

Gavi

Application Form for Country Proposals

For Support to:

Routine New Vaccines Support Preventive Campaign Support

Submitted by

The Government of

Uganda

Date of submission: 11 October 2015

Deadline for submission: 8 September 2015

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

Start Year

2016

End Year

2020

Form revised in 2015

(To be used with Guidelines of October 2014)

Please submit the Proposal using the online platform

https://AppsPortal.gavialliance.org/PDExtranet

Enquiries to: proposals@gavi.org or representatives of a Gavi partner agency. Unless otherwise specified, the documents can be shared with Gavi partners, collaborators and the general public. The Proposal and attachments must be submitted in English, French, Spanish, or Russian.

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

Gavi is unable to return submitted documents and attachments to countries.

Gavi GRANT TERMS AND CONDITIONS

FUNDING USED SOLELY FOR APPROVED PROGRAMMES

The applicant country ("Country") confirms that all funding provided by the 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 the 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 the Gavi in its Annual Progress Report if it wishes to propose any change to the programme(s) description in its application. The Gavi will document any change approved by the Gavi, and the Country's application will be amended.

RETURN OF FUNDS

The Country agrees to reimburse to the 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 the Gavi, within sixty (60) days after the Country receives the Gavi's request for a reimbursement and be paid to the account or accounts as directed by the Gavi.

SUSPENSION/ TERMINATION

The Gavi may suspend all or part of its funding to the Country if it has reason to suspect that funds have been used for purpose other than for the programmes described in the Country's application, or any Gavi-approved amendment to the application. The Gavi retains the right to terminate its support to the Country for the programmes described in its application if a misuse of Gavi funds is confirmed.

ANTICORRUPTION

The Country confirms that funds provided by the 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 the Gavi, as requested. The 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 the 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 THE GavI TRANSPARANCY AND ACCOUNTABILITY POLICY

The Country confirms that it is familiar with the 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 the Gavi arising out of or relating to its application that is not settled amicably within a reasonable period of time, will be submitted to arbitration at the request of either the 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 the Gavi. For any dispute for which the amount at issue is greater than US \$100,000 there will be three arbitrators appointed as follows: The 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.

The 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. Application Specification

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

Type of Support	Vaccine	Start Year	End Year	Preferred second presentation[1]
Routine New Vaccines Support	Rotavirus, 2-dose schedule	2016	2020	
Preventive Campaign Support	Meningococcal A, 10 dose(s) per vial, LYOPHILISED	2016	2016	
	If the selected vaccine is not your 1st preference, please state your preferred vaccine and presentation			If the selected vaccine is not your 1st preference, please state your preferred vaccine and presentation
	Not Applicable			

[1] Gavi may not be in a position to accommodate all countries first product preferences, and in such cases, Gavi will contact the country and 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.

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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 :
 - The duration of support
 - The total amount of funds requested
 - Details of the vaccine(s), if applicable, including the reason for the choice of presentation
 - Projected month and year of introduction of the vaccine
- Relevant baseline data, including:
 - DTP3 and Measles coverage data (as reported on the WHO/UNICEF Joint Reporting Form)
 - Birth cohort, targets and immunisation coverage by vaccines
- · Country preparedness
 - Summary of EVM assessment and progress on EVM improvement plan
- The nature of stakeholders' participation in developing this proposal
 - Inter-Agency Coordinating Committee
 - Partners, including CSO involvement

The Government of Uganda (GoU) is requesting support from Gavi to introduce Rotavirus vaccine in September 2016. The GoU is requesting US\$1,435,644 in operational costs from Gavi to support the introduction of Rotavirus vaccine. The GoU plans to introduce Rotarix (RV1) 2-dose vial, which has been identified by government and partners as the preferred product presentation based on lower cold chain capacity requirements and the presence of a vaccine vial monitor (VVM).

The GoU is also requesting support from Gavi to conduct Meningitis serotype A campaign in November 2016, which will be conducted over 5 days in 38 high-risk districts. The GoU is requesting US\$4,552,647 for operational costs to conduct the MenA mass campaign. The 10-dose vial MenAfriVac vaccine has been selected as the preferred product presentation based on the fact that the 10-dose vial will maximize the use of cold chain storage space at the national and district vaccine stores with no effect on storage capacity for routine vaccines.

Through a series of consultative discussions with EPI partners and stakeholders, the country has decided to give MenA vaccination through a mass campaign in selected 38 high risk districts. MenA will not be introduced into the routine immunisation schedule following this mass campaign. This decision takes into consideration the WHO recommendation of introduction into routine immunisation at least 1- 5 years from the mass campaign.

In addition, the country's capacity to introduce more than one vaccine into routine immunisation in the same year is untenable, given the tOPV switch, IPV introduction and significant preparation required for the planned introduction of the Rotavirus vaccine.

Therefore, the country will consider introduction of MenA vaccine into routine immunisation in the next 2-5 years from the time of the mass campaign.

National coverage for DPT3, OPV3 and measles has increased from 2012 to 2014. DPT3 coverage increased from 78% in 2012 to 102% in 2014, OPV3 coverage increased from 82% to 99% and measles increased from 82% to 96% over the same time period, according to administrative data.

According to the WHO/UNICEF Best Estimates coverage for DPT3 is 78%, OPV3 82% and measles 82% with a DPT 1-3 dropout rate at 12%. UNEPI has set program antigen targets for 2016-2020 with DPT3 projected to reach > 90% nationally.

Through the Gavi Health System Support (HSS) and GAVI Immunization System Support (ISS), UNEPI's capacity to deliver services has been expanded to lower level Health Facility IIIs and, in some districts, Health Facility IIs. The total current national cold chain capacity is 123,308L, of which 39,400L is at central vaccine stores and 83,908L at lower levels. With the planned installation by November 2015 of cold chain equipment procured through Gavi HSS funding, Uganda will have sufficient cold chain capacity to accommodate both Rotavirus and MenA vaccines, particularly given MenAfriVac's unique thermostability under Controlled Temperature Chain (CTC) conditions.

The most recent Effective Vaccine Management Assessment (EVMA) conducted in 2014 found that five out of nine assessment criteria met 80% of the minimum standards set for countries to achieve against the 2011 EVMA results. Specifically, at the national level:

- Vaccine arrival increased to 80% from 70% in 2011
- Storage and transport capacity increased to 93% from 56% in 2011
- Buildings equipment and transport increased to 91% from 79% in 2011
- Stock management increased to 82% from 80% in 2011
- Vaccine management policy and procedures increased to 85% from 45% in 2011

Improvements were also noted in temperature control management, vaccine distribution management, Management Information System (MIS) and supportive functions. Uganda is thus well-prepared for the introduction of Rotavirus vaccine and MenA campaign.

The preparation of both the Rotavirus vaccine introduction application and the MenA vaccination campaign plan of action (POA) has been a consultative and participatory process involving all key in-country UNEPI partners, including WHO, UNICEF, PATH, CHAI, African Field Epidemiology Network (AFENET) and the System Strengthening for Routine Immunisation (SS4RI)/Maternal Child Survival Program (MCSP). Technical assistance in preparing the Rotavirus application and MenA POA was provided by WHO Inter Support Team (IST) / Headquarter (HQ) and UNICEF Eastern and Southern Africa Regional Office (ESARO), while financial support was provided by partners to finalize both documents. The HPAC, Minister of Health and Minister of Finance and Economic Development on behalf of the Government of Uganda approved the introduction of Rotavirus vaccine and the MenA campaign on 2nd of September, 2015.

4. Signatures

4.1. Signatures of the Government and National Coordinating Bodies

4.1.1. Government and the Inter-Agency Coordinating Committee for Immunisation

The Government of Uganda would like to expand the existing partnership with the Gavi for the improvement of the infants routine immunisation programme of the country, and specifically hereby requests Gavi support for:

Rotavirus, 2-dose schedule routine introduction

Meningococcal A, 10 dose(s) per vial, LYOPHILISED preventive campaigns

The Government of Uganda commits itself to developing national immunisation services on a sustainable basis in accordance with the Comprehensive Multi-Year Plan presented with this document. The Government requests that the Gavi and its partners contribute financial and technical assistance to support immunisation of children as outlined in this application.

Table(s) 6.2.4 in the NVS Routine section of this application shows the amount of support in either supply or cash that is required from the Gavi. Table(s) 6.2.3 of this application shows the Government 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 annually release its portion of the co-financing funds in the month of **October**.

The payment for the first year of co-financed support will be around **October 2016** for Rotavirus, 2-dose schedule.

Please note that this application will not be reviewed or recommended for approval by the Independent Review Committee (IRC) without the signatures of both the Minister of Health and Minister of Finance or their delegated authority. These signatures are attached as DOCUMENT NUMBER: 1 and 2 in Section 10. Attachments.

Minister of Health (or delegated authority)		Minister of Finance (or delegated authority)	
Name	Dr Elioda Tumwesigye	Name	Hon Matia Kasaija
Date		Date	
Signature		Signature	

This report has been compiled by (these persons may be contacted in case the Gavi Secretatiat has queries on this document):

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4.1.2. National Coordinating Body - Inter-Agency Coordinating Committee for Immunisation

Agencies and partners (including development partners and NGOs) 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 use of the GaviGavi 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	Health Policy Advisory Committee (HPAC)	
Year of constitution of the current committee	2002	
Organisational structure (e.g., sub-committee, stand-alone)	HPAC is a stand alone committee, but receives monthly reports from 9 technical working groups.	
Frequency of meetings	Monthly	

The Terms of Reference or Standard Operating Principles for the ICC, including details on the ICC membership, quorum, dispute resolution process and meeting schedules is attached as DOCUMENT NUMBER: 4.

Major functions and responsibilities of the ICC/HSCC:

- To coordinate and advise government and health development partners on the implementation of the National Health Policy (NHP) and Health Sector Strategic and Investment Plan (HSSIP)
- To provide overall policy and strategic coordination of the sector
- To oversee the management of annual health sector budget process
- To provide a forum of information sharing and resolution of disagreements or conflicts among health sector stakeholders

Please describe how partners have provided support in preparation of the proposal:

The process of proposal development has been a consultative, participatory exercise with all key EPI partners including WHO, UNICEF, CHAI, PATH and MCSP Project. Technical support has also been provided by WHO IST and HQ and UNICEF ESARO in the preparation and development of the final proposal. In addition, health development partners have provided financial support to UNEPI for coordination and proposal writing meetings.

4.1.3. Signature Table for the Coordinating Committee for Immunisation

We the members of the ICC, HSCC, or equivalent committee [1] met on the 02/09/2015 to review this proposal. At that meeting we endorsed this proposal on the basis of the supporting documentation which is attached. The minutes of the meeting endorsing this proposal are attached as Document number 5. The signatures endorsing the proposal are attached as Document number 6 (please use the list for signatures in the section below).

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

Function	Title / Organisation	Name	Please sign below to indicate the attendance at the meeting where the proposal was endorsed	Please sign below to indicate the endorsement of the minutes where the proposal was discussed
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Chair	Permanent Secretary/Ministry of Health	Dr. Asuman Lukwago	
Secretary	Program Officer/HPAC Secretariat	Marie Dativa Aliddeki	
Members	First Secretary, Health and Social Protection/Embassy of Sweden	Anne Lindeberg	

By submitting the proposal we confirm that the quorum has been met. Yes

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

4.2. National Immunization Technical Advisory Group (NITAG)

Has a NITAG been established in the country? Yes

We the members of the NITAG met on the 31/08/2015 to review this proposal. At that meeting we endorsed this proposal on the basis of the supporting documentation describing the decision-making process through which the recommendations were reached, attached as Document number 9.

4.2.1. The NITAG

Profile of the NITAG

Name of the NITAG	Advisory Committee on Vaccines and Immunization (ACVI)	
Year of constitution of the current NITAG	2014	
Organisational structure (e.g., sub-committee, stand-alone)	Independent committee	
Frequency of meetings	Quarterly	

Function	Title / Organisation	Name
Chair	Principal, College of Health Sciences, Makerere University, Kampala	Prof Nelson Sewankambo
Secretary	Research Officer, Uganda National Academy of Sciences	Celia Nalwadda
	AMREF	Dr Lawrence Kaggwa
	Assistant Commissioner, Child Health, MoH	Dr Jesca Nsungwa-Sabiiti
	Executive Director, African Centre for Global Health and Social Transformation (ACHEST) Kampala	Prof Francis Omaswa
	Department of Epidemiology and Biostatistics Makerere University School of Public Health	Dr Roy William Mayega
Members	Lecturer, Dept of Health Policy, Planning and Management Makerere University School of Public Health	Dr Peter Waiswa
Wembers	Health Economist, Sabin Vaccines Institute, Kampala	Ms Diana Kizza
	Parliament of Uganda	Hon Benson Obua-Ogwal, MP
	Senior Lecturer, Makerere University College of Health Sciences, Kampala	Dr Sabrina Bakeera-Kitaka
	Department of Biomolecular Resources and Biolab Sciences, College of Veterinary Medicine, Animal Resources and Biosecurity, Makerere University	Dr Jesca Lukanga Nakavuma
	Country Manager, PATH Uganda	Dr Emmanuel Mugisha

Major functions and responsibilities of the NITAG

1. To conduct of policy analyses to determine optimal national immunization policies

- 2. To guide the national government and immunization program on strategies for the control of vaccine preventable diseases through immunization
- 3. To advise MOH on monitoring the immunization programme to quantify impact
- 4. To advise the government on the collection of important disease and vaccine uptake data
- 5. To identify the need for further data for policymaking
- 6. To guide other organizations, institutions or government agencies in the formulation of policies, plans and strategies for research and development of new vaccines and vaccine technologies for the future

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 **(Document Number: 10)**

5. Immunisation Programme Data

5.1 Background information

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 for Immunisation (cMYP) (or equivalent plan) and attach a complete copy (with an Executive Summary) as DOCUMENT NUMBER 11. Please attach the cMYP costing tool as DOCUMENT NUMBER 12.
- Please attach relevant Vaccine Introduction Plan(s) as DOCUMENT NUMBER: 14
- Please refer to the two most recent annual WHO/UNICEF Joint Reporting Forms (JRF) on Vaccine Preventable Diseases
- 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 yellow fever and meningitis A mass preventive campaigns.

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

	Figure	Year	Source
Total population	34,856,813	2014	Uganda Census provisional results 2014 UBOS
Birth cohort	1,690,555	2014	Uganda census provisional results November 2014
Infant mortality rate (per 1000)	54	2011	UDHS 2011
Surviving infants[1]	1,599,265	2015	Uganda census provisional results November 2014
GNI per capita (US\$)	660 %	2014	WORLD BANK 2015
Total Health Expenditure (THE) as a percentage of GDP	7 %	2013	MTEF 2014/2015
General government expenditure on health (GGHE) as % of General government expenditure	44 %	2015	MTEF 2014/2015

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

5.1.1 Lessons learned

Routine New Vaccines Support

If new or under-used vaccines have already been introduced in your country, please give details of the lessons learned from previous introduction(s) specifically for: storage capacity, protection from accidental freezing, staff training, cold chain, logistics, coverage and drop-out rates, wastage rate, etc., and suggest action points or actions taken to address them. Please refer to previous Post Introduction Evaluations (PIE), if applicable. If they are included in the Introduction Plan, please cite the section only.

Lessons Learned	Action Points
- Delayed release of funds negatively impacts the quality and timeliness of planning and training	- Hold consultative meetings with the relevant resources providers to ensure timely release of funds - Funds should be available at all the relevant levels prior to commencement of training Factor in the likely delays in the IFMS system during planning of Rota Virus introduction activities
- Lack of vaccines for demonstration during training affects the quality of training	- Request for dummies and /samples from the manufacturer to be used during training

- Delays in availing vaccines for health workers to start the actual vaccine administration immediately after the training, leads to loss of knowledge and skills	Conduct quality training that ensures sustained knowledge and skills, even in the event of delayed distribution and administration of the new vaccine. Ensure timely availability and release of funds for early implementation of activities
-The national launch should ideally happen after all districts have been trained so that there is one uniform day for the launch	- The national launch should happen after all the appropriate preparations have been conducted (Training at all levels, vaccine distribution up to peripheral level, social mobilization, UNICEF readiness assessment, etc.)
- Backlog cohorts, when not included in forecasting for the new vaccines is likely to lead to shortages	Emphasis on the eligibility of recipients during training, social mobilization and sensitization Include an additional buffer in the forecasted quantities to cater for backlog cohort
- The lack of immediate support supervision following launch of the vaccine affects the uptake of the new vaccine, especially in the initial months of the introduction	 If funding is available, support supervision and monitoring will be conducted after one month of introduction The Ministry of Health to plan routine supervision to coincide with the month after introduction, so as to leverage existing resources
 Ministry of Health and country local partners should begin the planning process early enough to ensure a smooth introduction of any new vaccine. Coordination of activities by implementing partners led to a successful PCV launch in Iganga 	Planning meetings to begin as soon as the decision letter and approval is received from GAVI (At least within four weeks) Continue with coordination meetings through the National Coordination Committee meetings so as to ensure well coordinated and timely implementation of immunization activities including launch of the Rotavirus Vaccine
 When new vaccines are introduced into the programme, a long term sustainable vaccine financing plan should be discussed and endorsed by the Government so that children would not be deprived of immunization services against emerging vaccine preventable diseases A clear commitment is needed by the Government to support new vaccines to ensure sustainability The estimated amount for government co-financing burden is expected to increase significantly as new vaccines are introduced in the routine immunization schedule. This increases the risk of government defaulting on its obligation 	- The Ministry of Health has included the financial requirements for the new vaccines in MTEF and LTEF - Funding remains inadequate but plans for continued advocacy with Parliament, Ministry of Finance and Economic Development and other relevant authorities to increase the health budget and thereby increase amount available for new vaccines
- Monitoring tools (Child Health Cards, tally sheets and monthly summary forms) should be availed prior to training of health workers and other staff - Shortage of monitoring tools in districts visited after the launch of PCV	- All monitoring tools have been revised to include all new vaccines including Rotavirus vaccine - GAVI HSS funds have been used to procure adequate monitoring tools for the next two years, as stop gap measure while Ministry of Health mobilizes additional resources to ensure continuity in supply
- Intensive social mobilization is essential for adequate uptake of new vaccines by the public	- Intensive social mobilization to be conducted post launch date to ensure continued uptake of new vaccines alongside the routine immunization vaccines; using multiple strategies and channels
- Delay in the production and dissemination of IEC materials. This was attributed to financial constraints	- Timely production and dissemination Rotavirus Vaccine IEC materials before the launch of the new vaccine
- Advocacy meetings with parliament, religious leaders and the media were conducted in the same month of the PCV launch.	- Continued advocacy with parliament and other stakeholders, through meetings, media messages before the month of the new vaccine launch.
- The refugee situation is transient and dynamic making it difficult to predict and accurately forecast for their vaccine needs.	If there is need for additional vaccines to meet the additional refugee numbers, UNEPI in consultation with UNHCR and the Office of the Prime Minister will submit a justification for the request of additional doses - UNEPI and UNHCR will work closely to compile refugee numbers to

Preventive campaign support

If campaigns with Meningococcal A vaccines have already been conducted in your country, please give details of the lessons learned, specifically for: storage capacity, protection from additional freezing, staff training, cold chain, logistics, coverage, wastage rate, etc., and suggest action points to address them in future campaigns. If they are included in the Introduction Plan or Plan of Action, please cite the section only.

Lessons Learned	Action Points
-Inadequate Human Resource (HR) capacity impacts negatively on the quality of immunizations given	- Liaise with neighboring training institutions to mobilize additional HR to support the campaign including working to together to conduct training within the health institutions
- A successful campaign is dependent on timely provision of funds and related supplies, much earlier to the date of the launch	- GAVI and MOH ensure timely disbursement of funds at all levels prior to training and national launch activities
- Intensive, wide coverage and tailored social mobilization for target groups is critical for comprehensive coverage for the campaign.	Increased budget allocation for advocacy, communication and social mobilization (ACSM) activities Exploring non traditional approaches to ACSM for mobilizing the target population through mobilization and awareness to increase uptake of MenA
- Well planned NVI and campaigns, have potential to strengthen routine immunization through the additional resources and service uptake mobilization	- Integrate messages for routine immunisation in planned campaigns - Leverage existing campaign resources including cold chain and vaccine management, training, micro planning to strengthen routine immunization
- Multi sectoral planning is gateway to successful campaigns	- Utilize Office of Prime minister (OPM) to mobilise all relevant government organs and stakeholders
- In campaigns targeting a specific geography, synchronizing with neighboring countries/localities is important to achieve maximum benefit/coverage from the campaign	- Plan/advocate for coordinated efforts across borders to align campaign timelines and implementation - Conduct multi-sectoral consultative meetings to plan for campaign - Utilise OPM to provide refugee population data in target districts to adequately plan and forecast for additional vaccines and logistics requirements
- Protracted procurement processes result in Vaccine Immunisation Grants not completely utilized leading to unspent funds that could otherwise have been used to implement key activities.	- Early and timely release of funds for smoother procurement process
- AEFI surveillance is very critical to increase confidence and demand to achieve high target coverage	- Early implementation of the AEFI, specifically the district surveillance systems; to ensure early detection and investigation for appropriate action
- Adequate micro-planning at the district level is important for a successful campaign	- Conduct training and provide the REC tools to all levels

5.1.2 Health planning and budgeting

Please provide information on the planning and budgeting cycle in your country

Annually, plans of action are developed by the various Ministry of Health programs and aggregated into an annual work plan. This is also involves districts developing comprehensive work plans that feed into the national plan. The budgeting process is closely aligned with the work plan development.

Activities included in the annual work plans and budgets are informed by the health Sector Strategic and Investment Plan 2010/11-2014/15 and the National Health Policy 2010/11-2019/20. These two policy documents define the medium and long term health priorities and are closely aligned with the National Development Plan.

The planning and budgeting cycle for Uganda is July to June

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The planning and budgeting cycle for Uganda is July to June

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

- 1. The Health Sector Strategic and Investment Plan 2010/11-2014/15. Note: the MOH is developing a Health Sector Development Plan 2016/17 -2019/20 to replace the HSSIP II
- 2. National Health Policy 2010/11-2019/20
- 3. National Budget Framework Paper FY 2014/15 FY 2018/19

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

The new UNEPI cMYP (2016-2020) is well aligned with the proposal document and both Rotavirus vaccine introduction and the MenA campaign are key priorities for the Ministry of Health in 2016. (Refer to the M&E framework of the cMYP)

Please indicate the national planning budgeting cycle for health

The cycle is aligned to the financial year 1st July to 30th June

Please indicate the national planning cycle for immunisation

The cycle is aligned to the financial year 1st July to 30th June

5.1.3 Preparatory activities

Please provide an outline of all **preparatory** activities for vaccine(s) introduction or campaigns. If they are included in detail the Introduction Plan and/or Plan of Action, please cite the sections only.

The program has developed a Rotavirus vaccine introduction plan and the MenA Campaign plan of action. These documents clearly outline all the preparatory activities for the Rotavirus vaccine introduction and the MenA campaign. For:

- 1. Rotavirus vaccine, refer to Section 6 Introduction of Rotavirus Vaccine into the national routine immunisation schedule in 2016
- 2. MenA, refer to Section, refer to Section 5 Planning and Implementation of MenA campaign

5.1.4 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, socio-economic 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).

In Uganda, there are no major observed barriers related to geographic, socio-economic and or gender/equity. According to NDPII, significant progress has been made to strengthen gender equality and women empowerment. There has been formulation of a gender responsive regulatory framework including policies and strategies. There has also been a process of institutionalizing gender planning in all sectors and increased collection of gender disaggregated data and thorough research. The country moved from the

43rdto 29th global gender ranking, suggesting some successes in equalizing access to services and opportunities

Discuss how equity issues (geographic, socio-economic and/or gender) are being taken into account in the design of social mobilisation and other strategies to increase immunisation coverage. Highlight where these issues are addressed in the vaccine introduction plan(s).

The equity issues discussed here will be taken into account in the design of social mobilisation and other strategies to increase immunisation coverage. They are clearly highlighted in the proposal document in Section 2.2. of Rotavirus vaccine introduction plan.

Immunisation in Uganda is implemented within the health system and there are barriers that affect access to services and hence cause equity problems.

- 1. Geographical barriers: these include hard to reach areas due to physical barriers e.g. eastern and south western region which are mountainous and hilly terrain coupled with poor road network. This has caused inequalities in distribution of human resources, in most cases qualified health workers will not be willing to work in these areas. The GOU has put in place strategies to address this gap and this includes:
- Attain and retain the right HRH numbers and skills mix in the health sector through advocacy for annual increases in recruitment to increase the proportion of skilled positions in order to improve quality health services delivery in those areas. The Uganda Parliamentarian Immunization Forum is spearheading this activity
- Use evidence to advocate for appropriate remuneration of health workers;
- Provide decent and safe accommodation for health workers at health facilities especially in hard to reach areas through GAVI HSS
- Some local governments have put in place a mechanism provide incentive schemes for attraction and retention of health workers in hard-to-reach areas while addressing the gender and human rights aspects

2. Socio economic barriers:

According to the 2007 household survey, there remains a significant inequality in access to health care. These inequalities occur due to differences in socio-economic status and geographical location. Twenty eight percent (28%) of the households in Uganda are experiencing catastrophic payments. The incidence of catastrophic health expenditure ranges from 24.8% in the richest quintile to 28.3% in the poorest quintile and between 23.4% in the eastern region and 38.1% in the western region. One of the key objectives of the National Development Plan is to increase household incomes and promotion of equity through working to reduce catastrophic health expenditures by households

- 3. Gender barriers: these include level of education and marriage status in decision making which is critical for immunization. The UDHS shows that about 53% of the women mainly decide by themselves how their earnings are to be spent, 32% report that they make the decision jointly with their husband/partner; while 13 percent report that the decision is mainly made by their husband/partner. There are variations in the proportion of women who make independent decisions about their earnings ranging from 24% in Eastern region to 79% in Kampala. This shows that women in urban areas are more likely to make independent decisions compared to those in rural areas. The strategies put in place to address these barriers include:
 - free education for all with an additional entry point in higher institution for girls
 - Coordination with CSOs, (including women centered organizations) especially those working in the area of health consumer rights such as Uganda National Health Consumers' Organization to build awareness among individuals and communities about their rights and responsibilities.

Related to NV introduction the following approaches will be utilized as earlier mentioned above with a focus on increasing community demand for new vaccine and addressing all concerns /rumours related to Rotavirus Vaccine namely:

1) Updated country Multi Year Plan (cMYP), 2016-2020 which addresses the short term and medium term program priorities and this program document is to be used as a resource mobilization tool with allocation of more resources to hard to reach areas

- (2) This year's annual plan is aligned with the cMYP addresses priority interventions to revamp the immunization performance in the country. It focuses on major priorities and activities to solve cited problems in various program assessments and is to be used as a resource mobilization tool
- (3) 2015 EPI annual work plan developed with focus on priority interventions for immunization and monitored at all levels of implementation and all levels of MOH
- (4) National Communication Strategy for Routine Immunization was developed and disseminated to all districts. This is targeting to reduce the disparities in social and economic barriers and improve access and utilization for immunization.
- (6) A national RED approach roll out by MOH and Health development Partners to ensure Routine Immunization Strengthening. Districts have been supported to develop health facility community based micro plans to address the issue of equity
- (7) Most of the target population for MenA is in school and we are to use school based approach to ensure we reach most of the target population. Men A vaccine will be done in campaign mode which is an approach that reaches
- (8) Utilization of CSOs in the identified areas to create awareness on immunisation service while monitoring equity in service delivery

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

Sex disaggregated data is collected and used in the immunisation routine reporting systems through an electronic Health Management Information System. This data is disaggregated right from the lowest point of service delivery.

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 vaccines or campaigns and financing of these activities.

Yes. The country has experienced an influx ofrefugees, following civil unrest in the neighboring countries to the north and the west. This is likely to create a shortage of the vaccine and overstretching the existing HR capacity. The influx also predisposes the country to disease outbreaks of otherwise controlled diseases, especially those from high endemic diseases and stretches the surveillance capacity. All these, distort immunisation plans and have significant financial implication for immunisation service delivery.

If available, please provide additional information and documents on subnational coverage data, e.g. comparing urban/rural districts or districts with highest/lowest coverage, etc.

In Uganda, there is only one urban district the capital, the rest of the districts are rural (111). However within the districts there are urban populations located in town councils. Unfortunately the data for these areas is not available routinely.

Please describe what national surveys take place routinely in country to assess gender and equity related barriers. Highlight whether this application includes any activities to assess gender and equity related barriers.

The National Development Plan II has clearly stated that several studies have been conducted and there is increased collection of gender disaggregated data/information through research. Routinely, through the Health Management Information System (HMIS), data collection is disaggregated by gender including routine immunization and there has not been any disparity as far as immunization services is concerned.

The most recent national studies conducted to determine associated gender barriers are:

- 1. The Knowledge, Attitude, Practices and Behavior (KAPB) study conducted in 2011
- 2. Uganda Demographic Health Study 2011

These studies reported similar findings related to social and economic barriers to health including immunization as summarised below:

- Low community social mobilization for uptake of immunization services due to inadequate funds
- Knowledge gaps in information of benefits of immunization to the caretakers resulting from inadequate social mobilization
- Disparity in quality of service delivery due to inadequate human resources to be posted to hard to reach areas
- There is no notable difference in vaccination coverage between male and female children.

The above factors have resulted in accumulation of large population of unimmunized children that have contributed to sporadic outbreaks of vaccine preventable diseases

These key challenges to immunization service delivery have been addressed in the new country Multi Year Plan (cMYP), EPI annual work plan and the routine immunisation communication strategic plan to reduce the disparities in social and economic barriers. No findings specifically point to gender discrimination to access of immunisation services.

The next UDHS 2016 will continue to provide data on barriers related to gender and socio-economic issues and once the results are available, the identified activities in the cMYP will be used to address those challenges.

5.1.5 Data quality

Please attach a data quality assessment (DQA), report if one has been completed within the previous 48 months (DOCUMENT NUMBER: 13). If available, an improvement plan and progress report on the implementation of the improvement plan should also be submitted (DOCUMENT NUMBER: 16, DOCUMENT NUMBER: 17).

If DQA not available, please briefly describe plans to establish mechanisms for data quality assessment.

A data quality assessment was conducted in 2013 (report attached)

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.

Currently the country is using the UDHS and EPI coverage surveys to validate the quality of administrative data at an interval of five years respectively. The last UDHS was done in 2011 and the next is planned for 2016.

The last comprehensive EPI coverage survey was conducted in 2005 and follow up surveys have not been conducted due to financial constraints. Efforts for resource mobilization are ongoing to ensure the coverage survey is done as per the 5 year recommendation, with one planned for 2016.

The country is implementing a comprehensive Data Improvement Plan following a Data Quality Self Assessment (DQSA) conducted in 2013 that identified gaps that need to be addressed in order to strengthen HMIS data management and utilisation at health facility level.

In order to address the recommendations from the DQSA, the Uganda Ministry of Health (UNEPI and Resource Center), WHO,CDC, UNICEF, GAVI and other partners developed a strategic national plan to improve immunization data quality, through the Data Improvement Team (DIT) strategy. The strategy focuses on improving the completeness, accuracy, timeliness and reliability of routine immunization data at all levels of the health system in Uganda. The outcome of this strategy is shown in document 17.

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.

The most recent Uganda Demographic Health Survey was conducted in 2011 and the next one will be conducted in 2016.

Information on vaccine coverage among children age 12-23 months was collected from vaccination cards and mother's report, by background characteristics. It was observed that children living in urban areas are more likely than those living in rural area to be fully vaccinated (61 percent and 50 percent, respectively). Among the regions, the proportion of children that received all of their basic vaccinations varies. Children residing in Kampala (urban district) are the most likely to have received all of their vaccinations (63 percent), while children living in the East Central region (39 percent) are the least likely to be fully immunized when compared with children living in other regions. Vaccination coverage increases as the educational attainment of a child's mother also increases. For example, 45 percent of children whose mothers have no education are fully immunized compared with 62 percent among children of mothers with secondary or higher education. Similarly, children in households in the middle wealth quintile are slightly less likely to have been fully immunized compared with children in households in the other wealth quintiles

5.2. Baseline and Annual Targets (NVS Routine Support)

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

Normalia an	Base Year		Baseline a	nd Targets	
Number	2014	2016	2017	2018	2019
Total births	1,690,555	1,794,555	1,848,930	1,904,953	1,962,673
Total infants' deaths	91,290	96,906	99,842	102,868	105,984
Total surviving infants	1,599,265	1,697,649	1,749,088	1,802,085	1,856,689
Total pregnant women	1,690,555	1,794,555	1,848,930	1,904,953	1,962,673
Target population vaccinated with OPV3[1]					
OPV3 coverage[2]	82 %	85 %	90 %	90 %	92 %
Target population vaccinated with DTP1[1]	1,423,346	1,561,837	1,644,143	1,730,002	1,782,421
Target population vaccinated with DTP3[1]	1,247,427	1,443,003	1,574,179	1,621,877	1,708,154
DTP3 coverage[2]	78 %	85 %	90 %	90 %	92 %
Wastage[3] rate in base-year and planned thereafter (%) for DTP	10	10	10	10	10
Wastage[3] factor in base-year and planned thereafter for DTP	1.11	1.11	1.11	1.11	1.11
Target population vaccinated with 1st dose of Rotavirus	0	520,612	1,644,143	1,730,002	1,782,421
Target population vaccinated with 2nd dose of Rotavirus	0	497,977	1,609,161	1,657,918	1,745,288
Rotavirus coverage[2]	0 %	29 %	92 %	92 %	94 %
First Presentation: Rotavirus, 2-dose schedule					
Wastage[3] rate in base-year and planned thereafter (%)	0	5	5	5	5
Wastage[3] factor in base-year and planned thereafter (%)	1.00	1.05	1.05	1.05	1.05
Maximum wastage rate value for Rotavirus, 2-dose schedule	5 %	5 %	5 %	5 %	5 %
Target population vaccinated with 1st dose of Measles	1,311,397	1,459,978	1,539,197	1,621,877	1,671,020
Measles coverage[2]	82 %	86 %	88 %	90 %	90 %
Annual DTP Drop out rate [(DTP1 – DTP3) / DTP1] x 100	12 %	8 %	4 %	6 %	4 %

^[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): $[(A - B)/A] \times 100$. Whereby: A = the number of doses distributed for use according to the supply records with correction for stock balance at the end of the supply period; B = the number of vaccinations with the same vaccine in the same period.

Number	Baseline and Targets
	2020
Total births	2,022,142
Total infants' deaths	109,196
Total surviving infants	1,912,946
Total pregnant women	2,022,142
Target population vaccinated with OPV3[1]	
OPV3 coverage[2]	94 %
Target population vaccinated with DTP1[1]	1,874,687
Target population vaccinated with DTP3[1]	1,798,169
DTP3 coverage[2]	94 %
Wastage[3] rate in base-year and planned thereafter (%) for DTP	10
Wastage[3] factor in base-year and planned thereafter for DTP	1.11
Target population vaccinated with 1st dose of Rotavirus	1,874,687
Target population vaccinated with 2nd dose of Rotavirus	1,836,428
Rotavirus coverage[2]	96 %
First Presentation: Rotavirus, 2-dose schedule	
Wastage[3] rate in base-year and planned thereafter (%)	5
Wastage[3] factor in base-year and planned thereafter (%)	1.05
Maximum wastage rate value for Rotavirus, 2- dose schedule	5 %
Target population vaccinated with 1st dose of Measles	1,759,910
Measles coverage[2]	92 %
Annual DTP Drop out rate [(DTP1 – DTP3) / DTP1] x 100	4 %

^[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. Whereby: A = the number of doses distributed for use according to the supply records with correction for stock balance at the end of the supply period; B = the number of vaccinations with the same vaccine in the same period.

5.3. Targets for Preventive Campaign(s)

5.3.1 Targets (Meningococcal A campaign)

Mini catch-up campaigns will be introduced at the same time as routine EPI. Gavi will support one-time mini catch-up campaigns with Meningococcal A conjugate vaccine targeting cohorts born between the initial mass campaign and introduction of routine infant vaccination in all 26 endemic countries in the African meningitis belt. The exact age range will depend on the specific country epidemiology and situation, although the target number to be reached should be included in table 5.3.1)

Cohort for Meningococcal A via mass preventative campaigns is population 1-29 years old

Table 5.3.1 Baseline NVS campaign figures for Meningococcal A

Number	Targets: preventative mass campaigns		
	2016		
Total target population	7,004,074		
Wastage rate (%) for Meningococcal A (campaign)	10		

Number	Targets: mini catch-up campaigns		
	2016		
Total target population	0		
Wastage rate (%) for Meningococcal A (campaign)	0		

6. New and Under-Used Vaccines (NVS Routine)

6.1. Assessment of burden of relevant diseases (if available)

If already included in detail in the Introduction Plan or Plan of Action, please cite the section only.

Disease	Title of the assessment	Date	Results
ROTA VIRUS	A cross sectional study: Prevalence and factors associated with rotavirus infection among children admitted with acute diarrhea in Uganda Nakawesi et al. BMC Pediatrics 2010, 10:69	September 2006 - January 2007	The prevalence of rotavirus infection was 45.4%. On multivariate analysis rotavirus was significantly associated with a higher education (above secondary) level of the mother [OR 1.8; 95% CI 1.1-2.7]; dehydration [OR 1.8; 95% CI 1.1-3.0] and breastfeeding [OR 2.6; 95% CI 1.4-4.0]. Although age was significantly associated with rotavirus on bivariate analysis; this association disappeared on multivariate analysis. No significant association was found between rotavirus infection and nutritional status, HIV status and attendance of day care or school.
Rotavirus	Projected health benefits and costs of pneumococcal and rotavirus vaccination in Uganda. J.E.Tatea; A. Kisakye et al	2010	The study team determined the impact and cost effectiveness of rotavirus vaccination programs among children < 5 years of age in Uganda from the public health system perspective. The rotavirus specific model was used to compare the disease burden and cost with and without vaccination program. Introduction of the rotavirus vaccine into the routine immunisation schedule will save 5265 lives, prevent 94,729 rotavirus cases of children < 5 years and save 996 million Uganda shillings (\$0.6 million) indirect medical costs annually. It was also observed that rotavirus vaccine will highly be cost effective.
Rotavirus	Cost-effectiveness of rotavirus vaccination in Kenya and Uganda. Charles Sigei, John Odaga et al Vaccine 33S (2015) A109–A118	2013	The study team conducted a prospective cost-effectiveness analyses for rotavirus vaccine introduction for Kenya and Uganda. In each country a national consultant worked with a national technical working group to identify appropriate data and validate study results. Secondary data on demographics, disease burden, health utilization, and costs were used to populate the TRIVAC cost-effectiveness model. The baseline analysis assumed an initial vaccine price of \$0.20 per dose, corresponding to Gavi, the Vaccine Alliance stipulated copay for low-income countries. The incremental cost-effectiveness of a 2-dose rotavirus vaccination schedule was evaluated for 20 successive birth cohorts from the government perspective in both countries, and from the societal perspective in Uganda. Results specifically for Uganda showed that between 2016 and 2035, rotavirus vaccination can avert approximately 70,236 and 329,779 undiscounted deaths and hospital admissions respectively in children under 5 years in Uganda. Over the 20-year period, the discounted vaccine program costs are around US\$ 60 million in Uganda. Discounted government health service costs avoided are US\$ 10 million in Uganda (or US\$ 18 million including household costs). The

			cost per disability-adjusted life-year (DALY) averted from a government perspective is US\$ 34 in Uganda (US\$ 29 from a societal perspective). Conclusions: Rotavirus vaccine introduction is highly cost-effective and the involvement of national experts improves the quality of data used, is likely to increase acceptability of the results in decision-making, and can contribute to strengthened national capacity to undertake economic evaluations.
Rotavirus	Rotavirus prevalence and genotypes among children younger than 5 Years with Acute Diarrhea at Mulago National Referral Hospital, Kampala, Uganda Amos Odiit, Augustine Mulindwa et al PIDJ Vol 33, No 1, Supp 1, January 2014	2012	The study team reviewed a total of 6387 children with acute diarrhea were enrolled into the public health surveillance system and of these, 5627 had stool samples collected and tested for rotavirus antigens by enzyme immunoassay ProSpecT Rotavirus kit. The results showed that Rotavirus was detected in 1844 (32.8%) of 5627 children with acute diarrhea that had stool specimens collected, and 93% of positive cases of rotavirus gastroenteritis were between 3 and 23 months of age, with highest prevalence in children 6–11 months of age. Rotavirus infections occurred throughout the year. During this period a total of 354 positive stool samples were subjected to reverse transcription polymerase chain reaction and genotyping assays. The most common genotypes detected were G1P [8] (16.1%) and G9P [8] (15.3%), followed by G2P [4] (7.6%), G9P [6] (7.1%), G8P[4] (6.5%) and G12P [6](5.6%). Mixed G or P types (17.9%) and partially typed either G or P types (10.7%) were common. The conclusion was that Uganda would benefit by introducing rotavirus vaccine and hence reduce the hospitalization burden of managing acute diarrhea cases.

6.2. Requested vaccine (Rotavirus, 2-dose schedule)

As reported in the cMYP, the country plans to introduce Rotavirus, using Rotavirus, 2-dose schedule.

When is the country planning to introduce this vaccine? September 2016

Please note that, due to a variety of factors, the launch date may vary compared to the date stipulated in the application. Gavi will work closely with countries and their partners to address these issues.

6.2.1. Co-financing information

If you would like to co-finance an amount higher than the minimum, please provide information in Your co-financing row.

Country group	Low
---------------	-----

	Year 1	Year 2	Year 3	Year 4
	2016	2017	2018	2019
Minimum co-financing	0.20	0.20	0.20	0.20
Your co-financing (please change if higher)	0.20	0.20	0.20	0.20

	Year 1
	2020
Minimum co-financing	0.20
Your co-financing (please change if higher)	0.20

6.2.2. Specifications of vaccinations with new vaccine

	Data from		Year 1	Year 2	Year 3	Year 4
	Data Iroin		2016	2017	2018	2019
Number of children to be vaccinated with the first dose	Table 5.2	#	520,612	1,644,143	1,730,002	1,782,421
Number of children to be vaccinated with the second dose	Table 5.2	#	497,977	1,609,161	1,657,918	1,745,288
Immunisation coverage with the second dose	Table 5.2	#	29 %	92 %	92 %	94 %
Country co-financing per dose	Table 6.2.1	\$	0.2	0.2	0.2	0.2

	Data from		Year 1
	Data from		2020
Number of children to be vaccinated with the first dose	Table 5.2	#	1,874,687
Number of children to be vaccinated with the second dose	Table 5.2	#	1,836,428
Immunisation coverage with the second dose	Table 5.2	#	96 %
Country co-financing per dose	Table 6.2.1	\$	0.2

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

		2016	2017	2018	2019
Number of vaccine doses	#	121,100	358,000	325,700	333,800
Number of AD syringes	#	0	0	0	0
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	0	0	0	0
Total value to be co-financed by the Country [1]	\$	274,000	809,000	736,000	754,500

[1] The co-financing amount for low-income countries indicates costs for the vaccines and any freight charges. The total co-financing amount does not contain the costs and fees of the relevant Procurement Agency, such as contingency buffer and handling fees. Information on these extra costs and fees will be provided by the relevant Procurement Agency as part of the cost estimate to be requested by the Country.

		2020
Number of vaccine doses	#	352,800
Number of AD syringes	#	0
Number of re-constitution syringes	#	0
Number of safety boxes	#	0
Total value to be co-financed by the Country [1]	\$	797,500

[1] The co-financing amount for low-income countries indicates costs for the vaccines and any freight charges. The total co-financing amount does not contain the costs and fees of the relevant Procurement Agency, such as contingency buffer and handling fees. Information on these extra costs and fees will be provided by the relevant Procurement Agency as part of the cost estimate to be requested by the Country.

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

		2016	2017	2018	2019
Number of vaccine doses	#	1,247,000	3,686,100	3,353,900	3,437,300
Number of AD syringes	#	0	0	0	0
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	0	0	0	0
Total value to be co-financed by Gavi	\$	2,818,000	8,329,500	7,578,500	7,767,000

		2020
Number of vaccine doses	#	3,632,800
Number of AD syringes	#	0
Number of re-constitution syringes	#	0
Number of safety boxes	#	0
Total value to be co-financed by Gavi	\$	8,209,000

6.2.5. New and Under-Used Vaccine Introduction Grant

Calculation of Vaccine Introduction Grant for the Rotavirus, 2-dose schedule

Year of New Vaccine Introduction	Births (from Table 5.2)	Share per Birth in US\$	Total in US\$	
2016	1,794,555	0.80	1,435,644	

The Grant will be based on a maximum award of \$0.80 per infant in the birth cohort with a minimum starting grant award of \$100,000

Please describe how the Gavi Vaccine Introduction Grant will be used to facilitate the timely and effective implementation of critical activities in advance of and during the introduction of the new vaccine (refer to the cMYP and the Vaccine Introduction Plan).

The GAVI new vaccine introduction grant will be utilized by the country to support the most critical start up activities; as in country resource mobilization continues. The grant will support the following activities:

- 1. Training of operational level health workers: This will be done in a cascade manner first at the national level to train a pool of trainers of trainers. The trained pool of trainers will then lead training for the operational level health workers at the sub county level.
- 2. Printing of the operational field guides to be provided to each of the trained health workers. Plan is to provide at least a copy per participant
- 3. Advocacy and sensitization targeting the key stakeholders at the national and district level through print media and meetings
- 4. Preventative cold chain maintenance at the district level by both national and district cold chain focal persons
- 5. Support of core teams from the national and district level to supervise and monitor the quality of training at the operational level and the actual vaccination exercise.
- 6. Vaccine distribution at the district level.

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. 28.

Where Gavi support is not enough to cover the full needs, please describe other sources of funding and the expected amounts to be contributed, if available, to cover your full needs.

Apart from the Government of Uganda and GAVI funding, additional funding will be mobilized from in country health development partners mainly;

- 1. UNICEF to support social mobilization activities
- 2. WHO to support supervision and monitoring;
- Other partners will include: CHAI and USAID/MCSP

6.2.6.Integrated disease control

a) Has the country introduced Pneumococcal vaccine? Please describe other existing interventions for prevention and treatment of pneumonia and diarrhoea, and the status of implementation.

Yes, the country introduced PCV10 in April 2013 followed by a phased roll out to all districts by the end January 2014. .

In addition to the PCV 10 introduction and national roll out, the country developed and launched the Uganda Protect, Prevent and Treat Diarrhea and Pneumonia in Uganda Implementation framework 2015-2020. As part of the national commitment to child survival: A Promise Renewed, the PPT strategic implementation framework articulates a holistic approach to controlling and managing pneumonia and diarrhea. The strategies/interventions include:

- 1) <u>Protect</u> children by establishing good health practices from birth through: a) Exclusive breast feeding for 6 months; b) Adequate complimentary feeding; c) Vitamin A supplementation
- 2) <u>Prevent</u> children becoming ill from pneumonia and diarrhea vaccines through: a) vaccines pertussis, measles, Hib, PCV10 and rotavirus b) hand washing with soap c) safe drinking water and sanitation d) reduce household air pollution e) HIV prevention f) cotrimoxazole prophylaxis for HIV infected and exposed children.
- 3) <u>Treat</u> children who are ill from pneumonia and diarrhea with appropriate treatment through: a) improved care seeking and referral b) case management at health facility and community level c) supplies Low Osmolality ORS, zinc, antibiotics and oxygen d) continued feeding including breast feeding

Implementation of activities is ongoing through different programs such as the Integrated Community Case Management for childhood illnesses, diarrhea treatment programs, WASH program and introduction of new vaccines (PCV10 in 2013 and Rotavirus vaccine planned for 2016) strengthening of routine immunization that has contributed to an improvement in Pentavalent 3 coverage.

According to the situational analysis in the HSDP, diarrheal diseases reduction has been driven by the above interventions. The National household latrine coverage is currently 74.8% compared to the national target of 77%, while hand washing with soap after usage is 32.8% compared to the national target 50%. The rural population with access to safe water is at 64%.

b) Please describe, based on a review of current policies, where there may be a gap in policies that might affect supply and delivery of low-osmolarity ORS, zinc, and antibiotics to facilities and/or Community Health Workers.

Key gaps relate to implementation and funding:

- 1. Partial coverage of integrated community case management (iCCM) program. In 2016, 67 of the 112 districts are targeted
- 2. Reliance on donor to fund ORS/zinc procurement costs related to iCCM
- 3. Limited Health Centre II and Health Centre III budget to procure essential medicines, including ORS/Zinc. Supply doesn't meet demand in many district s resulting in frequent stock outs
- c) Please describe any considerations of how Rotavirus vaccination could be used to strengthen joint delivery of services and communication about healthy actions like exclusive breastfeeding and hand washing with soap, and improve water and sanitation, and guidance around care-seeking behaviours.

The Rotavirus vaccine introduction will provide an opportunity to support the implementation of the PPT framework through

1. Supporting integration of district micro-planning and supervision of health facilities and the community level activities on the child health survival interventions

- 2. Prioritizing districts with the highest burden of these two diseases and lowest indicators on breastfeeding, hand washing, access to water, sanitation and treatment seeking for targeted approaches
- 3. Supporting harmonized outreaches and child health promotion campaigns which facilitate a host of activities such as caregiver sensitization, vitamin A supplementation, etc.
- 4. Establishing and maintaining linkages between the different departments especially at district level (Health, Water and Sanitation, Community Based Services)
- d) What are the potential barriers to integration of activities?.

(Consider for example the following components: policy development, management and coordination, supply and data management, service delivery, financing, health worker training, communication and social mobilisation, monitoring and evaluation).

Coordination: Integrated implementation of activities across different sectors and even departments within the Ministry of Health may pose a challenge. To mitigate this, the Ministry will continue to work closely with line ministries, through the office of the Prime Minister

- Competing priorities for health development partner support. To mitigate this, the planning process will
 be aligned with the cMYP and coordination through the health policy advisory committee to ensure
 that activities promote integrated implementation
- Limited resources may compromise the implementation of activities in an integrated manner. Planning, management and coordination of all key stakeholders will be emphasized to ensure resources are equitably distributed across relevant programs
- Overstretched and underfunded EPI program, yet primary health care integration particularly at sub
 national level is often channeled through EPI. This affects quality of service delivery increases the
 burden on health workers. Continues advocacy to increase staffing levels, timely release of funds and
 use of community health structures can significantly help address this challenge. At the district level,
 micro planning will be emphasized.
- e) Has the country developed a roadmap or strategy for strengthening a comprehensive approach to pneumonia and/or diarrhoea prevention and treatment? **Yes**

If Yes, please attach and refer to section 10. Attachments (Document N°24).

If No, please indicate potential area(s) of support required to develop and implement such a plan in the "Technical assistance" section below.

6.2.7. Technical assistance

Please describe any particular area(s) the Ministry would require technical assistance to support the introduction of Rotavirus. Please consider the support in the context of developing and implementing an integrated approach to disease prevention and control.

 Technical assistance to develop a plan of implementation of integration with specific focus on Uganda PPT approach

7. NVS Preventive Campaigns

7.1. Assessment of burden of relevant diseases related to campaigns (if available)

Disease	Title of the assessment	Date	Results
Meningococcal Meningitis	Setting priority for the introduction of the NmA conjugate vaccine in Uganda using the district Prio	June 13-20, 2014	All outbreak cases originate from districts in the Northern region or from districts in the northern part of the Western region. From 2004 to week 22 of 2014, 10,630 cases of suspected meningitis were reported nationally in Uganda through IDSR. Among these, 831 deaths were reported (case-fatality ratio (CFR) of 8%. A large epidemic occurred in 2007 with 4098 cases reported, representing nearly 40% of cases reported during this 10 year period. The majority of IDSR notifications occurred during the dry season (January-June). In terms of the age distribution of outbreak cases, 73.6% are in the target age for mass vaccination of 1-29 years. Among the 2222 outbreak cases with known sex, 1198 (53.9%) were male and 1024 (46.1%) were female. The reported outbreaks occurred primarily during the dry season (January-June) and the majority were due to serogroup A Neisseria meningitidis (NmA), which is a typical pattern observed in Meningitis Belt countries.

Please attach the Plan of Action for each campaign as Document No. 30,29 in Section 10.

7.1.1 Epidemiology and disease burden for Meningococcal A

Please select at least one of the following information sources to justify Meningococcal A disease burden results:

Epidemiological information on burden of disease:

$\overline{\mathbf{Q}}$	1	-	Risk	assessm	ents
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☐ 2 - Other

7.2.Request for Meningococcal A, 10 dose(s) per vial, LYOPHILISED campaign support

7.2.1. Summary for Meningococcal A campaign support

When is the country planning to conduct the MENINACONJUGATE catchup campaign? **November 2016**When is the country planning to conduct this campaign? **November 2016**

Please give a summary of the cMYP and/or the Meningococcal A, 10 dose(s) per vial, LYOPHILISED introduction plan sections that refer to the introduction of Meningococcal A, 10 dose(s) per vial, LYOPHILISED. Outline the key points that informed the decision-making process (data considered etc) and describe the plans for social mobilisation and microplanning, including strategies for insecure or hard-to-reach areas. If they are included in the introduction plan or plan of action, please cite the sections only.

Taking into account the epidemiologic features of meningitis in Uganda and the out puts of the DPT, vaccination was recommended in the Northern region of Uganda. After discussion with local experts, an additional 3 districts in the Western region (Masindi, Hoima, and Buliisa) are recommended for vaccination due to the presence of NmA outbreaks, presence of IDP camps, and in order to contribute to the immunity front along the DRC border. Although the Central region demonstrated high risk on the DPT output based on the number of suspect cases reported, this region was determined to be lower risk given the lack of outbreaks detected and lack of NmA confirmation in this region.

Experts from the MoH and WHO agreed that this proposed immunization zone should benefit from large-scale preventive campaigns against Nm A and supported the outputs of the risk assessment and proposed introduction strategy. A detailed assessment of the immunization capacities and needs will be necessary to finalize the planning of the campaigns for the GAVI application.

The Nm A conjugate vaccine is introduced in the form of vertical mass-immunization campaigns of persons aged 1-29 years old, representing 70% of the total population. These campaigns are usually conducted through the routine immunization channels, after the rainy season and before the meningitis epidemic season. The target vaccine coverage is of at least 90%. It is recommended that Uganda conduct a single mass vaccination campaign in 2015 in this proposed immunization zone

UNEPI has an existing national social mobilization task force headed by the Ministry of Health and UNICEF. The task force is responsible for advocacy, communication and social mobilization at the national, regional and district level. The group works in collaboration with political leaders, health development partners and NGOs, districts, media organizations, and community resource persons.

In the MenAfriVac campaign, the task force will conduct stakeholders meetings at national, regional and district level in the selected 38 districts to sensitize the technical teams, political and popular opinion leaders on MenAfriVac vaccination campaign.

The people to be targeted through advocacy will include

- Policy makers Cabinet and Parliamentarians
- Health Policy Advisory Committee (HPAC)
- Uganda Communication Commission (UCC)
- Media houses (Print, Electronic, telecommunication)
- Development Partners and Non-Governmental Organizations(NGOs) in Health
- Government Ministries, Local Government and Agencies
- Religious Leaders and Traditional Leaders at National and District levels

A comprehensive advocacy, social mobilization and behavior change communication strategy targeting different audiences, as well as service providers will be developed prior to the commencement of the MenAfriVac campaign. Emphasis will be given on ensuring a well-defined and executed advocacy and social mobilization strategy in order to:

- create awareness and sustain demand for Men A among the target group
- address all rumours and misinformation that exist or may occur
- routine immunisation mobilisation and strengthening
- detect and report on any potential AEFI

Communication activities will be undertaken through print and electronic media and will include: messages on the benefits of the campaign, talk shows and use of SMS messaging, among others. In addition communication materials like posters and leaflets will be circulated to the target population. The communication materials and messages will be translated into the appropriate local language for a given district.

At community level, demand for MenAfriVac and routine immunization will be created through community sensitization which will start three (3) months prior. Communication sub committees will be set up at the national and district level. At the national level, the subcommittee will be tasked with:

- Review and update of EPI IEC messages and materials
- Conduct stakeholder sensitization meetings for key decision makers, district, religious leaders, media and professional association to start 4 months prior to the campaign
- Prepare and disseminate press releases on the campaign
- Print and distribute IEC materials
- Engage the relevant line ministries of Education, Gender, Labor and Social development, agriculture, water and Karamoja (hard to reach and hard to access region)
- Plan the launch a MenAfriVac vaccination campaign in high risk district

At Sub national level:

- Sensitization of local leaders, school (pre-primary, primary, secondary and tertiary levels)
- Work with the community development office to mobilize within existing community structures
- Ensure that campaign messages are aired on the community radios and in the local language
- Engage telecom providers and mtrac to communicate campaign dates and other information to health workers
- For insecure areas like Karamoja: Engage kraal leaders, religious and cultural leaders.

The micro planning process will be bottom up planning. At national level, planning will be coordinated through the NCC and at district level, through the expanded DHT.

Previous lessons from the campaigns will be used to consolidate the planning process

Key activities will be:

- Procurement of logistics and vaccine requirements
- Review and updating of training tools
- Coordination meetings with line ministries i.e. Ministries of Education, Gender and Karamoja region
- Include all health facilities, institution clinics, independent posts in the plan
- temporary Recruitment of post workersin addition to existing human resources
- mapping of to better understand geographical settings and barriers and consequently inform appropriate planning
- Compilation of the micro plans of district and national subcommittees into a comprehensive budget plan for national
- Cross border planning and coordination meetings

Through these activities, the ministry will ensure that all target groups are reached and well planned for, including the mobile populations, youth and hard to reach communities.

Please summarise the cold chain capacity (at central and other levels) and readiness to accommodate new vaccines, taking into consideration training, cold chain and other logistic requirements. If cold chain expansion is required, state how it will be financed, and when it will be in place. Please describe how the surge capacity for campaigns will be managed. Please indicate if the supplies for the campaign will have any impact in the shipment plans for your routine vaccines and how it will be handled. The Independent Review Committee requires a certain level of assurance that the cold chain is ready or will be ready for the campaign, and evidence/plans need to be provided (if they are included in detail in the plan of action, please cite the section here).

New Requirement: As approved by Gavi in June 2014 all future proposals (2015 and beyond) that include

Gavi-financing for cold chain equipment intended for vaccine storage shall need to procure equipment prequalified by WHO under their Performance Quality and Safety (PQS) program. The purchase of non-PQS equipment will only be considered on an exceptional basis, with justification and advance agreement from Gavi. Please note that all Gavi-financed cold chain equipment needs to be WHO pre-qualified. The purchase of non-PQS equipment will only be considered on exceptional basis, with justification and advance agreement from Gavi.

Included in the plan of introduction and action for Rotavirus Vaccine (section 7.5) and Men A campaign (section 5.7) respectively

Please describe any plans for expanding measles surveillance to include rubella and plans for the introduction of Congenital Rubella Syndrome (CRS) surveillance.

Men A campaign will be utilized to strengthen routine immunization through catch up activities of missed children below five years of age by:

- Use this campaign to identify children in their community who have missed routine vaccines to be brought for routine vaccination. This will be done by the Villge Health Teams during house to house mobilization using a registration form. The same opportunity will be used to document reasons for failure to vaccinate or failure to complete vaccination schedule.
- Used as an opportunity for catch up screening for girls who missed HPV, WCBA, men and pregnant women who missed their Tetanus doses to get these vaccination
- This will be verified with cards as evidence of how we have strengthened routine immunisation during the independent monitoring process.

Implementation strategy for the campaign

Two health workers and two mobilisers(post based) will be budgeted for and each post will have two vaccine carriers one for Men A vaccine and second carrier with other routine antigens.

Please submit relevant documentation to support the estimates of the size of the campaign target population (as DOCUMENT NUMBER : 23).

7.2.2. Grant Support for Operational Costs of the Meningococcal A Campaign

Table 7.2.2: calculation of grant to support the operational costs of the campaigns (mini catch up campaigns and mass campaigns)

Year of Meningococcal A support	Total target population (from Table 5.3)	Gavi contribution per target person in US\$	Total in US\$
2016	7,004,074	0.65	4,552,648

[1] The Grant will be based on a maximum award of \$0.65\$ per target person- (synergies between mass campaigns, mini catch up campaigns and routine immunisation need to be highlighted. There will be common activities such as training across the new introductions).

Please describe how the grant will be used to facilitate the preparation and timely and effective delivery of the campaigns to the target population (refer to the cMYP and the Vaccine Introduction Plan).

The grant will be used to support the following activities

- Planning
- Coordination meetings at national and district level
- Planning meetings at national and district level
- Social Mobilization
- Review and update messages and materials, printing and distribution of materials.
- Sensitization of key decision makers

- Community sensitization preferably 3 months prior to the launch date(using media and other relevant communication channels)
- National and district launch
- 3. Training
- Printing of the training guide
- Cascade training (national direct to district level) for health workers
- 4. Logistics and vaccine management
- Repair and maintenance of the cold chain equipment (TA)
- Distribution of vaccines from national to district level and from district to health facility level including community posts
- 5. Surveillance and monitoring
- Update, print and distribute monitoring tools(tally sheets, child register, child health card/mother passport)
- Conduct an independent monitoring of uptake of MenA
- 6. Waste management
- Ensure preparedness at health facilities for waste management disposal using incinerators. Where not available, plan to procure incinerators

Where Gavi support is not enough to cover the full needs, please describe other sources of funding and the expected amounts to be contributed, if available, to cover your full needs.

A part from the Government of Uganda and GAVI funding, additional funding will be mobilised from in country health development partners mainly;

- 1. UNICEF to support social mobilization activities,
- 2. WHO to support supervision and monitoring;
- 3. Other partners will include: USAID/MCSHP, CHAI,

Please complete the 'Detailed budget for VIG / Operational costs' template provided by Gavi and attach as a mandatory document in the Attachment section. VIG/operational costs template should detail or highlight activities for mini catch and comment on synergies across the VIGs).

Detailed budget attached as Document No. 28.

7.2.3 Meningococcal A Vaccine introduction Grant

Has a Meningococcal A vaccine already been introduced nationally on a routine basis? No

Calculation of Vaccine Introduction Grant for the Meningococcal A, 10 dose(s) per vial, LYOPHILISED

Please indicate in the tables below how the one-time Introduction Grant [1] will be used to support the costs of vaccine introduction and critical pre-introduction activities (refer to the cMYP). Gavi's support may not be enough to cover the full needs so please indicate in the table below how much and who will be complementing the funds needed.

Year of New Vaccine Introduction	Birth cohort (from Table 5.1)	Gavi contribution per target person in US\$	Total in US\$	
2016	1,690,555	0.80	1,352,444	

[1] The Grant will be based on a maximum award of \$0.80 per person in the birth cohort with a minimum starting grant award of \$100,000

Please describe how the Gavi Vaccine Introduction Grant will be used to facilitate the timely and effective implementation of critical activities in advance of and during the introduction of the new vaccine (refer to the cMYP and the Vaccine Introduction Plan).

MenA vaccination will be conducted as a mass campaign in selected high risk districts.

MenA vaccination will not be introduced into the routine immunisation schedule following this mass campaign. This decision takes into consideration the WHO recommendation of introducing MenA into routine immunisation at least 1-5 years from the mass campaign.

8. Procurement and Management

8.1 Procurement and Management of New and Under-Used Vaccines Routine

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 procurement of vaccines (Gavi expects that most countries will procure vaccine and injection supplies through UNICEF or PAHO's Revolving Fund):

Procurement and management will follow the existing vaccine procurement mechanisms whereby the Ministry of Health through the National Medical Stores (NMS), provides funds to UNICEF country office that procures vaccines from WHO pre-qualified suppliers. Similarly, GAVI supported vaccines will be procured through UNICEF as per procedure of the existing government arrangement. All this is governed by an MOU signed annually between Ministry of Health and UNICEF.

- b) If an alternative mechanism for procurement and delivery of vaccine supply (financed by the country or the 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 procurement of locally-produced vaccines directly from a manufacturer which may not have been prequalified 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 is assured by a fully functional National Regulatory Authority (NRA), as assessed by WHO in the countries where they are manufactured and where they are purchased.

Not Applicable.

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 should be transferred using already established mechanisms i.e. from Gavi to the Ministry of Finance and Economic Development.

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

A vote for Rotavirus vaccine co-financing will be included in the Ministry of Health annual budget. Funds will be released from Ministry of Finance, Planning and Economic Development to Ministry of Health (MOH) Upon approval by Permanent Secretary of the Ministry of Health, MOH will transfer funds to UNICEF Supply Division that manages the procurement of Gavi approved vaccines

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

The Ministry of Finance, Planning and Economic Development (MoFPED) is the Principal Recipient(PR) of GAVI funds similar to all funds received by the Government of Uganda (GoU) according to Article153 (1) of the Constitution of The Republic of Uganda of 1995 and the Public Finance and Accountability Act of 2003.

The MoFPED maintains a GAVI specific bank account (USD account) in Bank of Uganda as a **'Collection Account'** where all the funds from GAVI alliance are disbursed. The name of the account is the Global Alliance for Vaccines Initiative Health Systems Strengthening (GAVI HSS) Grant.

Two additional GAVI designated project bank accounts are operated by the Ministry of Health in the Bank of Uganda

When funds are received by the MoFPED **collection account**, they are transferred to the GAVI US Dollar account (GAVI Vaccines Fund USD Account) on request by the Permanent Secretary (Ministry of Health) to PSST (MoFPED).

The Uganda shillings account (GAVI Vaccines Fund UGX) is then used for payment of transactions in local currency for GAVI supported activities to all Sub Recipients (SR) including but not limited to local governments.

Funds disbursed to local governments are transferred from the MoH GAVI UGX account directly to the District General Collection bank accounts (receipt of which is confirmed in writing by the local government accounting officers to the Ministry of Health).

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

Rotavirus vaccine monitoring will be integrated in the existing routine immunisation HMIS reporting. All EPI data is recorded and reported using the existing Health Management Information tools (HMIS). The existing tools have already been revised to incorporate information on the new vaccines and gender segregation including rotavirus two dose schedule. HMIS monthly reports are submitted from the districts to the Ministry of Health electronically using the E HMIS (DHIS2) by the 15th day of the following month where data is aggregated. Monthly reports are aggregated to compile annual reports. The information is incorporated into the WHO/UNICEF Joint Reporting Format which is submitted annually by the 15th April of the following year and also GAVI APR. Periodically (every 5 years) nationwide coverage surveys and Demographic Health Surveys are done to verify immunization coverage. The monitoring indicators of the new vaccine to be introduced have been included in the new cMYP 2016-2020.

- g) If applying for measles second dose, does the country wish to have the support in cash or in-kind? N/A
- 8.2 Procurement and Management for NVS Preventive Campaign(s)

8.2.1 Procurement and Management for Meningococcal A, 10 dose(s) per vial, LYOPHILISED campaign

a) Please show how the support will operate and be managed including procurement of vaccines (Gavi expects that countries will procure vaccine and injection supplies through UNICEF):

The current mechanism will be explored given that Men A vaccine will be 100% procured by Gavi hence GAVI supported vaccine including Men A will be procured through UNICEF as per procedure of the existing government arrangement.

b) Please describe the financial management procedures that will be applied for the management of the preventive campaign cash support, including any procurement to be incurred.

The Ministry of Finance, Planning and Economic Development (MoFPED) is the Principal Recipient(PR) of GAVI funds similar to all funds received by the Government of Uganda (GoU) according to Article153 (1) of the Constitution of The Republic of Uganda of 1995 and the Public Finance and Accountability Act of 2003.

The MoFPED maintains a GAVI specific bank account(USD account) in BoU as a **'Collection Account'** where all the funds from GAVI alliance are disbursed. The name of the account is the Global Alliance for Vaccines Initiative Health Systems Strengthening (GAVI HSS) Grant.

When funds are received (Men A VIG) by the MoFPED **collection account**, they are transferred to the GAVI US Dollar account (GAVI Vaccines Fund USD Account) on request by the PS (MoH) to PSST (MoFPED).

The Uganda shillings account (GAVI Vaccines Fund UGX) is then used for payment of transactions in local currency for GAVI supported activities to all Sub Recipients (SR) including but not limited to local governments.

Funds disbursed to local governments are transferred from the MoH GAVI UGX account directly to the District General Collection bank accounts (receipt of which is confirmed in writing by the local government accounting officers to the MoH).

c) Please indicate if the campaign is going to be phased, and if so, how this will be done.

The preventative MenA mass campaign will not be phased. All high risk districts will implement the campaign during the proposed dates set by the Ministry of Health in close collaboration with its partners. The Ministry of Health will ensure that operational funds are available at all levels prior to commencement of activities as earlier documented during the lessons learnt section in this proposal.

d) Please outline how coverage of the campaign including mini catch up campaigns will be monitored, reported and evaluated (refer to the cMYP and/or the Meningococcal A, 10 dose(s) per vial, LYOPHILISED campaign introduction plan)

The MenA mass campaign specific monitoring tools will be reviewed and updated using various forms from the tally sheets, parish level forms, sub county level forms and the district level. The districts will submit data by sub county level and district aggregate figures to the national level to obtain national level aggregates by district and sub county level. Vaccination cards for MenA will also be produced and used during the campaign in the high risk districts. Immediately after the MenA mass campaign, independent monitors will conduct a post campaign evaluation exercise. This team will be dispatched to the districts on the last day of the campaign and commence their activity on the following day. The team will be trained at the national level preferably during the week of implementation.

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 prequalification and, if so, describe the procedure and its duration. In addition, state whether the country accepts the Expedited Procedure for national registration of WHO-prequalified vaccines.

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

The following vaccines are already registered by the National Drug Authority of Uganda therefore there will be no need to request for registration.

Rotarix - Licensed, Manufactured by GLAXOSMITHKLINE BOILOGICALS S.A RUE DE l'INSTITUT 89 B-1330 RIXENSART; Reg.No - 7878/19/13)

MenAfriVac - Manufacturedby SERUM INSTITUTE OF INDIA 212/2 HADARPSARPUNE -411028; Reg. No - 7683/19/11)

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

The actual licensure status is highligted below:

Rotarix - Licensed, Manufacturedby GLAXOSMITHKLINE BOILOGICALS S.A RUE DE l'INSTITUT 89 B-1330 RIXENSART; Reg.No - 7878/19/13)

MenAfriVac - Manufactured by SERUM INSTITUTE OF INDIA 212/ 2 HADARPSARPUNE -411028; Reg. No - 7683/19/11)

Please describe local customs regulations, requirements for pre-delivery inspection, 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.

This will not be applicable given that the two vaccines are already registered in Uganda.

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.

This is not applicable.

8.4 Vaccine Management (EVSM/EVM/VMA)

It is mandatory for countries to conduct an Effective Vaccine Management (EVM) assessment prior to an application for introduction of new vaccine. This EVM should have been conducted within the preceding 36 months.

When was the EVM conducted? October 2014

Please attach the most recent EVM assessment report (DOCUMENT NUMBER: 25,26,27), the corresponding EVM improvement plan (DOCUMENT NUMBER: 26) and progress on the EVM improvement plan (DOCUMENT NUMBER: 27). 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.

If any of the above mandatory documents (EVM Assessment Report, EVM Improvement Plan, Progress on the EVM Improvement Plan) are not available, please provide justification and reference to additional documents such as PIE and External EPI Reviews.

When is the next Effective Vaccine Management (EVM) Assessment planned? October 2017

Not applicable.

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), the safe handling, storage, transportation and disposal of immunisation waste, as part of a healthcare waste management strategy. Please describe the country's waste management plan for immunisation activities (including campaigns).

Uganda has a Health care waste Management policy and three disposal methods are common for immunization waste:

a) Burying

In this method of disposal, waste is placed in a pit and covered with soil. The site for the waste pit is at least 50 meters away from any water source to avoid contamination of the source and the pitis usually located on land that is not used for agriculture or development.

b) Burning

Waste is placed in a pit and burned on a regular basis (at least once a week, according to the volume of waste and the size of the pit). The waste is burned thoroughly and ashes covered with earth. Pits are 1-2 meters wide and to the depth of 2-5 meters, but at least 1.5 meters above water table. The pit is usually fenced off to restrict unauthorized access and located away from public areas. Kerosene is added to the waste before starting the fire to avoid explosions.

c) Incineration

This method is used in some districts in particular at district and regional referral hospitals

For both vaccines, the waste will be managed using safety boxes which will be disposed of using burning and burying method in health facilities. Incinerators will be used where available. A provision to procure incinerators has been included in the cMYP 2016-2020; to improve on waste disposal at all levels providing immunisation services.

9. Additional Comments and Recommendations from the National Coordinating Body (ICC/HSCC)

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

In addition to the minutes, HPAC members asked for clarification on the co-financing for the MenA campaign and if there are plans to introduce it into the routine immunisation

10. List of documents attached to this proposal

10.1. List of documents attached to this proposal

Document Number	Document	Section	Mandatory	File
1	MoH Signature (or delegated authority) of Proposal	4.1.1	✓	MOH signature.pdf File desc: Date/time: 08/09/2015 04:37:44 Size: 849 KB
2	MoF Signature (or delegated authority) of Proposal	4.1.1	>	Signatures of the Ministers (MoH & MoFPED).pdf File desc: Date/time: 08/09/2015 08:35:01 Size: 860 KB
3	MoE signature (or delegated authority) of HPV Proposal	4.1.1	X	MOE signature.doc File desc: Date/time: 15/07/2015 03:08:41 Size: 22 KB
4	Terms of Reference for the ICC	4.1.2	>	HSSIP Compact Uganda final.pdf File desc: Date/time: 15/07/2015 03:11:38 Size: 790 KB
5	Minutes of ICC/HSCC meeting endorsing Proposal	4.1.3	>	HPAC MINUTES 02 SEPT 2015.pdf File desc: Date/time: 08/09/2015 09:31:02 Size: 6 MB
6	Signatures of ICC or HSCC or equivalent in Proposal	4.1.3	>	Signatures HPAC New Doc 54.pdf File desc: Date/time: 08/09/2015 04:39:29 Size: 1 MB
			✓	HPAC minutes - May 2015.pdf File desc: Date/time: 08/09/2015 05:16:38 Size: 4 MB
7	Minutes of last three ICC/HSCC meetings	4.1.3		HPAC MINUTES 17TH JUNE.pdf File desc: Date/time: 08/09/2015 09:11:21 Size: 3 MB
				HPAC MINUTES 8TH JULY.pdf File desc:

				Date/time : 08/09/2015 09:25:26 Size : 6 MB
8	A description of partner participation in preparing the application	4.1.3	×	Process of application UG.pdf File desc: Date/time: 08/09/2015 09:27:55 Size: 361 KB
	Minutes of NITAG meeting with		X	MenAfriVac UNITAG Final.pdf File desc: Date/time: 08/09/2015 04:54:37 Size: 1 MB
9	specific recommendations on the NVS introduction or campaign	4.2		Rota UNITAG Final.pdf File desc: Date/time: 08/09/2015 04:52:53 Size: 676 KB
10	Role and functioning of the advisory group, description of plans to establish a NITAG	4.2.1	>	INTERNAL PROCEDURES MANUAL FOR A NATIONAL TECHNICAL ADVISORY GROUP FOR UGANDA.pdf File desc: Date/time: 15/07/2015 04:10:32 Size: 672 KB
11	comprehensive Multi Year Plan - cMYP	5.1	>	UG cMYP 2016-2020 Final.pdf File desc: Date/time: 08/09/2015 08:54:31 Size: 3 MB
12	cMYP Costing tool for financial analysis	5.1	>	Costing tool UG.xlsx File desc: Date/time: 08/09/2015 05:24:24 Size: 3 MB
13	Monitoring and evaluation and surveillance (M&E) plan for the support requested, within the context of the country's existing monitoring plan for the EPI programme	5.1.5	>	Monitoring and evaluation surveillance.doc File desc: Date/time: 08/09/2015 05:39:53 Size: 22 KB
14	Vaccine introduction plan	5.1	>	Rotavirus Vaccine UG FINAL.pdf File desc: Date/time: 08/09/2015 08:56:11 Size: 1 MB
15	Introduction Plan for the introduction of RCV / JE / Men A into the national programme	7.x.4	×	MenA POA UG Final.pdf File desc: Date/time: 08/09/2015 05:27:36 Size: 1 MB

16	Data quality assessment (DQA) report	5.1.5	×	DQS report 2013.pdf File desc: Date/time: 15/07/2015 03:28:03 Size: 995 KB
17	DQA improvement plan	5.1.5	×	Data Improvement plan and progress report.pdf File desc: Date/time: 16/07/2015 05:12:51 Size: 815 KB
19	HPV roadmap or strategy	6.1.1	×	HPV roadmap.doc File desc: Date/time: 16/07/2015 07:56:08 Size: 22 KB
20	Introduction Plan for the introduction of RCV into the national programme	7.x.4	×	Rotavirus Vaccine UG FINAL copy.pdf File desc: Date/time: 08/09/2015 09:35:46 Size: 1 MB
21	HPV summary of the evaluation methodology	5.1.6	X	HPV summary of evaluation.doc File desc: Date/time: 16/07/2015 08:05:36 Size: 22 KB
22	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	×	Evidence of RCV commitment.doc File desc: Date/time: 16/07/2015 08:09:16 Size: 22 KB
23	Campaign target population documentation	7.x.1	>	UBOS Projections.pdf File desc: Date/time: 08/09/2015 05:44:54 Size: 2 MB
24	Roadmap or strategy for strengthening a comprehensive approach to pneumonia and/or diarrhoea prevention and treatment	6.x.6	×	PPTDP_Ug-2015-2020 Implementation FrameWork PrintReady4-1.pdf File desc: Date/time: 16/07/2015 08:11:37 Size: 1 MB
25	EVM report	8.3	>	Uganda EVMA report 2014.pdf File desc: Date/time: 15/07/2015 03:03:49 Size: 2 MB

	1			1
26	Improvement plan based on EVM	8.3	>	Uganda EVMA Oct 2014 Improvement Plan for NVS.xls File desc: Date/time: 15/07/2015 03:05:02 Size: 62 KB
27	EVM improvement plan progress report	8.3	>	Uganda EVMA Oct 2014 Improvement plan - Status copy.xls File desc: Date/time: 08/09/2015 09:02:03 Size: 51 KB
28	Detailed budget template for VIG / Operational Costs	6.x,7.x.2	\	Final Men A VIG budget.xls File desc: Date/time: 08/09/2015 06:09:47 Size: 81 KB Final UG VIG Rota budget.xls File desc: Date/time: 08/09/2015 07:08:51 Size: 99 KB
29	Risk assessment and consensus meeting report for Meningitis / Yellow Fever: (for yellow fever please include information required in the NVS guidelines on YF Risk Assessment process)	7.1	>	Meningitis.DPT.Uganda.REPORT.June2014 LC SM.pdf File desc: Date/time: 16/07/2015 08:13:56 Size: 1 MB
30	Plan of Action for campaigns	7.1, 7.x.4	>	Time line MenAfriVac campaign.xlsx File desc: Date/time: 08/09/2015 07:00:22 Size: 18 KB
	Other		×	Comments on two signatures from the Honorable ministers.doc File desc: Date/time: 08/09/2015 09:33:39 Size: 23 KB

11. Annexes

Annex 1 - NVS Routine Support

Annex 1.1 - NVS Routine Support (Rotavirus, 2-dose schedule)

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

		2016	2017	2018	2019
Number of vaccine doses	#	121,100	358,000	325,700	333,800
Number of AD syringes	#	0	0	0	0
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	0	0	0	0
Total value to be co-financed by the Country [1]	\$	274,000	809,000	736,000	754,500

		2020
Number of vaccine doses	#	352,800
Number of AD syringes	#	0
Number of re-constitution syringes	#	0
Number of safety boxes	#	0
Total value to be co-financed by the Country [1]	\$	797,500

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

		2016	2017	2018	2019
Number of vaccine doses	#	1,247,000	3,686,100	3,353,900	3,437,300
Number of AD syringes	#	0	0	0	0
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	0	0	0	0
Total value to be co-financed by Gavi	\$	2,818,000	8,329,500	7,578,500	7,767,000

		2020
Number of vaccine doses	#	3,632,800
Number of AD syringes	#	0
Number of re-constitution syringes	#	0
Number of safety boxes	#	0
Total value to be co-financed by Gavi	\$	8,209,000

Table Annex 1.1 C: Summary table for vaccine Rotavirus, 2-dose schedule

ID		Data from		2016	2017	2018	2019
	Number of surviving infants	Table 5.2	#	1,697,649	1,749,088	1,802,085	1,856,689
	Number of children to be vaccinated with the first dose	Table 5.2	#	520,612	1,644,143	1,730,002	1,782,421
	Number of children to be vaccinated with the second dose	Table 5.2	#	497,977	1,609,161	1,657,918	1,745,288
	Immunisation coverage with the second dose	Table 5.2	%	29 %	92 %	92 %	94 %
	Number of doses per child	Parameter	#	2	2	2	2
	Estimated vaccine wastage factor	Table 5.2	#	1.05	1.05	1.05	1.05
	Number of doses per vial	Parameter	#	1	1	1	1
	AD syringes required	Parameter	#	No	No	No	No
	Reconstitution syringes required	Parameter	#	No	No	No	No
	Safety boxes required	Parameter	#	No	No	No	No
СС	Country co-financing per dose	Table 6.4.1	\$	0.2	0.2	0.2	0.2
ca	AD syringe price per unit	Table Annexes 4A	\$	0.448	0.448	0.448	0.448
cr	Reconstitution syringe price per unit	Table Annexes 4A	\$	0	0	0	0
cs	Safety box price per unit	Table Annexes 4A	\$	0.0054	0.0054	0.0054	0.0054
fv	Freight cost as % of vaccines value	Table Annexes 4B	%	3.00 %	3.00 %	3.00 %	3.00 %

ID		Data from		2020
	Number of surviving infants	Table 5.2	#	1,912,946
	Number of children to be vaccinated with the first dose	Table 5.2	#	1,874,687
	Number of children to be vaccinated with the second dose	Table 5.2	#	1,836,428
	Immunisation coverage with the second dose	Table 5.2	%	96 %
	Number of doses per child	Parameter	#	2
	Estimated vaccine wastage factor	Table 5.2	#	1.05
	Number of doses per vial	Parameter	#	1
	AD syringes required	Parameter	#	No
	Reconstitution syringes required	Parameter	#	No
	Safety boxes required	Parameter	#	No
СС	Country co-financing per dose	Table 6.4.1	\$	0.2
са	AD syringe price per unit	Table Annexes 4A	\$	0.448
cr	Reconstitution syringe price per unit	Table Annexes 4A	\$	0
cs	Safety box price per unit	Table Annexes 4A	\$	0.0054
fv	Freight cost as % of vaccines value	Table Annexes 4B	%	3.00 %

Table Annex 1.1 D: Estimated numbers for Rotavirus, 2-dose schedule, associated injection safety material and related co-financing budget (page 1)

		Formula		2016	
			Total	Government	Gavi
Α	Country co-finance	V	8.85 %		
В	Number of children to be vaccinated with the first dose	Table 5.2	520,612	46,080	474,532
С	Number of doses per child	Vaccine parameter (schedule)	2		
D	Number of doses needed	B x C	1,041,224	92,160	949,064
Ε	Estimated vaccine wastage factor	Table 5.2	1.05		
F	Number of doses needed including wastage	D x E	1,093,286	96,769	996,517
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]	273,322	24,193	249,129
ı	Total vaccine doses needed	Round up((F + G) / Vaccine package size) * Vaccine package size	1,368,000	121,084	1,246,916
J	Number of doses per vial	Vaccine parameter	1		
K	Number of AD syringes (+ 10% wastage) needed	(D + G) x 1.11	0	0	0
L	Reconstitution syringes (+ 10% wastage) needed	(I / J) x 1.11	0	0	0
М	Total of safety boxes (+ 10% of extra need) needed	(I / 100) x 1.11	0	0	0
N	Cost of vaccines needed	I x vaccine price per dose (g)	3,009,053	266,335	2,742,718
0	Cost of AD syringes needed	K x AD syringe price per unit (ca)	0	0	0
Р	Cost of reconstitution syringes needed	L x reconstitution 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 % of vaccines value (fv)	82,081	7,266	74,815
s	Freight cost for devices needed	(O+P+Q) x freight cost as % of devices value (fd)	0	0	0
Т	Total fund needed	(N+O+P+Q+R+S)	3,091,134	273,600	2,817,534
U	Total country co-financing	I x country co- financing per dose (cc)	273,600		
٧	Country co-financing % of Gavi supported proportion	U / (N + R)	8.85 %		

Table Annex 1.1 D: Estimated numbers for Rotavirus, 2-dose schedule, associated injection safety material and related co-financing budget (page 2)

		Formula		2017	
			Total	Government	Gavi
Α	Country co-finance	V	8.85 %		
В	Number of children to be vaccinated with the first dose	Table 5.2	1,644,143	145,526	1,498,617
С	Number of doses per child	Vaccine parameter (schedule)	2		
D	Number of doses needed	B x C	3,288,286	291,051	2,997,235
Ε	Estimated vaccine wastage factor	Table 5.2	1.05		
F	Number of doses needed including wastage	D x E	3,452,701	305,603	3,147,098
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]	589,854	52,209	537,645
ı	Total vaccine doses needed	Round up((F + G) / Vaccine package size) * Vaccine package size	4,044,000	357,940	3,686,060
J	Number of doses per vial	Vaccine parameter	1		
K	Number of AD syringes (+ 10% wastage) needed	(D + G) x 1.11	0	0	0
L	Reconstitution syringes (+ 10% wastage) needed	(I/J) x 1.11	0	0	0
М	Total of safety boxes (+ 10% of extra need) needed	(I / 100) x 1.11	0	0	0
N	Cost of vaccines needed	I x vaccine price per dose (g)	8,895,183	787,324	8,107,859
0	Cost of AD syringes needed	K x AD syringe price per unit (ca)	0	0	0
Р	Cost of reconstitution syringes needed	L x reconstitution 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 % of vaccines value (fv)	242,641	21,477	221,164
s	Freight cost for devices needed	(O+P+Q) x freight cost as % of devices value (fd)	0	0	0
Т	Total fund needed	(N+O+P+Q+R+S)	9,137,824	808,800	8,329,024
U	Total country co-financing	I x country co- financing per dose (cc)	808,800		
٧	Country co-financing % of Gavi supported proportion	U / (N + R)	8.85 %		

Table Annex 1.1 D: Estimated numbers for Rotavirus, 2-dose schedule, associated injection safety material and related co-financing budget (page 3)

		Formula		2018	
			Total	Government	Gavi
Α	Country co-finance	V	8.85 %		
В	Number of children to be vaccinated with the first dose	Table 5.2	1,730,002	153,125	1,576,877
С	Number of doses per child	Vaccine parameter (schedule)	2		
D	Number of doses needed	B x C	3,460,004	306,250	3,153,754
Ε	Estimated vaccine wastage factor	Table 5.2	1.05		
F	Number of doses needed including wastage	D x E	3,633,005	321,562	3,311,443
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]	45,076	3,990	41,086
ı	Total vaccine doses needed	Round up((F + G) / Vaccine package size) * Vaccine package size	3,679,500	325,678	3,353,822
J	Number of doses per vial	Vaccine parameter	1		
K	Number of AD syringes (+ 10% wastage) needed	(D + G) x 1.11	0	0	0
L	Reconstitution syringes (+ 10% wastage) needed	(I/J) x 1.11	0	0	0
М	Total of safety boxes (+ 10% of extra need) needed	(I / 100) x 1.11	0	0	0
N	Cost of vaccines needed	I x vaccine price per dose (g)	8,093,429	716,360	7,377,069
0	Cost of AD syringes needed	K x AD syringe price per unit (ca)	0	0	0
Р	Cost of reconstitution syringes needed	L x reconstitution 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 % of vaccines value (fv)	220,771	19,541	201,230
s	Freight cost for devices needed	(O+P+Q) x freight cost as % of devices value (fd)	0	0	0
Т	Total fund needed	(N+O+P+Q+R+S)	8,314,200	735,901	7,578,299
U	Total country co-financing	I x country co- financing per dose (cc)	735,900		
٧	Country co-financing % of Gavi supported proportion	U / (N + R)	8.85 %		

Table Annex 1.1 D: Estimated numbers for Rotavirus, 2-dose schedule, associated injection safety material and related co-financing budget (page 4)

		Formula		2019	
			Total	Government	Gavi
Α	Country co-finance	V	8.85 %		
В	Number of children to be vaccinated with the first dose	Table 5.2	1,782,421	157,765	1,624,656
С	Number of doses per child	Vaccine parameter (schedule)	2		
D	Number of doses needed	B x C	3,564,842	315,529	3,249,313
Е	Estimated vaccine wastage factor	Table 5.2	1.05		
F	Number of doses needed including wastage	D x E	3,743,085	331,306	3,411,779
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]	27,520	2,436	25,084
ı	Total vaccine doses needed	Round up((F + G) / Vaccine package size) * Vaccine package size	3,771,000	333,776	3,437,224
J	Number of doses per vial	Vaccine parameter	1		
K	Number of AD syringes (+ 10% wastage) needed	(D + G) x 1.11	0	0	0
L	Reconstitution syringes (+ 10% wastage) needed	(I/J) x 1.11	0	0	0
М	Total of safety boxes (+ 10% of extra need) needed	(I / 100) x 1.11	0	0	0
N	Cost of vaccines needed	I x vaccine price per dose (g)	8,294,692	734,174	7,560,518
0	Cost of AD syringes needed	K x AD syringe price per unit (ca)	0	0	0
Р	Cost of reconstitution syringes needed	L x reconstitution 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 % of vaccines value (fv)	226,261	20,027	206,234
s	Freight cost for devices needed	(O+P+Q) x freight cost as % of devices value (fd)	0	0	0
Т	Total fund needed	(N+O+P+Q+R+S)	8,520,953	754,200	7,766,753
U	Total country co-financing	I x country co- financing per dose (cc)	754,200		
٧	Country co-financing % of Gavi supported proportion	U / (N + R)	8.85 %		

Table Annex 1.1 D: Estimated numbers for Rotavirus, 2-dose schedule, associated injection safety material and related co-financing budget (page 5)

		Formula	2020		
			Total	Government	Gavi
Α	Country co-finance	V	8.85 %		
В	Number of children to be vaccinated with the first dose	to be vaccinated with the first Table 5.2		165,931	1,708,756
С	Number of doses per child	Vaccine parameter (schedule)	2		
D	Number of doses needed	BxC	3,749,374	331,862	3,417,512
Ε	Estimated vaccine wastage factor	Table 5.2	1.05		
F	Number of doses needed including wastage	D x E	3,936,843	348,455	3,588,388
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]	48,440	4,288	44,152
ı	Total vaccine doses needed	Round up((F + G) / Vaccine package size) * Vaccine package size	3,985,500	352,762	3,632,738
J	Number of doses per vial	Vaccine parameter	1		
K	Number of AD syringes (+ 10% wastage) needed	(D + G) x 1.11	0	0	0
L	Reconstitution syringes (+ 10% wastage) needed	(I/J) x 1.11	0	0	0
М	Total of safety boxes (+ 10% of extra need) needed	(I / 100) x 1.11	0	0	0
N	Cost of vaccines needed	I x vaccine price per dose (g)	8,766,506	775,935	7,990,571
0	Cost of AD syringes needed	K x AD syringe price per unit (ca)	0	0	0
Р	Cost of reconstitution syringes needed	L x reconstitution 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 % of vaccines value (fv)	239,131	21,166	217,965
s	Freight cost for devices needed	(O+P+Q) x freight cost as % of devices value (fd)	0	0	0
Т	Total fund needed	(N+O+P+Q+R+S)	9,005,637	797,100	8,208,537
U	Total country co-financing	I x country co- financing per dose (cc)	797,100		
٧	Country co-financing % of Gavi supported proportion	U / (N + R)	8.85 %		

No NVS Routine – Preferred Second Presentation requested this year
Annex 3 - NVS Preventive campaign(s)

Annex 2 - NVS Routine - Preferred Second Presentation

Annex 3.1 - NVS Preventive campaign(s) (Meningococcal A, 10 dose(s) per vial, LYOPHILISED)

Table Annex 3.1 C: Summary table for CAMPAIGN Meningococcal A, 10 dose(s) per vial, LYOPHILISED

	Data from		2016
Total target population	Table 5.3.1	#	7,004,074
Number of doses per persons	Parameter	#	1
Wastage Rate	Table 5.3.1	#	10
Estimated vaccine wastage factor		#	1.11
Number of doses per vial	Parameter	#	10
AD syringes required	Parameter	#	Yes
Reconstitution syringes required	Parameter	#	Yes
Safety boxes required	Parameter	#	No
AD syringe price per unit	Table Annexes 4A	\$	0.448
Reconstitution syringe price per unit	Table Annexes 4A	\$	0.035
Safety box price per unit	Table Annexes 4A	\$	0.0054
Freight cost as % of vaccines value	Table Annexes 4B	%	5.00 %
Freight cost as % of devices value	Parameter	%	0

Table Annex 3.1 D: Estimated number of Meningococcal A, 10 dose(s) per vial, LYOPHILISED associated injection safety material and related co-financing budget (page 1)

		Formula	Gavi
			2016
В	Total target population	Table 5.3.1	7,004,074
С	Number of doses per persons	Vaccine parameter (schedule)	1
D	Number of doses needed	BxC	7,004,074
Ε	Estimated vaccine wastage factor	100 / (100 - Vaccine wastage rate)	1.11
F	Number of doses needed including wastage	DxE	7,774,523
G	Vaccines buffer stock	0	0
ı	Total vaccine doses needed	Round up((F + G) / Vaccine package size) * Vaccine package size	7,775,000
J	Number of doses per vial	Vaccine parameter	10
K	Number of AD syringes (+ 10% wastage) needed	(D + G) x 1.11	7,774,523
L	Reconstitution syringes (+ 10% wastage) needed	(I/J) x 1.11	863,026
N	Cost of vaccines needed	I x vaccine price per dose (g)	4,951,856
0	Cost of AD syringes needed	K x AD syringe price per unit (ca)	3,482,987
Р	Cost of reconstitution syringes needed	L x reconstitution price per unit (cr)	30,206
ø	Cost of safety boxes needed	M x safety box price per unit (cs)	0
R	Freight cost for vaccines needed	N x freight cost as of % of vaccines value (fv)	272,126
S	Freight cost for devices needed	(O+P+Q) x freight cost as % of devices value (fd)	0
Т	Total fund needed	(N+O+P+Q+R+S)	8,737,175

Note: There is no co-financing for NVS preventive campaigns

Annex 4

Table Annex 4A: Commodities Cost

Estimated prices of supply are not disclosed

Table Annex 4B: Freight cost as percentage of value

Vaccine Antigen	Vaccine Type	2016	2017	2018	2019	2020
Meningococcal A, 10 dose(s) per vial, LYOPHILISED	MENINACONJUGATE	5.50 %				
Rotavirus, 2-dose schedule	ROTA	2.73 %	2.73 %	2.73 %	2.73 %	2.73 %

Table Annex 4C: Low - Minimum country's co-payment per dose of co-financed vaccine.

Vaccine	2016	2017	2018	2019
Rotavirus, 2-dose schedule	0.2	0.2	0.2	0.2
Vaccine	2020			
Rotavirus, 2-dose schedule	0.2			

Table Annex 4D: Wastage rates and factors

The following table shows the wastage rates for routine and campaign vaccines, set for 2016.

Vaccine	dose(s) per vial	Maximum Vaccine wastage rate*		Benchmark Wastage Rate**
		Routine	Campaign	
HPV bivalent, 2 dose(s) per vial, LIQUID	2	10 %	10 %	
HPV quadrivalent, 1 dose(s) per vial, LIQUID	1	5 %	5 %	
JE, 5 dose(s) per vial, LYOPHILISED	5	10 %	10 %	
Measles second dose, 10 dose(s) per vial, LYOPHILISED	10	40 %	40 %	
Meningococcal A, 10 dose(s) per vial, LYOPHILISED	10	50 %	10 %	
MR, 10 dose(s) per vial, LYOPHILISED	10	15 %	15 %	
Pneumococcal (PCV10), 2 dose(s) per vial, LIQUID	2	10 %	10 %	
Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID	1	5 %	5 %	
Rotavirus, 2-dose schedule	1	5 %	5 %	
Rotavirus, 3-dose schedule	1	5 %	5 %	
Yellow Fever, 10 dose(s) per vial, LYOPHILISED	10	40 %	40 %	
Yellow Fever, 5 dose(s) per vial, LYOPHILISED	5	10 %	10 %	

Comments:

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

Table Annex 4E: Vaccine maximum packed volumes

Kindly note that this table is for reference purposes only and includes Gavi- and non Gavi-supported vaccines.

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	lyophilized	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	

^{*} Source - WHO indicative wastage rates

^{**} Source - Country APRs and studies, 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	НерВ	liquid	IM	3	1	18	
Hepatitis B	НерВ	liquid	IM	3	2	13	
Hepatitis B	НерВ	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	lyophilized	IM	3	1	13	35
Hib freeze-dried	Hib_lyo	lyophilized	IM	3	2	6	
Hib freeze-dried	Hib_lyo	lyophilized	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 Papilomavirus vaccine	HPV	liquid	IM	3	1	15	
Human Papilomavirus vaccine	HPV	liquid	IM	3	2	5.7	
Japanese Encephalitis	JE_lyo	lyophilized	sc	1	5	2.5	2.9
Measles	Measles	lyophilized	SC	1	1	26.1	20
Measles	Measles	lyophilized	SC	1	2	13.1	13.1
Measles	Measles	lyophilized	SC	1	5	5.2	7
Measles	Measles	lyophilized	SC	1	10	3.5	4
Measles-Mumps- Rubella freeze dried	MMR	lyophilized	SC	1	1	26.1	26.1
Measles-Mumps- Rubella freeze dried	MMR	lyophilized	SC	1	2	13.1	13.1
Measles-Mumps- Rubella freeze dried	MMR	lyophilized	sc	1	5	5.2	7
Measles-Mumps- Rubella freeze dried	MMR	lyophilized	sc	1	10	3	4
Measles-Rubella freeze dried	MR	lyophilized	SC	1	1	26.1	26.1
Measles-Rubella freeze dried	MR	lyophilized	sc	1	2	13.1	13.1
Measles-Rubella freeze dried	MR	lyophilized	sc	1	5	5.2	7
Measles-Rubella freeze dried	MR	lyophilized	SC	1	10	2.5	4
Meningitis A conjugate	Men_A	lyophilized	IM	1	10	2.6	4
Meningitis A/C	MV_A/C	lyophilized	SC	1	10	2.5	4
Meningitis A/C	MV_A/C	lyophilized	SC	1	50	1.5	3
Meningitis W135	MV_W135	lyophilized	SC	1	10	2.5	4
Meningococcal A/C/W/	MV_A/C/W	lyophilized	SC	1	50	1.5	3

Meningococcal A/C/W/Y	MV_A/C/W/Y	lyophilized	sc	1	10	2.5	4
Monovalent OPV-1	mOPV1	liquid	Oral		20	1.5	
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	lyophilized	SC	1	5	6.5	7
Yellow fever	YF	lyophilized	SC	1	10	2.5	3
Yellow fever	YF	lyophilized	SC	1	20	1.5	2
Yellow fever	YF	lyophilized	SC	1	50	0.7	1

12. Banking Form

In accordance with the derequests that a payment			e Gavi, the Government of Uganda hereby detailed below:
Name of Institution (Account Holder):	MINISTRY OF HEALTH		
Address:	P.O.BOX 7272		
City Country:	KAMPALA, UGANDA		
Telephone no.:	+256-414-340-872	Fax no.:	+256-414-231-584
•	Currency of the	bank account:	: USD
For credit to:	·	l	
Bank account's title:	: GAVI VACCNE FUND		
Bank account no.:	000140088400002		
Bank's name:	BANK OF UGANDA		

Is the bank account exclusively to be used by this program? True

By who is the account audited? AUDITOR GENERAL

Signature of Government's authorizing official

		Seal
Name:	DR. ASUMAN LUKWAGO	
Title:	PERMANENT SECRETARY	
Signature:		
Date:	08/09/2015	

FINANCIAL INSTITUTION		CORRESPONDENT BANK
		(In the United States)
Bank Name:	BANK OF UGANDA	CITI BANK (CITI NEW YORK)
Branch Name:	MAIN	MAIN
Address:	P.O.BOX 7120	CITI BANK NA, 111, WALL STREE
City Country:	KAMPALA, UGANDA	NEW YORK, USA
Swift Code:	UGAUGKA	NA
Sort Code:	NA	CITIUS33
		NA
ABA No.:	NA	NA
Telephone No.:	+256-414-258-441	IVA
FAV No.	.050 444 050 040	1212-816-7086
FAX No.:	+256-414-259-343	NA

I certify that the account No No 000140088400002 is held by MINISTRY OF HEALTH at this banking institution

The account is to be signed jointly by at least 3 (number of signatories) of the following authorized signatories:

2	Name: Title: Name:	DR ASUMAN LUKWAGO PERMANENT SECRETARY RONALD SEGAWA GYAGENDA
2		
2	Name:	PONALD SEGAWA GYAGENDA
2	Name:	RONALD SECAWA GVACENDA
		NONALD SEGAWA GTAGLINDA
	Title:	UNDER SECRETARY
3	Name:	MWAMBU WYCLIFFE
3	Title:	ASSISTANT COMMISSIONER ACCOUNTS
	l	
Name of bank's a	uthorizing offici	ial
TO BE SUBMITTE	ED .	
Signature:		
Date:		9/8/2015 12:00:00 A
Seal:		