements therein.

USE OF COMMERCIAL BANK ACCOUNTS

The Country is responsible for undertaking the necessary due diligence on all commercial banks used to manage Gavi cash-based support. The Country confirms that it will take all responsibility for replenishing Gavi cash support lost due to bank insolvency, fraud or any other unforeseen event.

ARBITRATION

Any dispute between the Country and Gavi arising out of or relating to this application that is not settled amicably within a reasonable period of time, will be submitted to arbitration at the request of either Gavi or the Country. The arbitration will be conducted in accordance with the then-current UNCITRAL Arbitration Rules. The parties agree to be bound by the arbitration award, as the final adjudication of any such dispute. The place of arbitration will be Geneva, Switzerland.

The languages of the arbitration will be English or French.

For any dispute for which the amount at issue is US\$ 100,000 or less, there will be one arbitrator appointed by Gavi. For any dispute for which the amount at issue is greater than US \$100,000 there will be three arbitrators appointed as follows: Gavi and the Country will each appoint one arbitrator, and the two arbitrators so appointed will jointly appoint a third arbitrator who shall be the chairperson.

Gavi will not be liable to the country for any claim or loss relating to the programmes described in the application, including without limitation, any financial loss, reliance claims, any harm to property, or personal injury or death. Country is solely responsible for all aspects of managing and implementing the programmes described in its application.

1. Type of support requested

Please specify the type of Gavi support you would like to apply for.

Type of Suppor	t Vaccine	Start Year	End year	Preferred second presentation[1]
Routine New Vaccines Suppor	HPV quadrivalent, 1 dose(s) per vial, LIQUID	2017	2018	HPV bivalent, 2 dose(s) per vial, LIQUID

[1] If, for a variety of reasons, the country's first product preference might only be available in limited quantities or be unavailable in the short term, Gavi will contact the country and its partners to explore alternative options. A country will not be obliged to accept its second or third preference; however, Gavi will engage with the country to fully explore a variety of factors (such as implications on introduction timing, cold chain capacity, disease burden, etc.) which may have an implication for the most suitable selection of vaccine. If a country does not indicate a second or third preference, it will be assumed that the country prefers to postpone introduction until the first preference is available. It should be noted that this may delay the introduction in the country.

[2] Gavi would also appreciate receiving comments and suggestions from the countries on the feasibility of and interest in selecting and expediting multiple presentations of pentavalent vaccine (single-dose and ten-dose vials) so as to minimise wastage and cost while maximizing coverage. See section 6.2.

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Annex 1.1 HPV quadrivalent, 1 dose(s) per vial, LIQUID

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<u>Table Annex 1.1 B Rounded up portion of equipment supplied by Gavi and estimate of associated costs in US\$</u>

Table Annex 1.1 C Summary table for quadrivalent HPV vaccine, 1 dose(s) per vial, LIQUID

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Annex 2 - NVS Routine - Preferred Second Presentation

Annex 2.1 HPV bivalent, 2 dose(s) per vial, LIQUID

<u>Table Annex 2.1 A Rounded up portion of supply procured by the country and estimate of associated costs in US\$</u>

<u>Table Annex 2.1 B Rounded up portion of equipment supplied by Gavi and estimate of associated costs in US\$</u>

Table Annex 2.1 C Summary table for bivalent HPV vaccine, 2 dose(s) per vial, LIQUID

<u>Table Annex 2.1 D Estimated figures for HPV bivalent, 2 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget</u>

Annex 3 - NVS Preventive campaign(s)

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Table Annex 4D: Wastage rates and factors

Table Annex 4E: Vaccine maximum packed volumes

12. Banking form

3. Executive Summary

Please provide a summary of your country's proposal, including the following the information:

- For each specific request, NVS routine support or NVS campaign:
 - Duration of support
 - The total amount of funds requested
 - o Characteristics of vaccine(s), if necessary, and the reason for presentation choice
 - Month and year planned for vaccine introduction (including campaigns and routine immunisations)
- Relevant baseline data, including:
 - DTP3 and measles coverage data (as reported on the WHO/UNICEF Joint Reporting Form)
 - Target population determined based on the evaluation of yellow fever and meningitis A risk
 - Birth cohort, targets and immunisation coverage by vaccines
- · Country preparedness
 - Summary of planned activities to prepare vaccine launch, including EVM assessments, progress with regard to EVM improvement plans, communication plans, etc.
 - Summary of the EVM assessment report and progress report on the implementation of improvement plan
- · How stakeholders participated in developing this proposal
 - Interagency Coordination Committee (ICC)
 - o Partners, including CSO involvement

Cervical cancer is one of the most common gynaecological cancers in Senegal. Thus, the country has made the fight against cervical cancer one of the priorities of its national health development programme (NHDP).

With the support of its partners, from 2014 to 2016 Senegal conducted a pilot phase for immunisation against infections due to HPV, the main cause of cervical cancer. The conclusive results of the assessments for this project, both in terms of immunisation coverage and acceptability by the different stakeholders, and the opportunities offered by Gavi, have driven the country to decide to introduce the vaccine into the routine Expanded Programme on Immunisation (EPI).

Immunisation for HPV will be introduced immediately at the national level and will involve nine-year old girls, both those enrolled in school and those not enrolled in school. The country chose to use the quadrivalent HPV vaccine. Administration will be in two doses, spaced at least six months apart. Standard immunisation strategies--fixed, outreach and mobile--will be used. Immunisation sessions will be planned annually by immunisation units. To reach the enrolled in school target, schools will be considered as service delivery points. An annual schedule for visits to schools and Daaras (Koranic school) will be created in close collaboration with the heads of these schools.

A steering committee has been set up by the Ministry of Health and Social Action. It is made up of representatives from the Prevention Directorate (DP) and other directorates and departments of the MSAS, of the Ministry of Education's Division of School Health, and partner organisations (WHO, UNICEF, USAID, INTRAHEALTH, UNFPA, PATH, etc).

It is responsible for coordinating preparation, implementation and monitoring of the HPV vaccine introduction. Various committees (technical, logistics, surveillance and pharmacovigilance, communication and social mobilisation) in charge of different components of the HPV vaccine introduction were set up by the steering committee. The timeline for carrying out activities up until the introduction has already been created.

The budget for the HPV vaccine introduction is estimated at 279,255,200 CFA francs, or US\$ 507,737, not including the cost of vaccines and supplies.

Funding for the plan will come from the introduction package allocated by Gavi and will be supplemented by the contributions from the Government and from partners (WHO, UNICEF). Thus, Gavi will contribute the amount of 259,539,500 CFAF (US\$ 471,890), or 94%. The gap will be covered by WHO in the amount of 11,839,500 (US\$ 21,526), or 4%, and UNICEF for 4,650,000 CFAF (US\$ 8,455), or 2%.

The Senegal EPI has proven its ability to successfully introduce a new vaccine. Senegal successfully introduced into its routine EPI the pneumococcal vaccine (PCV13) in 2013, the measles-rubella and rotavirus vaccines in 2014, the inactivated polio virus (IPV) vaccine in 2015 and the HepB monovalent vaccine at birth in 2016. Experience acquired during the introduction of these different new vaccines will undoubtedly contribute to a smooth introduction of the HPV vaccine.

Storage capacities have been analysed using WHO's logistics planning tool (*Epi-Log Forecasting Tool*). The gaps identified at the different levels of the supply chain will for the most part be closed by 2017 thanks to purchases of cold chain equipment out of the Government budget, GAVI/HSS funds and other partners' contributions.

The country currently has a suitable waste management system, thanks to the implementation in each region of at least one large-capacity incinerator to cover districts' incineration requirements.

In addition to writing and endorsing the introduction plan, preparatory activities consist of creating training materials, messages and materials for communication and training of immunisation staff and of education sector personnel at all levels. Trainings will be cascaded: the central level will be responsible for orientation of regional and district management teams and school inspectors, who will in turn carry out training of service providers for vaccination units and teachers. Guidelines will be implemented through post-introduction supervision and strengthening of supportive supervision at all levels.

Successfully introducing the HPV vaccine requires significant financial resources. The government's contribution and Gavi's grant will make it possible to reduce the financial risk.

Extending the EPI target to adolescents is a major challenge in terms of acceptability, as well as for reaching immunisation coverage objectives. Implementing the communication plan will contribute to strengthening the support of different stakeholders on a nationwide scale. Determining the age of eligible girls could also be a challenge. In-depth questioning with parents, and comparing ages are several strategies that will help overcome this obstacle.

Finally, AEFI surveillance and management will be strengthened through the existing pharmacovigilance system.

4. Signatures

4.1. Signatures of the Government and national coordinating bodies

4.1.1. The Government and the Interagency Coordination Committee (ICC) for immunisation

The Government of Senegal wishes to consolidate the existing partnership with Gavi to strengthen its national routine childhood immunisation programme and is specifically requesting Gavi support for:

HPV quadrivalent, 1 dose(s) per vial, LIQUID, routine introduction

The Government of Senegal agrees to develop national immunisation services on a sustainable basis in accordance with the comprehensive multi-year plan presented with this document. The Government requests that Gavi and its partners contribute financial and technical assistance to support immunising children as outlined in this application.

Table(s) 6.2.4 in the NVS Routine section of this application show(s) the amount of support either in kind or in cash that is required from Gavi. Table(s) 6.2.3 of this application show(s) the Government's financial commitment for the procurement of this new vaccine (NVS support only).

Following the regulations of the internal budgeting and financing cycles, the Government will release its portion of the funds in the month of **June**.

The payment of the first year of co-financed support will be due around **June 2017** for HPV quadrivalent, 1 dose(s) per vial, LIQUID.

It should be noted that any request not signed by the Ministers of Health and Finance, or by their authorised representatives, will not be examined or recommended for approval by the Independent Review Committee (IRC). These signatures appear in Documents Nos.: 2 and 3 in Section 10. Attachments

Minister of Health (or authorised representative)		Minister of Finance (or authorised representative)	
Name	Ibrahima Wone	Name	Birima Mangara
Date		Date	
Signature		Signature	

Documentation of the Ministry of Education's involvement must be produced for support in introducing the HPV vaccine into routine EPI. The Ministry of Education will either have to be involved in the ICC process (preferred option) and/or the Minister of Education (or delegated authority) must provide its signature (Document No.: {0} in Section 10. Attachments

Minister of Education (or delegated authority)			
Name			
Date			
Signature			

This report has been compiled by (these persons may be contacted by the Gavi Secretariat if additional information related to this proposal is required):

Full name	Position	Telephone	E-mail
Aliou DIALLO	Immunisation Focal Point for WHO	00221776408524	dialloali@who.int

Ousseynou BADIANE	EPI Coordinator for the MSAS	00221776514376	ouzbad@hotmail.com
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4.1.2. National Coordinating Body/Interagency Coordination Committee for immunisation

Agencies and partners (including development partners and civil society organisations) supporting immunisation services are coordinated and organised through an inter-agency coordinating mechanism (ICC, Health Sector Coordinating Committee (HSCC), or equivalent committee). The ICC, HSCC, or equivalent committee is responsible for coordinating and guiding the proper use of the Gavi ISS and NVS routine support and/or campaign support. Please provide information about the ICC, HSCC, or equivalent committee in your country in the table below.

Profile of the ICC, HSCC, or equivalent committee

Name of the committee	ICC	
Year of constitution of the current committee	2000	
Organisational structure (e.g., sub-committee, stand-alone)	Stand-alone committee	
Frequency of meetings	half-yearly	

The Terms of Reference or Standard Operating Principles for the ICC, including details on the ICC membership, quorum, dispute resolution process and meeting schedules are presented in the attached document (Document No.: 4).

Major functions and responsibilities of the ICC/HSCC:

The ICC is the body that defines the major focus area of the EPI. It is responsible for endorsing strategic decisions and monitoring their implementation.

Please describe the type of support offered by the different partners in preparing this application:

The EPI's Technical and Financial Partners all participated in writing up the application and the workshop was funded by WHO.

4.1.3. 4.1.3. Signature Table for the Coordination Committee on Immunisation

We, the undersigned members of the ICC, HSCC or equivalent committee [1] met on 26/08/2016 to review this proposal. At that meeting, we approved this proposal on the basis of the attached supporting documentation. The minutes of this meeting are attached as document number 5. The signatures confirming the request appear in document 6 (please use the list of signatures in the section below).

Please refer to Annex C of the 'Gavi HSS and NVS General Guidelines' for more information on ICCs.

Position	Title/Organisation	Name	Please sign below to indicate your attendance at the meeting during which the proposal was discussed.	Please sign below to indicate your endorsement of the minutes of the meeting during which the proposal was discussed.
Chair	Minister's Cabinet Director/MSAS	Dr Farba Lamine SALL		
Secretary	Director of Prevention/MSAS	Dr Elhadj Mamadou NDIAYE		
	WHO Representative	Deo Nthirimana		
Mambana	UNICEF representative	Leylee Moshiri		
Members	CSO representative	Safiétou Fall Diop		

By submitting the proposal, we confirm that a quorum was present. Yes

The minutes from the three most recent ICC meetings are attached as DOCUMENT NUMBER: 7).

4.2. National Immunisation Technical Advisory Group (NITAG)

Has a NITAG been established in your country? Not selected

In the absence of a NITAG, countries should clarify the role and functioning of the advisory group and describe plans to establish a NITAG. This document is attached as

5. Data on the immunisation programme

5.1 Reference material

Please complete the table below, using data from available sources. Please identify the source of the data, and the date. Where possible use the most recent data and attach the source document.

- Please refer to the Comprehensive Multi-Year Plan (cMYP) for Immunisation (or equivalent plan), and attach a complete copy with an executive summary (DOCUMENT NUMBER 9). Please also attach the cMYP costing tool (DOCUMENT NUMBER 10).
- Please attach relevant Vaccine Introduction Plan(s) as DOCUMENT NUMBER: 12
- Please refer to the two most recent joint WHO/UNICEF reports on immunisation activities.
- Please refer to Health Sector Strategy documents, budgetary documents, and other reports, surveys etc, as appropriate.
- Please refer to the attached risk assessments in the case of meningitis A mass preventive campaigns.

Please use the most recent data available and specify the source and date.

	Figure	Year	Source
Total population	14,755,795	2016	NASD
Birth cohort	525,306	2016	NASD
Infant Mortality Rate	33	2015	NASD
Surviving infants[1]	514,977	2016	NASD
GNI per capita (US\$)	1,000	2015	WB
Total Health Expenditure (THE)	678,766,570	2015	DAGE
General government expenditure on health (GGHE) as % of general government expenditure	10	2015	DAGE

[3] Surviving infants = infants surviving the first 12 months of life

5.1.1 Lessons learned

Support for new routine vaccines

If new or underused vaccines have already been introduced in your country, please complete in detail the lessons learned from previous introduction(s), specifically for: storage capacity, protection against accidental freezing, personnel training, cold chain, logistics, coverage and decrease in rates, wastage rates, etc. and propose areas of action or indicate the measures taken to address them. Please refer to the previous post-introduction evaluation (PIE) report, if necessary. If they are included in the introduction plan, please cite the section only. If this information is already included in the NVIP/AP, please refer to the document and the section/page where this information can be found.

Lessons learned	Actions
Develop a temperature control system for the central-level cold chains, with the possibility of an alarm at the central level and plan for corrective actions.	All central-level cold rooms were mapped and a remote alarm system was set up.
Strengthen care providers' knowledge of the new vaccines and the practice of vaccination during supportive supervisions.	Supportive supervision sessions were carried out in five regions where all of the vaccination units were visited. Moreover, the regions and districts were supported as part of their REC plans to conduct supportive supervisions.
Build the level of care providers on updating self-monitoring charts.	Updating the self-monitoring chart is one of the supportive supervision topics.
Organise regular training/retraining sessions for health personnel	Staff training/retraining sessions on the EPI were conducted in all of the country's districts. Knowledge was updated during training for new vaccines introductions. In HSS/Gavi, there are plans for new workers to attend training sessions and former service providers to be retrained on the EPI until 2019.

5.1.2 Planning and budgeting of health services

Please provide some additional information on the planning and budgeting context in your country:

The National Health Development Plan is a ten-year plan 2009-2018. The EPI develops the cMYP every five years and an annual work plan. Regions and districts develop a work plan each year (AWP).

Please indicate the name and date of the relevant planning document for health

2009-2018 National Health Development Plan (NHDP)

Is the cMYP (or updated Multi-Year Plan) aligned with this document (timing, content, etc)?

Yes

Please indicate the national planning budgeting cycle for health

The national planning cycle is ten years; however, every two years the multi-year expenditures programming document (DPPD) is developed by the health sector. The responsibility centres (directorates and departments of the Ministry of Health) do their planning annually.

Please indicate the national planning cycle for immunisation

The strategic planning cycle is a five-year cycle. Every year, a work plan (AWP) is also developed.

5.1.3 Gender and equity

Please describe any barriers to access, utilisation and delivery of immunisation services at district level (or equivalent) that are related to geographic location, socio-economic status and/or gender equity. Please describe actions taken to mitigate these barriers and highlight where these issues are addressed in the vaccine introduction plan(s).

Administrative and survey data have shown immunisation coverages that are higher in the districts of the northern and western regions than those of the southern regions. There are significant differences between the socio-economic quintiles; coverages are in fact higher in the richest quintiles. In addition, there are no gender-related disparities.

Corrective actions that have been implemented:

- -free health care, including immunisation for children under the age of five;
- -hiring by the government and partners and assigning health workers to the southern regions.
- -support for implementing REC plans to reach difficult-to-access populations
- -Involving CSOs to improve demand in low coverage areas.

Please examine whether questions of equity (socio-economic, geographic and gender-specific) have been taken into consideration in the process of preparing social mobilisation strategies, among other things, to improve immunisation coverage. Specify whether these issues are addressed in the vaccine introduction plan(s).

As part of the HSS/Gavi implementation, support for communication activities by CSOs is planned, with particular attention given to low-coverage areas.

Please indicate if sex-disaggregated data is collected and used in routine immunisation reporting systems.

In the reporting system, immunisation data is sex-disaggregated.

Is the country currently in a situation of fragility (e.g. insecurity, conflict, post-conflict, refugees/and or displaced persons and recent, current or potential environmental disaster, such as flooding, earthquake or drought or others)? If Yes, please describe how these issues may impact your immunisation programme, planning for introduction of routine immunisation or campaigns and financing of these activities.

NO

If possible, please provide additional information and documents on the data relative to sub- national coverage, for example comparisons between urban and rural districts, or between districts with the highest and lowest coverage etc.

Coverage by geographic area, DHS 2014 (see Annexes)

5.1.4 Data quality

Please attach a data quality assessment (DQA) report that was completed during the preceding 48 months using the most recent national survey including immunity coverage indicators (DOCUMENT NUMBER: 27) and an immunisation data quality improvement plan (DOCUMENT NUMBER 28). Subject to availability, a report on progress of implementing the improvement plan must also be presented (DOCUMENT NUMBER: 11, DOCUMENT NUMBER: 28).

Please indicate what routine mechanisms to independently assess the quality of administrative data are in place, and if so what these mechanisms are, and how they enable the country to track changes in data quality over time.

The country does not have such a mechanism.

Please detail what household surveys have been conducted in recent years to independently assess immunisation coverage and equity, and describe any survey plans for the coming five-year period.

National immunisation coverage survey in February 2013 and continuous DHS since 2012. A survey of immunisation coverages will be carried out during the external EPI review planned in 2016, and another survey will occur in 2019.

5.1.5 HPV-specific data

Please demonstrate country's ability to deliver a complete multi-dose series of vaccines to at least 50% of a one-year cohort selected from the population of 9-13-year-old girls in at least one typical district using a similar strategy to the one proposed for national HPV vaccine delivery. For each district, fill-in:

District Information			
Name of the district	Dakar Ouest		
District population size	225,100		
Describe how the district is divided into rural and urban areas:	the district is urban mainly made up of 66 neighbourhoods, including 39 housing developments and 3 traditional villages.		
District Information			
Name of the district	Mékhé		
District population size	180,164		
Describe how the district is divided into rural and urban areas:	A mainly rural district, made up of 600 villages, 7 rural communes and 1 urban commune.		

Please specify which multi-dose vaccine was used (HPV/TT/other)? What was the vaccination schedule?

The quadrivalent HPV vaccine administered in two doses, six months apart

Describe the vaccination strategy used (school based, health centre based, mixed)? How and by whom was it carried out, what was the responsible department/agency? What age/sex was the multi-dose vaccine delivered to? If it was school based, how many schools were targeted? Was it age-based or grade-based?

The quadrivalent HPV vaccine was administered to nine-year old girls, both those in school and those not in school. A mixed immunisation strategy (school and community) was used in the two pilot districts of Mékhé and Dakar Ouest. In Mékhé, 130 schools were visited, and 99 were visited in Dakar Ouest. The target that was not in school was vaccinated through outreach strategy immunisation in the community for the rural district of Mékhé and in health facilities in the urban district of Dakar Ouest. The vaccine was administered by qualified health workers (nurses, midwives) in both districts.

How many were in the target population? How many people in the target population began the multi-dose series? How many people in the target population received all doses?

YR1: target counted: 5,957 9-year-old girls; 5,669 vaccinated during the first round and 5,586 vaccinated with both doses.

YR2: target counted: 4,572 9-year-old girls; 4,499 vaccinated during the first round and 4,414 vaccinated with both doses.

Total: target counted: 10,529; vaccinated during the first round year 1 and year 2 10,167 and 10,000 vaccinated with both doses.

Please provide the source of data used to estimate the target population:

Immunisation involved nine-year old girls that were listed as living in the two pilot districts.

If applicable, please detail what additional people beside the target population also received the vaccine:

only the target population listed received the vaccine

Table 5.1.5: (please see WHO/UNICEF joint reporting form)

Age of girl	HPV 1st dose	HPV 2nd dose	HPV 3nd dose
9 years	10,167	10,000	

10 years		
11 years		
12 years		
13 years		
14 years		
15 years and older		
Unknown		

Was there an evaluation of the 'project'? If so, who performed it? Please provide a short summary of the evaluation methodology and/or provide the evaluation report if available (Document number No: 16). Please ensure this summary (and/or the attached report) includes a costing analysis of the proposed delivery strategy or strategies. Refer to section 10. Annexes 3.

The pilot project was evaluated from 18 to 22 July 2016. It involved the Directorate of Prevention, the Department of Disease Control, and the Division of School Medicine; the district management teams for Dakar ouest and Mékhé, the national education and health information departments, CCVS, WHO, UNICEF and PATH.

Both health districts presented the results from the two-year project period; the director of prevention shared the PIE results, the immunisation coverage survey and the economic evaluation. Presentations were followed by discussion. A broader reflection on strategies for scaling up took place.

the different reports will be attached to the application

5.2. Baseline data and annual objectives (NVS routine immunisation)

Please refer to cMYP pages to assist in filling in this section.

N	Base Year	Baseline a	and Targets	
Number	2015	2017	2018	
Total number of births	556,729	538,439	551,900	
Total number of infant deaths	15,703	17,768	18,212	
Total surviving infants	541,026	520,671	533,688	
Total number of pregnant women	556,729	538,439	551,900	
Target population vaccinated with OPV3[1]	479,886	468,604	480,319	
OPV3 coverage[2]	89 %	90 %	90 %	
Target population vaccinated with DTP1[1]	498,157	468,604	480,319	
Target population vaccinated with DTP3[1]	480,578	468,604	480,319	
DTP3 coverage[2]	89 %	90 %	90 %	
Wastage[3] rate in base-year and planned thereafter (%) for DTP	10	10	10	
	1.11	1.11	1.11	
Number of girls in the target cohort	3971	196621	201536	
Target population vaccinated with 1st dose(s) of HPV vaccine	3,705	176 958	181 382	
Target population vaccinated with the last dose of HPV vaccine	3,680	176 958	181 382	
HPV quadrivalent coverage with the 1st dose	93 %	90 %	90 %	
HPV quadrivalent coverage with the last dose	93 %	90 %	90 %	
First Presentation: HPV quadrivalent, 1 dose(s) per vial, LIQUID				
Wastage rate [3] in base-year and planned thereafter (%)	5	5	5	
Wastage rate [3] in base-year and planned thereafter (%)	1.05	1.05	1.05	
Maximum wastage rate value for quadrivalent HPV vaccine, 1 dose(s) par vial, LIQUID	5 %	5 %	5 %	
Second Presentation:				
Wastage rate [3] in base-year and planned thereafter (%)	5	5	5	
Wastage rate [3] in base-year and planned thereafter (%)	1.05	1.05	1.05	
Maximum wastage rate for the vaccine	10 %	10 %	10 %	

Population cible ayant reçu 1st dose(s) de vaccin RCV	463,231	468,604	480,319
RCV coverage[2]	86 %	90 %	90 %
Annual DTP Dropout rate [(DTP1 — DTP3) / DTP1] x 100	4 %	0 %	0 %

- [1] Indicate total number of children vaccinated with either DTP alone or combined
- [2] Number of infants vaccinated out of total surviving infants
- [3] The formula to calculate a vaccine wastage rate (in percentage): [(A B) / A] x 100, where A = stock balance at the end of the supply period; B = the number of immunisations with the same vaccine in the same period.

5.2.1 HPV-specific objectives

The cohorts of girls from a single year to be vaccinated for HPV must be in the WHO-recommended target population of girls 9 to 13 years of age.

Please specify the source of data that was used to estimate the number of girls in target and reported in the above table under "Target population vaccinated with HPV"

For the year 2015, the population of nine-year old girls affected by HPV immunisation was identified in the two pilot districts.

Starting in 2017, the annual projections from the National Agency for Statistics and Demography (NASD) will be utilised.

5.3. Target for the preventive campaign(s)

No NVS Prevention Campaign Support this year

5.4. Targets for the one-time mini catch-up campaign(s)

No one-time mini catch-up campaign this year

6. New and underused vaccines (routine NVS)

6.1. Calculation of the disease burden for corresponding diseases (if available)

If it is already included in detail in the Introduction Plan or Action Plan, please simply cite the section.

Disease	Title of the assessment	Date	Results
Cervical cancer	not assessed	N/A	N/A

6.1.1 Specific information on HPV disease burden

Has the country undertaken an assessment of the disease burden for cervical cancer? If so, describe the burden, and when and how it was assessed. If not, countries may refer to Globocan data (available on the WHO HPV information Centre website at http://www.who.int/hpvcentre/en).

The country has not undertaken an assessment of the disease burden for cervical cancer. However, according to Globocan, in 2012, the prevalence of HPV in the general population was 12.6%. According to the same source, there are approximately 1,197 new cases of cancer per year in Senegal. Mortality due to cervical cancer in women has reached 36 to 80 per thousand.

Describe existing prevention and control activities for cervical cancer.

In Senegal, there are 7 operational screening centres for precancerous cervical lesions using VIA/VILI/cryotherapy, and a pilot screening centre for precancerous cervical lesions using HPV/VIA/VILI/cryotherapy and a trained staff along with support materials. There is still no national integrated strategic prevention and control plan for cervical cancer.

Has the country developed a roadmap or strategy for establishing or strengthening a national comprehensive approach to cervical cancer prevention and control? **Yes**

If Yes, please attach the relevant document and refer to section 10. Attachments. (Document N°15)

If No, are there plans for the country to develop such a roadmap or strategy in the future? Please specify when and by whom the project will be carried out, and what agencies will be involved.

N/A

6.1.2 Administration strategy for HPV vaccine

Please specify the chosen age cohort for HPV vaccination: 9 years

Please describe the HPV immunisation strategy and plan (when the immunisations will be scheduled, where vaccines will be administered, who will administer them, how logistics will be handled, the plan to guarantee that all recommended doses will be delivered and plans to include girls who might be absent on the day immunisations are schedule, etc).

The standard immunisation strategies--fixed, outreach and mobile--will be used. To reach the in-school target, schools will be considered as service delivery points. An annual schedule for visits to schools and Daaras (Koranic school) will be created in close collaboration with the heads of these schools.

Before introducing HPV vaccination into routine, orientation of immunisation staff and education sector personnel will be conducted at all levels. Trainings will be cascaded: the central level will be responsible for orientation of regional and district management teams and school inspectors, who will in turn carry out training of vaccination unit service providers and teachers.

The trainings will address topics on the epidemiology of HPV infections and cervical cancer, communication, vaccine and supplies management, vaccine presentation, administration methods for the vaccine, data management, waste management and AEFI management. Interactive methods will be used during trainings; in particular, brainstorming, presentations followed by discussions, demonstrations and role-play.

The opportunity will be seized to address some general aspects of EPI. The acquisition of skills and knowledge will be evaluated before and after training.

In addition, there are plans to develop new registries and vaccination cards. Some tools will be revised, such as the daily collection sheet, the monthly report document, the order-delivery booklet and the stock record for vaccines and supplies.

Implementation of the guidelines will be monitored through post-introduction supervision for the HPV vaccine. In addition, supportive supervisions to vaccination units will be enhanced by the national staff and regional and district management teams, and partners. These monitoring activities will make it possible to ensure programme guidelines are respected.

Irrespective of the strategy, provide a description of existing health services and/or health education currently being provided to young adolescents (both girls and/or boys) within the 9-13 year-old age group and indicate any potential synergy by integrating with HPV vaccination:

a. For health services (in particular: the type of services provided, the age group/gender, if mandatory or optional, regular or occasional, in school or outside of school, who are the providers (government, NGO), frequency, to what extent the community uses these services, and how they are perceived by the community.)

There are no health services specifically provided to adolescents (boys and girls) in the 9-13 year age group. Health services are offered to all students at the school infirmaries (only in secondary school facilities, since elementary and middle level schools do not have infirmaries) or in medical inspectorates for schools (IME). In some cases, the student is sent directly to a local health facility for medical care.

However, several projects were carried out for adolescents, to raise their awareness regarding reproductive health topics.

It must be noted that apart from deworming and iron/folic acid supplementation, most health activities are in the form of projects, and thus for a limited time period (on average for three years) and do not specifically cover 9-13 year olds, nor do they cover all schools in Senegal. With a view to making annual medical visits systematic, the possibilities of pairing up with HPV immunisation could be studied.

Health education is also provided to all students (either in elementary school where most children 9-12 year of age are found) through the content of the Basic Education Curriculum (CEB, Curriculum de l'Education de Base) or in middle level schools (age 12-13 and up), through disciplines such as Social and Family Economics, and Life and Earth Sciences. Educational tools/materials (teacher's guide, workbooks, posters, image boxes, etc) for Health, Nutrition and the Environment (SNE) have been developed and made available to the elementary level. Teachers are trained to use these tools.

b. For health education (especially: the topic, whether it is national, sub-national, in school or outside school, who does the teaching, with what frequency, is it part of the school curriculum, are NGOs providers? How is this education perceived by the community? Is there an evaluation, and if so, how is it done and what have been the results?)

The topics of health education touch on many topics related to hygiene, prevention of waterborne diseases and those caused by contact with faeces, STI/HIV/AIDS, infections (malaria, tuberculosis, parasitosis, dermatosis, Ebola, etc), reproductive health problems (early pregnancy, abortion, female genital mutilation, sexual violence, etc). These topics are addressed in the middle-secondary curricula and in the CEB.

Some health education projects are supported by NGOs. Some are evaluated (study, survey, etc) and conclusions shared (for example, the attached evaluation of the Connecting4Life Project conducted for nearly two years by the OneWorld/UK NGO in middle schools and high schools in eight regions of Senegal.

Please describe the communication and social mobilisation plan for the HPV vaccination strategy (what activities will be carried out to educate and raise awareness of the vaccination plan at once for the target population, their parents/guardians, the wider community, community leaders, groups of influence, etc.; who will provide this education and what materials will be used; how often will these activities occur vis-a-vis the proposed vaccination schedule.)

A communication plan has been developed and will be implemented at the time of the introduction. Communication activities will involve all levels (from the central level to the operational level) and the

message focus areas will centre around:

- Scope and seriousness of gynaecological cancers attributed to HPV
- Mode of transmission for HPV infections
- Signs of HPV infections
- Cervical cancer screening
- Disease management
- Prevention (immunisation)
- Benefits of immunisation
- Target for immunisation (age 9)
- Immunisation strategies
- Incorporate the HPV vaccine in the EPI
- Introduction date and schedule
- Vaccine administration method
- Necessity of taking both doses
- Injection Safety
- Fear of injection
- Side effects and course of action
- · Importance of keeping the immunisation card

Getting the heads of household involved

the targets will be as follows:

• Primary participants group:

This is nine-year old girls, the objective being to vaccinate them before they begin to be sexually active. It is necessary to know the proportion of nine-year-old girls in school through the theoretical target issued by the NASD. However, it must be noted that school programmes only cover part of the country's group of primary participants; consequently, girls from Koranic schools and "daaras" have to be accounted for. There is also a proportion of girls who leave school and others that are not enrolled in school. For the latter, a community strategy will be implemented.

In this group of primary participants, parents who give their consent are also accounted for.

Secondary participants group:

This group is comprised of all those who help reach the group of primary participants. This is mainly health personnel, professional organisations, unions, and community stakeholders (relays, health committees, village chiefs, neighbourhood chiefs), teachers, members of different networks, CBO and NGO that participate in or support awareness-raising and mobilising populations with a view to reaching the objectives of HPV immunisation being introduced into the EPI.

This group, through its activities, participates in disseminating key messages to help parents agree to have their children vaccinated. To see their activities through, their capacities will need to be strengthened and they will need to be equipped with suitable communication materials.

Tertiary participants group:

In this group can be found the decision-makers, development partners, administrative and political authorities, members of anti-cancer organisations and opinion leaders such as religious and traditional leaders. These participants support planning and implementation of activities They support execution, help with mobilising resources and with solving problems that have been identified.

Please select the strategy that the country will choose to administer the HPV vaccine: **Mixed strategy including schools and health facilities**

School-based strategy

Senegal's strategy to administer HPV vaccine does not include a "School-based strategy"

INSTRUCTIONS

Description should include:

Primary/secondary/tertiary, grades in each category, majority age in each grade

Number of schools in the country (public/government, private, or other category if applicable to the country)

What is the school year (which month to which month)

When are school vacations? (approximate months, days if possible)

When do the main exams take place? (approximate month)

Elementary schools group the following ages according to grade: CI/CP: age 8; CE1/CE2, age 10; CM1, CM2, age 12.

the middle level includes the following grades and ages: 6th, age 14; 5th, age 16; 4th, age 17; 3rd, age 18.

The secondary level includes the following grades and ages, *seconde*, age 19, *première*, age 20 and *terminale*, age 21.

According to education statistics for 2015, the number of schools in the country (public/state, private or other category if applicable to the country)

- 1. **Early childhood:** Rural: 1272; Urban: 1,721; Total = 2,993
- 2. **Elementary Education:** Rural: 6,899; Urban 2,650; Total = 9,549
- 3. Middle-level Education: Rural: 677; Urban: 587; Total = 1264
- 4. **Secondary Education:** Rural: 160; Urban: 448; Total = 608

The school year goes from October to July. School vacations run from 31 July to 1 October. The elementary level certificate exams take place in June. The brevet and baccalaureat exams are held in July.

Please specify if girls will be vaccinated by selecting specific age

Table 6.1.2 a

	Base Year	Target year	
Number	2016	2017	
Target population of girls in chosen age	191,825	196,621	
Girls who are the selected age and in school	170,724	174,922	

If girls are to be vaccinated by a specific **grade**, please specify grade and fill in the data below regarding the target grade:

Table 6.1.2 b

Age of girls in the grade	Number of girls in grade / age	% of girls in targeted population
8 years	0	0
9 years	0	0
10 years	0	0
11 years	0	0
12 years	0	0

13 years	0	0
14 years	0	0
TOTAL girls 9-13 years old	0	
TOTAL girls 14 years old and above	0	
Total	0	

Note:

(1) To add new Ages of girls in grade, click on the **New field** icon in the **Action** line. Use the **Delete** icon to delete an Ages of girls in grade.

Please provide a source for enrolment data (eg National Statistics Office, Ministry of the Economy, recent census, school records, etc)

National Agency for Statistics and Demography (NASD) and UNESCO (for data on girls enrolled in school)

How will the school-based strategy capture those girls not in school? (Will out-of-school girls be invited to join school-attending girls on the days of vaccination? Will separate outreach sessions be scheduled for them? Will existing contact positions be used? Will out-of-school girls be invited to come to the local health centre? Will vaccination nurses do home visits?)

Girls not in school will be reached through standard routine immunisation strategies in health facilities or during outreach and mobile strategies. The HPV vaccine will be offered in the same way as all of the other antigens during vaccination sessions throughout the year.

If applicable, please describe special considerations to be made for marginalised or migrating populations?

N/A

Health centre-based strategy

Please describe the health system and services for the target population at the health centres: (Especially: Number and type of health centres in the country by level (national, sub-national, district), (by public/government, private, or other categorisation relevant for the country and if available). What services for 9-13 year old girls are routinely available in these health centres? What are the days/hours of operation for service delivery in health centres? How are vaccinations delivered in the existing health centres? By whom, to what populations, etc.)

Senegal includes 76 health districts. Currently, 1,312 vaccination units comprised of health centres and public and private health posts organise immunisation sessions. There are no specific health services for girls 9-13 years of age. Health services operate from 8:00 a.m. to 5:00 p.m. There are nurses and midwives on call/on duty at night and on holidays in health centres and posts.

Immunisation activities will be planned annually, and will be the subject of a poster campaign by vaccination unit managers. HPV vaccines will be administered by qualified and trained providers (nurses, midwives).

How will the health centre-based strategy capture all of the girls concerned?

The HPV vaccine will be offered for the entire year in vaccination units and will pertain to all girls who are nine years old at the time of vaccination who come to the health facility or outreach or mobile vaccination sites. Schedules will be posted in area health facilities. The vaccination unit manager will inform area relays (outreach and mobile strategies) one week prior to the activity. The relays will be responsible for mobilising parents and nine-year old girls before and on the day of the activity. Talk sessions on cervical cancer prevention will be held at immunisation sites.

If applicable, please describe special considerations to be made for marginalised or migrating populations?

N/A

6.2. Requested vaccine (HPV quadrivalent, 1 dose(s) per vial, LIQUID)

As indicated in the cMYP, the country plans to introduce the quadrivalent HPV, using HPV quadrivalent, 1 dose(s) par vial, LIQUID.

When does the country intend to introduce this vaccine? November 2017

It should be noted that because of various factors, the launch date may vary compared to the date stipulated in the application. Gavi will work in close collaboration with the country and its partners to correct this problem.

Please summarise the cold chain capacity (at central and other levels) and readiness to accommodate new vaccines, taking into consideration training, cold chain equipment and other logistics requirements. If cold chain expansion is required, state how it will be financed, and when it will be in place. The independent review committee must have assurances that the cold chain is ready or will be ready for the new routine vaccine introduction; convincing data/plans must be provided. **All the proposals** that include Gavi funding for the cold chain intended for storing vaccines must provide equipment that is WHO-prequalified for its performance, quality and programme safety (PQS). The purchase of non-PQS equipment will only be taken into account in special cases, with documentation and prior approval from Gavi.

At the central storage facility level: Taking into account the supply schedule, which is on average twice a year per antigen, storage capacities required for 2017 are 49,001 litres. In 2016, the central level vaccine storage facility has four positive cold rooms with a total net capacity of 44,102 litres. Thus, in 2017, there will be a gap of 2,001 litres, which will reach 7,862 litres in 2020. The purchase of a 40 m3 cold room is planned in 2017 with HSS/Gavi funds, in order to close the gaps until 2020.

At the regional storage facility level: Only 3 regions out of 14 will show a gap in 2017. These are Dakar, Diourbel and Thiès. Using HSS/Gavi funds, the purchase of three 10 m3 positive cold rooms is planned, in order to close the gap in these three regions until 2020.

At the district storage facility level: The gap at the district level is 45 TCW3000 (28 in 2016 and 17 in 2017) and one 10m3 positive cold room. In 2016, 22 TCW 3000, 12 of which were recently procured, were deployed at the district level. The storage gap at the district level is thus 23 TCW 3000 and one 10m3 positive cold room. These purchases are planned in the Government budget and the HSS/Gavi budget.

At the vaccination unit storage facility level: The rehabilitation plan provides for the purchase of 1,110 refrigerators by 2020 in order to close all of the gaps identified. In 2016, 150 refrigerators were procured, including 60 using Gavi/NVS funds (30 TCW 40 SDD and 30 RCW50 EG), 50 from the Government budget (30 TCW2000 and 20 TCW40 SDD) and 40 with the support of JICA (20 TCW2000 and 20 TCW40 SDD). The purchase of 124 refrigerators is planned from the HSS/Gavi budget. The country plans to apply for a cold chain optimisation grant from Gavi (CCOP). If the proposal is accepted, the Government budget for purchasing the cold chain will also be in the platform, in addition to that of the HSS. For this reason, the number of equipment items planned will be doubled. In any case, the gaps will be closed until 2017 by the current projections.

6.2.1. Co-financing information

If you wish to co-finance a larger amount, please indicate it on your co-financing line.

Country group	Preparatory transition phase			
	2017 2018			
Minimum co-financing	0.51	0.58		
Your co-financing (please change if higher)	0.51	0.58		

6.2.2. Specifications of vaccinations with new vaccines

	Data from		2017	2018
Number of children to be vaccinated	Table 5.2	#	176 958	181 382

with the first dose				
Number of children to be vaccinated with the second dose	Table 5.2	#	176 958	181 382
Immunisation coverage with the second dose	Table 5.2	%	90%	90%
Country co-financing per dose	Table 6.4.1	\$	0.51	0.58

6.2.3. Portion of supply to be procured by the country (and cost estimate, US\$)

		2017	2018
Number of vaccine doses	#	51,090	47,940
Number of AD syringes	#	54,540	50,684
Number of reconstitution syringes	#	0	0
Number of safety boxes	#	0	0
Total value to be co-financed by the Country [1]	\$	236,947	222,315

^[1] The co-financing amount for intermediate countries and graduating countries shows the cost of vaccines, associated safety materials and transport costs. The total co-financing amount does not include supply agency costs and fees, such as handling costs. Information on these additional costs and fees will be provided by the supply agency involved, as part of the cost estimates required by the country.

6.2.4. Portion of supply to be procured by Gavi, (and cost estimate, US\$)

		2017	2018
Number of vaccine doses	#	413,510	335,360
Number of AD syringes	#	441,430	354,563
Number of reconstitution syringes	#	0	0
Number of safety boxes	#	0	0
Total value to be co-financed by Gavi	\$	1,917,797	1,555,212

6.2.5. New and Under-Used Vaccine Introduction Grant

Calculation of the vaccine introduction grant for HPV quadrivalent, 1 dose(s) par vial, LIQUID

Year of New Vaccine Introduction	Girls in the cohort (from table 5.2)	Share per Birth in US\$	Total in US\$
2017	196,621	2.40	471,890

The grant will be based on a maximum award of \$2.40 per girl in the birth cohort with a minimum starting grant award of \$100,000

Please explain how the introduction grant provided by Gavi will be used to facilitate the timely and effective implementation of the activities before and during the introduction of the new vaccine (refer to the cMYP and to the vaccine introduction plan).

The introduction grant provided by Gavi will cover: creating training materials, communication support materials and management tools; orientation workshops for district and regional management teams and inspectors for education and training; provider training; teacher training; producing communication materials, producing and broadcasting commercials, the national kick-off ceremony, support for regions' and districts' communication activities; copying documents; supervision activities; and part of the post-introduction evaluation.

Please complete the 'Detailed budget for VIG / operational costs' template provided by Gavi and attach as a mandatory document in the attachment section.

Detailed budget attached as Document No. 22.

If the Gavi support does not cover all of the requirements, please describe the other sources of funding and the amounts projected, if available, to cover your requirements

The funding gap for the introduction, in the amount of 16,489,500 CFA francs (US\$ 29,981) will be covered by WHO for 11,839,500 (US\$ 21,527) and by UNICEF for 4,650,000 (US\$ 8,455).

6.2.6. Technical assistance

Please describe any specific area for which the Ministry will need technical assistance in order to support the introduction of quadrivalent HPV.

7. 7. NVS Preventive campaigns

No NVS Prevention Campaign Support this year

8. Procurement and management

8.1 Procurement and management of routine immunisation with new or underused vaccines

Note: The PCV vaccine must be procured through UNICEF to be able to access the price awarded by the Advance Market Commitment (AMC).

a) Please show how the support will operate and be managed, including purchase of vaccines (Gavi expects that most countries will procure vaccine and injection supplies through UNICEF or PAHO's Revolving Fund):

The country's vaccines will be supplied through UNICEF, as part of procurement assistance.

- b) If an alternative mechanism for procurement and delivery of vaccine (financed by the country or Gavi) is requested, please document
 - A description of the mechanism and the vaccines or commodities to be procured by the country;
 - Assurance that vaccines will be procured from the WHO list of pre-qualified vaccines, indicating the specific vaccine from the list of pre-qualification. For the purchase of locally-produced vaccines directly from a supplier which may not have been pre-qualified by WHO, assurance should also be provided that the vaccines purchased comply with WHO's definition of quality vaccines, for which there are no unresolved quality problems reported to WHO, and for which compliance with standards is assured by a National Regulatory Authority (NRA) with jurisdiction, as assessed by WHO in the countries of production and purchase.

N/A

c) If receiving direct financial support from Gavi (such as operational support for campaigns or VIG activities), please indicate how the funds should be transferred by Gavi.

Funds granted for introducing the HPV vaccine should be deposited into the Gavi/NVS account opened by the Ministry of Health and Social Action at the Société Générale de Banques in Senegal (SGBS).

e) Please indicate how the co-financing amounts will be paid (and who is responsible for this)

The Senegalese government transfers the co-financing funds into the UNICEF SD account. The Treasury's paymaster general is responsible for the transfer.

e) Please describe the financial management procedures that will be applied for the management of the NVS direct financial support, including procurement.

The funds are housed in the Gavi/NVS account opened by the Ministry of Health and Social Action at the Société Générale de Banques in Senegal (SGBS). The co-signers on the account are the Director of General Administration and Equipment and the Director of Prevention. Disbursement of funds is based on a request from the Directorate of Prevention, in accordance with the resource utilisation plan. The management procedures used are those of the Ministry of Health and Social Action.

f) Please describe how coverage of the introduced vaccine will be monitored, reported and evaluated (refer to cMYP and Introduction Plan).

Management and reporting tools will be revised to account for HPV immunisation. The monthly activities reports from vaccination units will be compiled by the health districts and sent to the central level through the DHIS2 platform. Monthly coordination meetings at the district level and quarterly meetings at the central level will be held. The monthly feedback report from the Immunisation Division will be distributed to all system stakeholders.

Furthermore, HPV vaccine coverages according to the area of residence, gender, and socio-economic level will be taken into account in continuous DHS starting in 2018.

g) For support request related to the measles vaccine second dose, does the country wish to receive donations in kind or in cash? N/A

8.2 Procurement and management for NVS preventive campaigns

No NVS Prevention Campaign Support this year

8.3. Product licensure

For each of the vaccine(s) requested, please state whether manufacturer registration and/or national vaccine licensure will be needed in addition to WHO pre-qualification and, if so, describe the procedure and its duration. In addition, state whether the country accepts the expedited procedure for national registration of WHO-pre-qualified vaccines.

Note that the necessary time for licensure should be factored into the introduction timeline and reflected in the Vaccine Introduction Plan or Action Plan.

The country has a national regulation authority called the DPM (Directorate of Pharmacy and Medications). This authority releases vaccine lots based on documents received from UNICEF for WHO-licensed vaccines. The process takes a maximum of one week.

For each of the vaccine(s) requested, please provide the current licensure status of the preferred presentation and of any alternative presentations, if required.

The two vaccines (quadrivalent and bivalent) for HPV are already registered in the country.

Please describe current local customs regulations, requirements for pre-delivery inspection, and special documentation requirements that may potentially cause delays in receiving the vaccine. If such delays are anticipated, explain what steps are planned to handle these.

Vaccines are exempt from the country's customs duty. Formalities for releasing vaccines are handled by a private service provider who anticipate customs formalities from the time it receives the pre-alert, which means that the vaccines are delivered to the central warehouse as soon as they arrive at the airport.

Please provide information on NRA in the country, including status (e.g. whether it is WHO-certified). Please include points of contact with phone numbers and e-mail addresses. UNICEF will support the process by communicating licensing requirements to the vaccine manufacturers where relevant.

The regulatory authority is a directorate of the Ministry of Health called the Directorate of Pharmacy and Medication.

Contact Information: Dr Birame Dramé, tel +221 77 638 55 68. mail: bidrame@gmail.com

8.4 Vaccine Management (EVSM/EVM/VMA)

It is mandatory for a country to conduct an assessment of effective vaccine management (EVM) before requesting support for the introduction of a new vaccine. Cette GEV aurait dû être effectuée au cours des 5 années précédentes.

When was the EVM conducted? October 2015

Please attach the EVM improvement plan progress report (DOCUMENT NUMBER 21); and if it has not previously been provided, please attach the most recent EVM assessment report (DOCUMENT NUMBER: 20, 19, 21) and the corresponding EVM improvement plan (DOCUMENT NUMBER: 19). The improvement plan should include a timeline, budget of committed resources for these activities and funding gaps, if any, as well as M&E indicators to monitor progress of implementation.

When is the next Effective Vaccine Management (EVM) Assessment planned? October not planned

8.5 Waste management

Countries must have a detailed waste management and monitoring plan as appropriate for their immunisation activities. This should include details on sufficient availability of waste management supplies (including safety

boxes), of equipment enabling the safe handling of immunisation materials, storage capacity, transportation and disposal of immunisation waste. Please describe the country's waste management plan for immunisation activities (including campaigns).

Waste management is a very important link in the injection safety chain. The introduction of the HPV vaccine at the national level results in the increase of immunisation waste. To reduce the risk of contamination by sharps, the system must make available to regions and districts incinerators capable of destroying the wastes resulting from this immunisation. The new option for waste management plans for implementation in each region of at least one large-capacity incinerator to cover districts' incineration requirements.

The evaluation of waste management system capacities identified a gap of 14 incinerators in 2016, which was closed using Gavi/HSS funds.

9. Additional comments and recommendations from the national coordinating body (ICC/HSCC)

Comments and recommendations from the National Coordinating Body (ICC/HSCC)

10. List of documents attached to this proposal

10.1. List of documents attached to this proposal

Table 1: Checklist for mandatory attachments

Document Number	Attachment	Section	File			
Approvals						
1	MoH Signature (or delegated authority) of Proposal	4.1.1	Page de signature Ministres HPV.pdf File desc: Date/time 08/09/2016 11:23:12 Size: 460 KB			
2	MoF Signature (or delegated authority) of Proposal	4.1.1	Page de signature Ministres HPV.pdf File desc: Date/time 08/09/2016 11:26:21 Size: 460 KB			
3	MoH Signature (or delegated authority) of Proposal for HPV support	4.1.1	Page de signature Ministres HPV.pdf File desc: Date/time 08/09/2016 11:41:01 Size: 460 KB			
4	ICC Terms of Reference	4.1.2	CCIA Sn.pdf File desc: Date/time 25/08/2016 07:02:29 Size: 1 MB			
5	Minutes of ICC/HSCC meeting endorsing Proposal	4.1.3	CR CCIA soumission GAVI aout 2016.docx File desc: Date/time 08/09/2016 11:24:46 Size: 35 KB			
6	Signatures of ICC or HSCC or equivalent in Proposal	4.1.3	Page de signature CCIA HPV.pdf File desc: Date/time 08/09/2016 11:45:41 Size: 393 KB			
7	Minutes of the three most recent ICC/HSCC meetings	4.1.3	CR CCIA EVA CONJOINTE.docx File desc: Date/time 25/08/2016 07:09:06 Size: 35 KB			
8	Role and functioning of the advisory group, description of plans to establish a NITAG	4.2.1	Note de service CCVS.jpg File desc: Date/time 25/08/2016 07:07:06 Size: 287 KB			
Vaccine mai	Vaccine management, planning and funding					
9	comprehensive Multi Year Plan - cMYP	5.1	PPAC 2015 VF.pdf File desc: Date/time 25/08/2016 07:10:52 Size: 3 MB			

10	cMYP Costing tool for financial analysis	5.1	CMYP V3 9 1 SN Rev2.xlsx File desc: Date/time 25/08/2016 07:11:24 Size: 3 MB
11	M&E and monitoring plan in the countries with an existing monitoring plan	5.1.4	NON DISPONIBLE.docx File desc: Date/time 08/09/2016 11:57:04 Size: 20 KB
12	Vaccine introduction plan	5.1	Draft 4 plan introduction VPH.docx File desc: Date/time 25/08/2016 07:14:43 Size: 1 MB
15	HPV vaccine roadmap or strategy	6.1.1	NON DISPONIBLE.docx File desc: Date/time 08/09/2016 11:57:40 Size: 20 KB
16	Summary of the HPV vaccine assessment methodology	5.1.6	NON DISPONIBLE.docx File desc: Date/time 08/09/2016 11:58:21 Size: 20 KB
19	EVM report	8.3	SEN-EGEV 2015-RAPPORT-final V8- 151208.pdf File desc: Date/time 25/08/2016 07:16:33 Size: 3 MB
20	Improvement plan based on EVM	8.3	SEN-EGEV-2015-CIP-VERSION FINALE.pdf File desc: Date/time 25/08/2016 07:16:59 Size: 14 KB
21	EVM improvement plan progress report	8.3	Plan amélioration GEV revue 230616.xlsx File desc: Date/time 25/08/2016 07:19:22 Size: 261 KB
22	Detailed model budget for the vaccine introduction / operating costs grant	6.x,7.x.2, 6.x.2	VIG and Op Cost Detail Template 2016 FR.xlsx File desc: Date/time 25/08/2016 07:21:03 Size: 152 KB
27	Data quality assessment (DQA) report	5.1.4	NON DISPONIBLE.docx File desc: Date/time 08/09/2016 11:55:46 Size: 20 KB

Table 2: List of optional attachments

Document Number	Attachment	Section	File
13	Introduction Plan for the introduction of rubella / JE / Men A / YF combined vaccine into the national programme.	7.x.4	No file uploaded

	T	1	1
14	Annual EPI plan with a four-year vision for combating measles and rubella.		No file uploaded
17	Evidence of commitment to fund purchase of RCV for use in the routine system in place of the first dose of MCV	7.x.3	No file uploaded
18	Campaign target population documentation	7.x.1, 6.x.1	No file uploaded
23	Risk assessment and MenA consensus meeting report If DPT was used instead, please specify	7.1	No file uploaded
24	National eradication plan for measles (and rubella), if available		No file uploaded
25	A description of partner participation in preparing the applications	4.1.3	No file uploaded
26	Minutes of the NITAG meeting with specific recommendations on NVS introduction or the campaign	4.2	No file uploaded
28	DQA improvement plan	5.1.4	No file uploaded
29	Campaign action plan	7.1, 7.x.4	No file uploaded
30	Other documents		No file uploaded
31	Proof of MCV1 self-financing	5.1.5	No file uploaded
			<u> </u>

11. Annexes

Annex 1 - NVS Routine Support

Annex 1.1 - NVS Routine Support (HPV quadrivalent, 1 dose(s) per vial, LIQUID)

Table Annex 1.1 A: Rounded up portion of supply that is procured by the country and estimate of relative costs in US\$

		2017	2018
Number of vaccine doses	#	51,100	48,000
Number of AD syringes	#	54,600	50,700
Number of reconstitution syringes	#	0	0
Number of safety boxes	#	0	0
Total value to be co-financed by the Country [1]	\$	237,000	222,500

Table Annex 1.1 B: Rounded up portion of supply procured by Gavi and estimate of relative costs in US\$

_		2017	2018
Number of vaccine doses	#	413,600	335,400
Number of AD syringes	#	441,500	354,600
Number of reconstitution syringes	#	0	0
Number of safety boxes	#	0	0
Total value to be co-financed by Gavi	\$	1,918,000	1,555,500

Table Annex 1.1 C: Summary table for quadrivalent HPV vaccine, 1 dose(s) per vial, LIQUID

ID		Data from		2017	2018
	Number of surviving infants	Table 5.2	#	520,671	533,688
	Number of children to be vaccinated with the first dose	Table 5.2	#	176 958	181 382
	Number of children to be vaccinated with the second dose	Table 5.2	#	176 958	181 382
	Immunisation coverage with the second dose	Table 5.2	%	90%	90%
	Number of doses per child	Parameter	#	2	2
	Estimated vaccine wastage factor	Table 5.2	#	1.05	1.05
	Number of doses per vial	Parameter	#	1	1
	AD syringes required	Parameter	#	Yes	Yes
	Reconstitution syringes required	Parameter	#	No	No
	Safety boxes required	Parameter	#	No	No
СС	Country co-financing per dose	Table 6.4.1	\$	0.51	0.58
са	AD syringe price per unit	Table Annexes 4A	\$	0.041	0.041
cr	Reconstitution syringe price per unit	Table Annexes 4A	\$	0	0
cs	Safety box price per unit	Table Annexes 4A	\$	0.005	0.005
fv	Freight cost as% of vaccines value	Table Annexes 4B	%	2.10%	2.10%

Table Annex 1.1 D: Estimated numbers for HPV quadrivalent, 1 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget (page 1)

		Formula		2017	
			Total	Government	Gavi
Α	Country co-financing	V	11.00 %		
В	Number of children to be vaccinated with the first dose	Table 5.2	176,958	19,460	157,498
С	Number of doses per child	Vaccine parameter (schedule)	2		
D	Number of doses needed	BXC	353,916	38,919	314,997
Е	Estimated vaccine wastage factor	Table 5.2	1.05		
F	Number of doses needed including wastage	DXE	371,612	40,865	330,747
G	Vaccines buffer stock	Buffer on doses needed = (D - D of previous year) x 25% Buffer on wastages = ((F - D) - (F of previous year - D of previous year)) x 25%, = 0 if negative result G = [buffer on doses needed] + [buffer on wastages]	92,903	10,217	82,686
I	Total vaccine doses needed	Round up((F + G) / Vaccine package size) * Vaccine package size	464,600	51,090	413,510
J	Number of doses per vial	Vaccine parameter	1		
K	Number of AD syringes (+ 10% wastage) needed	(D + G) x 1.11	495,970	54,540	441,430
L	Reconstitution syringes (+ 10% wastage) needed	(I/J) x 1.11	0	0	0
М	Total of safety boxes (+ 10% of extra need) needed	(K + L) / 100 × 1.11	0	0	0
N	Cost of vaccines needed	I x * vaccine price per dose (g)	2,090,700	229,904	1,860,796
0	Cost of AD syringes needed	K x AD syringe price per unit (ca)	20,212	2,223	17,989
Р	Cost of reconstitution syringes needed	L x reconstitution syringe price per unit (cr)	0	0	0
Q	Cost of safety boxes needed	M x safety box price per unit (cs)	0	0	0
R	Freight cost for vaccines needed	N x freight cost as % of vaccines value (fv)	43,832	4,820	39,012
s	Freight cost for devices needed	(O+P+Q) x freight cost as% of devices value (fd)	0	0	0
Т	Total funding needed	(N+O+P+Q+R+S)	2,154,744	236,947	1,917,797
U	Total country co-financing	I * country co- financing per dose (cc)	236,946		
V	Country co-financing % of Gavi supported proportion	U/T	11.00 %		

Table Annex 1.1 D: Estimated numbers for HPV quadrivalent, 1 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget (page 2)

		Formula		2018	
			Total	Government	Gavi
Α	Country co-financing	V	12.51 %		
В	Number of children to be vaccinated with the first dose	Table 5.2	181,382	22,686	158,696
С	Number of doses per child	Vaccine parameter (schedule)	2		
D	Number of doses needed	BXC	362,764	45,371	317,393
Ε	Estimated vaccine wastage factor	Table 5.2	1.05		
F	Number of doses needed including wastage	DXE	380,903	47,640	333,263
G	Vaccines buffer stock	Buffer on doses needed = (D - D of previous year) x 25% Buffer on wastages = ((F - D) - (F of previous year - D of previous year)) x 25%, = 0 if negative result G = [buffer on doses needed] + [buffer on wastages]	2,323	291	2,032
ı	Total vaccine doses needed	Round up((F + G) / Vaccine package size) * Vaccine package size	383,300	47,940	335,360
J	Number of doses per vial	Vaccine parameter	1		
K	Number of AD syringes (+ 10% wastage) needed	(D + G) x 1.11	405,247	50,684	354,563
L	Reconstitution syringes (+ 10% wastage) needed	(I/J) x 1.11	0	0	0
М	Total of safety boxes (+ 10% of extra need) needed	(K + L) / 100 × 1.11	0	0	0
N	Cost of vaccines needed	I x * vaccine price per dose (g)	1,724,850	215,726	1,509,124
0	Cost of AD syringes needed	K x AD syringe price per unit (ca)	16,515	2,066	14,449
Р	Cost of reconstitution syringes needed	L x reconstitution syringe price per unit (cr)	0	0	0
Q	Cost of safety boxes needed	M x safety box price per unit (cs)	0	0	0
R	Freight cost for vaccines needed	N x freight cost as % of vaccines value (fv)	36,162	4,523	31,639
s	Freight cost for devices needed	(O+P+Q) x freight cost as% of devices value (fd)	0	0	0
Т	Total funding needed	(N+O+P+Q+R+S)	1,777,527	222,315	1,555,212
U	Total country co-financing	I * country co- financing per dose (cc)	222,314		
V	Country co-financing % of Gavi supported proportion	U/T	12.51 %		

Annex 2 – NVS Routine Support – Preferred second presentation

Annex 2.1 - NVS Routine Support (HPV bivalent, 2 dose(s) per vial, LIQUID)

Table Annex 2.1 A: Rounded up portion of supply that is procured by the country and estimate of relative costs in US\$

		2017	2018
Number of vaccine doses	#	3,884,400	3,669,500
Number of AD syringes	#	4,146,600	3,879,700
Number of reconstitution syringes	#	0	0
Number of safety boxes	#	0	0
Total value to be co-financed by the Country [1]	\$	237,000	222,500

Table Annex 2.1 B: Rounded up portion of supply procured by Gavi and estimate of relative costs in US\$

		2017	2018
Number of vaccine doses	#	- 3,419,700	- 3,286,100
Number of AD syringes	#	- 3,650,600	- 3,474,300
Number of reconstitution syringes	#	0	0
Number of safety boxes	#	0	0
Total value to be co-financed by Gavi	\$	- 208,500	- 199,000

Table Annex 2.1 C: Summary table for bivalent HPV vaccine, 2 dose(s) per vial, LIQUID

ID		Data from		2017	2018
	Number of surviving infants	Table 5.2	#	520,671	533,688
	Number of children to be vaccinated with the first dose	Table 5.2	#	176 958	181 382
	Number of children to be vaccinated with the second dose	Table 5.2	#	176 958	181 382
	Immunisation coverage with the second dose	Table 5.2	%	0	0
	Number of doses per child	Parameter	#	2	2
	Estimated vaccine wastage factor	Table 5.2	#	1.05	1.05
	Number of doses per vial	Parameter	#	2	2
	AD syringes required	Parameter	#	Yes	Yes
	Reconstitution syringes required	Parameter	#	No	No
	Safety boxes required	Parameter	#	No	No
СС	Country co-financing per dose	Table 6.4.1	\$	0.51	0.58
са	AD syringe price per unit	Table Annexes 4A	\$	0.041	0.041
cr	Reconstitution syringe price per unit	Table Annexes 4A	\$	0	0
cs	Safety box price per unit	Table Annexes 4A	\$	0.005	0.005
fv	Freight cost as% of vaccines value	Table Annexes 4B	%	2.10%	2.10%

Table Annex 2.1 D: estimated figures for HPV bivalent, 2 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget (page 1)

		Formula		2017	
			Total	Government	Gavi
Α	Country co-financing	V	836.05 %		
В	Number of children to be vaccinated with the first dose	Table 5.2	176,958	1,479,465	- 1,302,507
С	Number of doses per child	Vaccine parameter (schedule)	2		
D	Number of doses needed	BXC	353,916	2,958,929	- 2,605,013
Е	Estimated vaccine wastage factor	Table 5.2	1.05		
F	Number of doses needed including wastage	DXE	371,612	3,106,877	- 2,735,265
G	Vaccines buffer stock	Buffer on doses needed = (D - D of previous year) x 25% Buffer on wastages = ((F - D) - (F of previous year - D of previous year)) x 25%, = 0 if negative result G = [buffer on doses needed] + [buffer on wastages]	92,903	776,720	- 683,817
I	Total vaccine doses needed	Round up((F + G) / Vaccine package size) * Vaccine package size	464,600	3,884,306	- 3,419,706
J	Number of doses per vial	Vaccine parameter	2		
K	Number of AD syringes (+ 10% wastage) needed	(D + G) x 1.11	495,970	4,146,576	- 3,650,606
L	Reconstitution syringes (+ 10% wastage) needed	(I/J) x 1.11	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	(K + L) / 100 × 1.11	0	0	0
N	Cost of vaccines needed	I x * vaccine price per dose (g)	7,962	66,567	- 58,605
0	Cost of AD syringes needed	K x AD syringe price per unit (ca)	20,212	168,984	- 148,772
Р	Cost of reconstitution syringes needed	L x reconstitution syringe price per unit (cr)	0	0	0
Q	Cost of safety boxes needed	M x safety box price per unit (cs)	0	0	0
R	Freight cost for vaccines needed	N x freight cost as % of vaccines value (fv)	167	1,397	- 1,230
s	Freight cost for devices needed	(O+P+Q) x freight cost as% of devices value (fd)	0	0	0
Т	Total funding needed	(N+O+P+Q+R+S)	28,341	236,948	- 208,607
U	Total country co-financing	I * country co- financing per dose (cc)	236,946		
٧	Country co-financing % of Gavi supported proportion	U/T	836.05 %		

Table Annex 2.1 D: Estimated figures for HPV bivalent, 2 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget (page 2)

		Formula		2018	
			Total	Government	Gavi
Α	Country co-financing	V	957.34 %		
В	Number of children to be vaccinated with the first dose	Table 5.2	181,382	1,736,447	- 1,555,065
С	Number of doses per child	Vaccine parameter (schedule)	2		
D	Number of doses needed	BXC	362,764	3,472,893	- 3,110,129
Е	Estimated vaccine wastage factor	Table 5.2	1.05		
F	Number of doses needed including wastage	DXE	380,903	3,646,546	- 3,265,643
G	Vaccines buffer stock	Buffer on doses needed = (D - D of previous year) x 25% Buffer on wastages = ((F - D) - (F of previous year - D of previous year)) x 25%, = 0 if negative result G = [buffer on doses needed] + [buffer on wastages]	2,323	22,240	- 19,917
ı	Total vaccine doses needed	Round up((F + G) / Vaccine package size) * Vaccine package size	383,300	3,669,493	- 3,286,193
J	Number of doses per vial	Vaccine parameter	2		
K	Number of AD syringes (+ 10% wastage) needed	(D + G) x 1.11	405,247	3,879,601	- 3,474,354
L	Reconstitution syringes (+ 10% wastage) needed	(I/J) x 1.11	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	(K + L) / 100 × 1.11	0	0	0
N	Cost of vaccines needed	I x * vaccine price per dose (g)	6,569	62,888	- 56,319
0	Cost of AD syringes needed	K x AD syringe price per unit (ca)	16,515	158,106	- 141,591
Р	Cost of reconstitution syringes needed	L x reconstitution syringe price per unit (cr)	0	0	0
ď	Cost of safety boxes needed	M x safety box price per unit (cs)	0	0	0
R	Freight cost for vaccines needed	N x freight cost as % of vaccines value (fv)	138	1,322	- 1,184
s	Freight cost for devices needed	(O+P+Q) x freight cost as% of devices value (fd)	0	0	0
Т	Total funding needed	(N+O+P+Q+R+S)	23,222	222,316	- 199,094
U	Total country co-financing	I * country co- financing per dose (cc)	222,314		
V	Country co-financing % of Gavi supported proportion	U/T	957.34 %		

Annex 3 - NVS Preventive campaign(s)

No NVS Prevention Campaign Support this year

Annex 4

Table Annex 4A: Commodities Cost

Estimated prices of supplies are not disclosed

Table Annex 4B: Freight cost as percentage of value

Vaccine Antigen	Type of Vaccine	2017	2018
HPV quadrivalent, 1 dose(s) per vial, LIQUID	HPV	2.10 %	2.10 %

Table Annex 4C: Preparatory transition phase - Minimum country's co-payment per dose of co-financed vaccine

Vaccine	2017	2018
HPV quadrivalent, 1 dose(s) per vial, LIQUID	0.51	0.58

Table Annex 4D: Wastage rates and factors

The table below presents the wastage rates for the different vaccines (routine immunisation and campaigns) for 2017.

Vaccine	dose(s) per vial	Maximum ra	Wastage te*	Benchmark Wastage Rate **
Yellow Fever, 10 dose(s) per vial, LYOPHILISED	10	40 %	0 %	
Antiamaril, 5 dose(s) par flacon, LYOPHILISÉ	5	10 %	0 %	
Meningococcal A, 10 dose(s) per vial, LYOPHILISED	10	50 %	10 %	
Pneumococcal (PCV10), 2 dose(s) per vial, LIQUID	2	10 %	0 %	
Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	1	5 %	0 %	
Rotavirus, 2-doses schedule	1	5 %	0 %	
Rotavirus, 3-doses schedule	1	5 %	0 %	
Measles, 10 dose(s) per vial, LYOPHILISED for the second dose	10	40 %	0 %	
JE, 5 dose(s) per vial, LYOPHILISED	5	10 %	10 %	
HPV bivalent, 2 dose(s) per vial, LIQUID	2	10 %	0 %	
HPV quadrivalent, 1 dose(s) per vial, LIQUID	1	5 %	0 %	
MR, 10 dose(s) per vial, LYOPHILISED for the second dose	10	40 %	15 %	

Observations:

Note: HPV demonstration project wastage rates are the same as for the national introduction of the vaccine

Table Annex 4E: Vaccine maximum packed volumes

Please note that this table is used solely for reference and includes both the vaccines supported by Gavi as well as vaccines not supported.

Vaccine product	Designation	Vaccine formulation	Admin route	No. of doses in the schedule	Presentation (doses/vial, prefilled)	Packed volume vaccine (cm3/dose)	Packed volume diluents (cm3/dose)
BCG	BCG	lyophilised	ID	1	20	1.2	0.7
Diphtheria-Tetanus	DT	liquid	IM	3	10	3	
Diphtheria-Tetanus- Pertussis	DTP	liquid	IM	3	20	2.5	
Diphtheria-Tetanus- Pertussis	DTP	liquid	IM	3	10	3	
DTP liquid + Hib freeze-dried	DTP+Hib	liquid+lyop.	IM	3	1	45	
DTP-HepB combined	DTP-HepB	liquid	IM	3	1	9.7	
DTP-HepB combined	DTP-HepB	liquid	IM	3	2	6	
DTP-HepB combined	DTP-HepB	liquid	IM	3	10	3	
DTP-HepB liquid + Hib freeze-dried	DTP+Hib	liquid	IM	3	10	2.5	
DTP-HepB liquid + Hib freeze-dried	DTP-HepB-Hib	liquid+lyop.	IM	3	1	22	

^{*} Sources: WHO recommended wastage rates

^{**} Source: Country APRs and surveys, approved by WHO, UNICEF, and the Gavi Secretariat

		-					
DTP-HepB-Hib liquid	DTP-HepB-Hib	liquid+lyop.	IM	3	2	11	
DTP-HepB-Hib liquid	DTP-HepB-Hib	liquid	IM	3	10	4.4	
DTP-HepB-Hib liquid	DTP-HepB-Hib	liquid	IM	3	2	13.1	
DTP-HepB-Hib liquid	DTP-HepB-Hib	liquid	IM	3	1	19.2	
DTP-Hib combined liquid	DTP+Hib	liquid+lyop.	IM	3	10	12	
DTP-Hib combined liquid	DTP+Hib	liquid	IM	3	1	32.3	
Hepatitis B	HepB	liquid	IM	3	1	18	
Hepatitis B	НерВ	liquid	IM	3	2	13	
Hepatitis B	HepB	liquid	IM	3	6	4.5	
Hepatitis B	НерВ	liquid	IM	3	10	4	
Hepatitis B Uniject	НерВ	liquid	IM	3	Uniject	12	
Hib freeze-dried	Hib_lyo	lyophilised	IM	3	1	13	35
Hib freeze-dried	Hib_lyo	lyophilised	IM	3	2	6	
Hib freeze-dried	Hib_lyo	lyophilised	IM	3	10	2.5	3
Hib liquid	Hib_liq	liquid	IM	3	1	15	
Hib liquid	Hib_liq	liquid	IM	3	10	2.5	
Human Papillomavirus vaccine	HPV	liquid	IM	3	1	15	
Human Papillomavirus vaccine	HPV	liquid	IM	3	2	5.7	
Japanese Encephalitis	JE_lyo	lyophilised	sc	1	5	2.5	2.9
Measles	Measles	lyophilised	SC	1	1	26.1	20
Measles	Measles	lyophilised	SC	1	2	13.1	13.1
Measles	Measles	lyophilised	SC	1	5	5.2	7
Measles	Measles	lyophilised	SC	1	10	3.5	4
Measles-Mumps- Rubella freeze dried	MMR	lyophilised	SC	1	1	26.1	26.1
Measles-Mumps- Rubella freeze dried	MMR	lyophilised	sc	1	2	13.1	13.1
Measles-Mumps- Rubella freeze dried	MMR	lyophilised	SC	1	5	5.2	7
Measles-Mumps- Rubella freeze dried	MMR	lyophilised	sc	1	10	3	4
Measles-Rubella freeze dried	MR	lyophilised	SC	1	1	26.1	26.1
Measles-Rubella freeze dried	MR	lyophilised	SC	1	2	13.1	13.1
Measles-Rubella freeze dried	MR	lyophilised	SC	1	5	5.2	7
Measles-Rubella freeze dried	MR	lyophilised	SC	1	10	2.5	4
Meningitis A conjugate	Men_A	lyophilised	IM	1	10	2.6	4
Meningitis A/C	MV_A/C	lyophilised	SC	1	10	2.5	4
Meningitis A/C	MV_A/C	lyophilised	SC	1	50	1.5	3
Meningitis W135	MV_W135	lyophilised	SC	1	10	2.5	4
Meningococcal A/C/W/	MV_A/C/W	lyophilised	SC	1	50	1.5	3

	•		•	7			
Meningococcal A/C/W/Y	MV_A/C/W/Y	lyophilised	sc	1	10	2.5	4
Monovalent OPV-1	mOPV1	liquid	Oral		20	1.5	li.
Monovalent OPV-3	mOPV3	liquid	Oral		20	1.5	
Pneumo. conjugate vaccine 10-valent	PCV -10:	liquid	IM	3	1	11.5	
Pneumo. conjugate vaccine 10-valent	PCV -10:	liquid	IM	3	2	4.8	
Pneumo. conjugate vaccine 13-valent	PCV -13:	liquid	IM	3	1	12	
Polio	OPV	liquid	Oral	4	10	2	
Polio	OPV	liquid	Oral	4	20	1	
Polio inactivated	IPV	liquid	IM	3	PFS	107.4	
Polio inactivated	IPV	liquid	IM	3	10	2.5	
Polio inactivated	IPV	liquid	IM	3	1	15.7	
Rota vaccine	Rota_liq	liquid	Oral	2	1	17.1	
Rota vaccine	Rota_liq	liquid	Oral	3	1	45.9	
Tetanus Toxoid	TT	liquid	IM	2	10	3	
Tetanus Toxoid	TT	liquid	IM	2	20	2.5	
Tetanus Toxoid Uniject	тт	liquid	IM	2	Uniject	12	
Tetanus-Diphtheria	Td	liquid	IM	2	10	3	
Yellow Fever	YF	lyophilised	SC	1	5	6.5	7
Yellow Fever	YF	lyophilised	SC	1	10	2.5	3
Yellow Fever	YF	lyophilised	SC	1	20	1.5	2
Yellow Fever	YF	lyophilised	SC	1	50	0.7	1

12. Banking form

		nancial support made by Gavi, the (a electronic bank transfer as detailed	
Name of Institution (Account Holder)			
Address:			
City, Country:			
Telephone no.:		Fax no.:	
	Curre	ency of the bank account:	
For credit to:			
Bank account's ti	tle:		
Bank account no	.:		
Bank name:			
Is the bank accour	nt exclusively to be	used by this programme?	
By whom is the ac	count audited?		
Signature of Gove	rnment's authorisir	ng official	
			Seal
	Name:		
	Title:		
	Signature:		
	Date:		
	FINANCIAL IN	ASTITUTION	CORRESPONDENT BANK
FINANCIAL INSTITUTION			(in the United States)
Bank name:			<u> </u>
Branch Name:			
Address:			
City, Country:			
Swift Code:			
Sort Code:			
ABA No.:			
Telephone No.:			
FAX No.:			

I certify that account No. is held by at this banking institution

The accou	nt must be signed joir	ntly by at least (number of signatories) of the following authorised signatories:
1	Name:	
	Title:	
2	Name:	
	Title:	
3	Name:	
	Title:	
Name of ba	ank's authorising offic	ial
Signature:		
Date:		
Seal:		