Application Form for Gavi NVS support

Submitted by

The Government of

Solomon Islands

Date of submission: **8 September 2017**

Deadline for submission:

i. 8 September 2017

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

Start Year	2016	End Year	2022

Form revised in 2016

(To be used with Guidelines of December 2016)

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

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 TRANSPARENCY 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. Type of Support requested

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	RV1, 1 dose/plastic tube, liquid	2019	2022	RV5, 1 dose/plastic tube, liquid
Routine New Vaccines Support	HPV quadrivalent, 1 dose(s) per vial, LIQUID	2019	2022	

[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.

2. Table of Contents

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 (including for campaigns and routine)

- Relevant baseline data, including:
  - DTP3 and Measles coverage data (as reported on the WHO/UNICEF Joint Reporting Form)
  - Target population from Risk Assessments from Yellow Fever and Meningitis A
  - Birth cohort, targets and immunisation coverage by vaccines

- Country preparedness
  - Summary of planned activities to prepare for vaccine launch, including EVM assessments, progress on EVM improvement plans, communication plans, etc.
  - Summary of EVM assessment and progress on EVM improvement plan

- The role of the Coordination Forum (ICC/HSCC or equivalent) and stakeholders' participation (e.g. government, key donors, partners, key implementers, CSOs) in developing this proposal

The Solomon Islands Government is requesting support from Gavi, the Vaccine Alliance, to introduce rotavirus and human papillomavirus (HPV) vaccines.

Rotavirus Vaccine

In response to recent rotavirus outbreaks in Solomon Islands and the burden of diarrhea disease in the area, the Solomon Islands Government has also decided to apply for Gavi funds to introduce rotavirus vaccine in early 2019. The timeline proposed to introduce rotavirus vaccine will allow the Solomon Islands Ministry of Health and Medical Services (MHMS) to harness synergies in planning, training and roll-out of the rotavirus vaccination program alongside the HPV vaccination program.

During 2013-2016, an average of 7,250 cases of diarrheal disease was captured each year by Solomon Island's syndromic surveillance and an average of 1,050 children <5 years were hospitalized for diarrhea each year. In 2014, following severe flooding, there were more than 6,000 cases of diarrhea and 27 deaths. Among the sample of cases for which diagnostic testing was conducted, 38% of cases were due to rotavirus. Although the burden of rotavirus disease in the Solomon Islands is not known, the burden of diarrheal diseases is high, and based on data from other countries, it is expected that rotavirus accounts for >30% of cases of diarrhea that result in hospitalization among children under 5 years of age.

Use of rotavirus vaccines that are currently prequalified, i.e., those eligible for procurement using Gavi funds, have been shown to lead to a substantial decline (approximately 50-90% decrease) in global rotavirus hospitalizations among children less than 5 years of age.

Stunting is a health priority for SIG. The global literature shows that multiple diarrhea episodes are associated with stunting. Children with moderate-to-severe diarrhea show a significant reduction in growth, measured by body length, in just 2 months after an episode of diarrhea; and prolonged episodes, such as we can see with the severe diarrhea caused by rotavirus, reduce growth in the 3 months after a diarrhea episode. One in 10 children in the Solomon Islands are either malnourished or severely malnourished (CIS, 2017)

Initial studies of rotavirus vaccine usage in Vietnam and Thailand found the two-dose presentation of the vaccine to be cost-effective at prices under $5.6, ranging up to $9.2 per dose (in 2017 USD). SIG has

recommended the use of the 2-dose Rotarix™ product (GlaxoSmithKline), costed for Gavi countries at $4.66 per full, wastage-adjusted immunization course (exclusive of programmatic delivery costs).

National coverage for DPT3, OPV3 and measles first dose has increased from 2013 to 2016. DPT3 and OPV3 coverage both increased from 94% in 2013 to 99% in 2016; first dose measles vaccine coverage increased from 93% in 2013 to 99% in 2016 according to WHO-UNICEF estimates.

Rotarix (RV1) 1-dose vial for rotavirus vaccine. These vaccines have 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) for Rotarix.

The Solomon Islands Government requests a total of USD 100,000 from Gavi to vaccinate a total of 78,871 infants against rotavirus during 2019-2022.

HPV Vaccine

The Solomon Islands Government is requesting support from Gavi to introduce human papillomavirus (HPV) vaccine in April 2019.

The Western Pacific Region (WPR), which has more than one-fourth of the world's population and accounts for approximately one-third of the global cancer burden. The WPR is expected to have a 41% increase in cancer burden by 2025. Age-adjusted incidence rates of cancer are relatively high in high-income countries compared with low- and middle-income countries and Pacific Island Countries (GLOBOCAN 2012). The low rates of cancer are partly due to the limitations in diagnostic capacity and incomplete cancer registration.

Cervical cancer is the most common cancer among women in the Solomon Islands. Solomon Islands has an estimated population of 175,642 women ages 15 years and older who are at risk of developing cervical cancer (GLOBOCAN 2012). Current estimates indicate that every year, 57 women are diagnosed with cervical cancer and 31 die from the disease. In Solomon Islands, cervical cancer accounted for 303 cases during 2004-2014 (most common cause of cancer in Solomon Islands during 2004-2014 and highest cumulative total among cancer types seen at the National Referral Hospital, NRH). The majority of the cases of cervical cancer in Solomon Islands are detected in advanced or terminal stages of the disease.

The Solomon Islands Ministry of Health and Medical Services (MHMS) in collaboration with the Ministry of Education (MOE) and working closely with WHO, UNICEF, PATH and the Australian Cervical Cancer Foundation (ACCF) implemented a two-year human papillomavirus (HPV) vaccine demonstration project (2015-2016) in Honiara City Council (HCC) and Isabel Province, to assess the feasibility and acceptability of HPV vaccination using a school-based and community outreach strategy.

The strategy targeted all girls aged 9-12 years in HCC and Isabel Province in the first year to receive two doses of HPV vaccine (12 month interval between first and second doses) and targeted 9-year old girls in the second year of the demonstration project.

A coverage survey was conducted in HCC and Isabel Province in 2016. In HCC, 71.8% of eligible girls were fully vaccinated, 11.6% received only one dose, and 16.6% received no doses of the vaccine. In Isabel Province, 91.1% of eligible girls were fully vaccinated, 5.4% received one dose, and 3.6% received no doses of the vaccine. A post-introduction evaluation conducted in HCC and Isabel Province in 2016 showed that HPV vaccination was well-accepted by health workers, teachers, students, parents, religious groups, the general public and the media

Solomon Islands plans to introduce HPV vaccination nationally in April 2019 and integrate HPV vaccination into the routine immunization program. HPV vaccination will be conducted once a year in schools targeting girls 9-14 years old. A school-based approached will be used to targets in-school girls aged 9-14 years and a community-based approach will be used to target out-of-school girls aged 9-14 years in the community. In HCC and Isabel Province, the target age for the HPV vaccination will be 9-year old in-school and out-of-school girls because girls 10-14 years received HPV vaccine during the demonstration project.

During National Immunization Week in April 2019, the HPV vaccination will be promoted, and the HPV vaccine rollout will start two weeks later, in May 2019, so that HPV vaccination can be promoted fully and to allow preparation and advocacy to be done between active promotion of the program and the initiation of vaccination. HPV vaccination will be conducted at schools, in communities and in the health facilities two weeks after National Immunization Week by trained health workers, with follow up of in-school and out-of-schools girls who were absent during vaccination days at schools and in community settings during the two

weeks following school vaccination days. The same strategy will be used for school and community outreach strategies each year to reach both in- and out-of-school girls.

The Solomon Islands Government requests a total of USD 121,872 from Gavi to vaccinate a total of 64,796 girls against HPV during 2019-2022, including the first-year additional multi-year cohort of girls aged 10-14 years.

Cold Chain

Solomon Islands has a walk-in cold room (WICR) with 30 cubic metres capacity at the national level, with a net current vaccine storage capacity at +5°C storage temperature of 8,571 liters (2017 EVM Assessment). The estimated vaccine storage capacity requirement, including planned new vaccine introductions, is 3,426 liters. There are two domestic chest freezers which serve the negative storage capacity at the national level. These two freezers will be replaced with WHO Performance, Quality and Safety (PQS) freezers in 2018. The 18 subnational vaccine distribution centers also have sufficient capacity, with net storage capacity at +5°C of 1,505 liters; the uninstalled capacity is 1,448 liters. These will also accommodate the vaccine volume requirements at the level of the vaccine distribution centers. However, replacement of older cold chain equipment is needed and this will be implemented during 2018-2019 to sustain the positive capacity. Of the 352 service points in the country, 259 have cold chain equipment. The 93 health facilities without cold chain equipment are slated to receive solar direct drive refrigerators if the Cold Chain Equipment Optimisation Platform (CCEOP) proposal is approved. This will increase cold chain equipment (CCE) coverage to all service delivery points. Currently, there are 96 gas absorption refrigerators which will be replaced with WHO PQS solar direct drive refrigerators, which are more efficient and appropriate for the settings in which they will be used. The current cold chain capacity has been achieved with investment by the Solomon Islands government and partners, including Gavi, UNICEF, WHO and the Korean International Cooperation Agency (KOICA). The current available CCE capacity will allow for successful introduction of both HPV and rotavirus vaccines while replacement and extension of capacity continue.

Effective Vaccine Management

The most recent Effective Vaccine Management (EVM) assessment was conducted was in June 2017. There has been improvement in the scores EVM assessment scores compared to the 2012 EVM assessment. However, the 2017 EVM assessment of 9 criteria at each of the three levels (central, provincial and health facility levels) of the Solomon Islands' supply chain revealed that arrival procedures to the Central Vaccine Store in the National Medical Store (this was only applicable at the central level) had a score of 62%, below the target score of 80%. The key shortcomings are the absence of a satisfactory written contingency plan to deal with unexpected arrival or delays of vaccine shipments and that customs staff have not received orientation training in how to care and treat vaccines. Of the 8 other criteria, the overall score of only one was at least 80%, namely that for vaccine management; the scores the other 7 criteria (temperature, storage capacity, building equipment and transport, maintenance, stock management, distribution, and management information system and supportive functions) were consistently below the 80% target overall and at all levels. One of the cold chain challenges identified in the EVM assessment is the large number (96) of absorption refrigerators. At the service delivery points, storage capacity and maintenance have regressed, underscoring the need to increase cold chain storage (the CCEOP, if funded, will support this) while strengthening maintenance. An improvement plan was developed to address the key challenges, which include limited cold chain storage capacity, replacement of obsolete equipment, facilities with no CCE, continuous use of stem thermometers and personnel needs.

Preparation of the Application

The preparation of application for funds for the HPV and rotavirus vaccine introductions has been a consultative and participatory process involving key in-country partners, including MHMS, WHO, UNICEF, and PATH. Technical assistance in preparing the application was provided by the WHO Country Office in Solomon Islands, the WHO Western Pacific Regional Office, WHO Headquarters and UNICEF. The Minister of Health and Minister of Finance on behalf of the Government of the Solomon Islands approved the submission of this application on ## of September 2017.

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 Solomon Islands 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:

RV1, 1 dose/plastic tube, liquid; HPV quadrivalent, 1 dose(s) per vial, LIQUID routine introduction

The Government of Solomon Islands 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) **6.2.3, 6.2.4, 6.3.3, 6.3.4** in the Routine New Vaccines Support of this application shows the amount of support in either supply or cash that is required from the Gavi.Table(s) **6.2.3, 6.2.4, 6.3.3, 6.3.4** 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 **January**.

The payment for the first year of co-financed support will be around **January 2019** for RV1, 1 dose/plastic tube, liquid, HPV quadrivalent, 1 dose(s) per vial, LIQUID.

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	Hon Dr Tautai Agikimua Kaituú	**Name**	Hon Synder Rini
Date		**Date**	
Signature		**Signature**	

Proof of involvement of the Ministry of Education will also be required for HPV Routine Support. The Ministry of Education will either have to be involved in the ICC process (preferred option) and, for countries choosing schools as a location for vaccinations, or choosing a school link strategy, the Minister of Education (or delegated authority) must provide its signature. The signature is attached as DOCUMENT NUMBER : 3 in Section 10. Attachments.

Minister of Education (or delegated authority)	
Name	
Date	
Signature	

By signing this application form, we confirm that the requested funding for salaries, salary top-ups/allowances, per diems and incentives does not duplicate funding from other sources (e.g. from other donors).

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

Full name	Position	Telephone	Email
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4.1.2. National Coordination Forum (Interagency Coordinating Committees (ICCs), Health Sector Coordinating Committees (HSCCs), and other equivalent bodies)

To be eligible for support, Gavi asks countries to ensure a *basic* functionality of their Coordination Forum (ICC/HSCC or equivalent body). Countries can demonstrate this by adhering to the requirements listed in section 5.2 of the General Guidelines. The information in this section and a set of documents submitted along with this application will help the Independent Review Committee (IRC) to assess adherence.

Profile of the Coordination Forum

Name of the Forum	ICC
Organisational structure (e.g., sub-committee, stand-alone)	Stand-alone

The Terms of Reference for the Coordination Forum is attached as DOCUMENT NUMBER : 4. The Terms of Reference should include all sections outlined in Section 5.2 of the General Guidelines..

Please describe the role of the Coordination Forum and stakeholders' participation (e.g. government, key donors, partners, key implementers, CSOs) in developing this proposal:

The EPI technical Committee is comprised of the Ministry of Health and Medical Services (MHMS), WHO and UNICEF. WHO has supported MHMS with a Consultant who prepared the initial paper draft. UNICEF EPI specialist supported the MHMS with completing and discussing responses to the portal queries. Both partners have contributed in reviewing the drafts and finalizing the application. As members of the ICC/ Family Health Committee, WHO and UNICEF have endorsed the application for submission to Gavi.

4.1.3. Signature Table for the Coordination Forum (ICC/HSCC or equivalent body)

We the members of the ICC, HSCC, or equivalent committee *[1]* met on the **01/09/2017** to review this proposal. At that meeting we endorsed this proposal on the basis of the supporting documentation which is attached. The minutes from the meeting endorsing the proposal and of the meetings of the past 12 months are attached as Document number 5. The signatures endorsing the proposal are attached as Document number 7 (please use the list for signatures in the section below).

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
Chair	Undersecretary of Health Improvement	Dr Nemia Bainavalu		
Secretary	Director of Reproductive and Child Health Division	Dr Divinal Ogaoga		
Members	EPI Specialist	Dr Ibrahim Dadari		
	Obstetric and Gynae Consultant	Dr Leane Panisi		
	Paediatric Consultation	Dr Titus Nasi		
	Chief of Field Officer	Dr Zelalem Taffesse		
	Health Officer	Everlyn Darcy		
	Director Planning & Policy	Ivan Ghemu		

	National EPI Program Coodinator MOH	Jenniffer Anga		
	Program Manager,Reproductive and Childhealth Division	Kathy Gapirongo		
	Program Analyst	Pauline McNeil		
	Country Rep Solomon Islands	Sevil Huseynova		
	RMNACH Officer	Simon Burgraaf		
	National Pharmacy Manager	Timmy Manea		

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

The minutes from the meeting endorsing the proposal and of the meetings of the past 12 months are attached are attached as DOCUMENT NUMBER : 6.

4.2. National Immunization Technical Advisory Group (NITAG)

Has a NITAG been established in the country ? **No**

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: 8)**

5. Immunisation Programme Data

5.1 Background information

Please complete the table below, using the most recent data from available sources. Please identify the source of the data, and the date and attach the source document, where possible. The following documents should be referred to and/or attached:

- Comprehensive Multi-Year Plan for Immunisation (cMYP) (or equivalent plan). Please attach as DOCUMENT NUMBER 9.
- New Vaccine Introduction Plan(s) / Plan of Action. Please attach as DOCUMENT NUMBER 12.
- New Vaccine Introduction Checklist, Activity List and Timeline. Please attach as DOCUMENT NUMBER 12.
- Effective Vaccine Management (EVM) assessment. Please attach as DOCUMENT NUMBER 20.
- Two most recent annual WHO/UNICEF Joint Reporting Forms (JRF) on Vaccine Preventable Diseases.
- Health Sector Strategy documents, budgetary documents, and other reports, surveys etc, as appropriate.
- In the case of Yellow Fever and Meningitis A mass preventive campaigns, the relevant risk assessments. Please attach as DOCUMENT NUMBER 24 and DOCUMENT NUMBER 25.

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

	Figure	Year	Source
Total population	620,084	2017	2009 Census Projection
Birth cohort	19,319	2017	2009 Census Projection
Infant mortality rate (per 1000)	17	2015	Core Indicator set
Surviving infants*[1]*	18,739	2017	2009 Census Projection
GNI per capita (US$)	1,940	2016	World Bank
Total Health Expenditure (THE) as a percentage of GDP	5.1	2014	Desk review
General government expenditure on health (GGHE) as % of General government expenditure	11.1	2016	Desk review

[1] 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. If this information is already included in NVIP/POA, please reference the document and in which section/page this information can be found.

Lessons Learned	Action Points
• In Solomon Islands, the infant mortality rate (IMR) has declined from 30 per 10,000 live births (LB) in 2010 to 24 per 10,000 LB in 2014 and 17 per 10,000 LB in 2015, primarily because of immunization. • Introduction of multiple vaccines has saved human resources, money and time because training, developing and printing of IEC materials can be done together. – Pentavalent vaccine with 5 antigens administered with one injection, saved time both for health workers and parents and reduced the number of injections needed and immunization wastage. – Multi-vaccine formulations have been found to be as safe as monovalent vaccines. – Synergies have resulted from implementation with other new vaccines introductions (PCV, HPV and IPV) and monitoring and evaluation tools as well as information, education and communication (IEC) materials have built upon previous tools and materials and revised together to accommodate the subsequent introduction of new vaccines, including integrated vaccine management training	• New vaccines present both opportunities and challenges. Based on disease burden, competing public health priorities, cost, sustainability and impact on the EPI program in particular and the health system in general, Solomon Islands should continue to introduce new vaccines such as HPV and rotavirus vaccines and capitalize infrastructure as well as monitoring and evaluation materials and expertise that have been developed.
• Completing preparatory activities before the introduction date is imperative. • ICC and EPI Technical Committee provide guidance and technical assistance using data to guide future action.	• Plan introduction preparations early for effective and efficient implementation. • Utilize experience with and lessons from lessons learned from new vaccine introduction to improve the EPI program (e.g. the recommendations of HPV post introduction evaluation and coverage survey can be used to strengthen the EPI program).
• All zones should receive vaccine stocks prior to launch. • Early prepositioning of stocks of vaccines at provincial and Area Health Centre (AHC) levels will help counter potential backlogs and prevent stock-outs. • Refrigerators and freezers should be procured, maintained, repaired and reallocated as appropriate to ensure adequate cold chain capacity at all levels.	• Deliver vaccines and other supplies to provincial medical stores and AHCs at least two weeks prior to launch • Allocate refrigerators and freezers based on updated Cold Chain Integrity data to ensure that cold chain capacity is adequate at all levels. • Develop a tracking system to monitor where vaccines have been distributed, when trainings have been completed, and when vaccinations have been administered.
• Completing preparatory activities before the introduction date is imperative. • Guidance and technical assistance (TA) from the ICC and the EPI Technical Committee have helped with the ability to use data to guide future action.	• Preparations for introductions should be planned early for effective and efficient implementation. • Experience with and lessons from lessons learned from new vaccine introductions should be used to improve the EPI program (e.g., the recommendations of HPV post introduction evaluation and coverage survey can be used to strengthen the EPI program). Guidance and TA should be sought from the ICC and EPI Technical Committee as new vaccines are introduced.
• It would have been very helpful if all areas/zones could receive vaccine stocks prior to launch. • Early prepositioning of stocks of vaccines at provincial and Area Health Centre levels would have helped counter potential backlogs and prevented stock-outs. • Refrigerators and freezers should be procured, maintained,	• To ensure the national rollout of HPV capitalizes on what worked in the HPV vaccine demonstration program, vaccinations will be offered in two ways to girls: 1) in schools for those attending school; and 2) through outreach sessions in the community for girls not attending school. • Vaccines and other supplies will be delivered to provincial medical stores and Area Health Centres at least two weeks prior to launch.

repaired and reallocated as appropriate to ensure adequate cold chain capacity at all levels.	• Allocate refrigerators and freezers based on updated cold chain Integrity data to ensure that cold chain capacity is adequate at all levels. • Develop a tracking system to monitor where vaccines have been distributed, when trainings have been completed, and when vaccinations have been administered.
• New vaccine introduction has provided an opportunity to train health workers on new vaccines as well as to give refresher training on EPI. Take for example during the national PCV training, a basic vaccine management training was integrated in the national training and cascade down to the subnational level. • Early training of supervisors at the national level enabled them to supervise, assist with and monitor training at provincial and zonal levels. • Cascade training has successfully trained trainers with adequate skills at provincial and zonal levels. • Training sessions that include practical exercises, pre- and post-training testing, refresher on key topics, and sharing updated WHO training materials (both soft and hard copies) with trainers and participants have been effective.	• More health workers will be trained through a health facility-based approach. • A tracking system for trainings is being developed and will be used for HPV and rotavirus vaccine introductions. • Partners at national and local levels will be enlisted to supervise health center-based trainings. • Cascade training through training of trainers will be used for future vaccine introductions. • Practical exercises, pre- and post-training testing and sharing updated WHO materials at trainings will be used for future vaccine introductions.
• Pilot testing of IEC materials (e.g., key messages, acceptability of the new vaccine, etc.) helped ensure high acceptance of vaccines by the community. – Timely printing and distribution of IEC materials was important. – When social mobilization was utilized, timely disbursement of funds for social mobilization is important.	• IEC materials will be printed in enough time in advance to ensure distribution four weeks prior to vaccine introductions. • A tracking system for distribution of IEC materials is being developed. • Funds for social mobilization activities will be allocated at the district level where social mobilization is needed.
• Revision of checklists in a timely fashion has been helpful. • Timely reporting of monitoring of coverage data and sharing coverage data regularly and using data for local action were important.	• Checklists will be developed or revised in advance of vaccine introductions. • Monitoring and evaluation tools will be developed in advance of their use and coverage data will be disseminated all administrative levels. • Requirements for distributing monitoring and evaluation tools will be forecasted to ensure their availability in all facilities.

5.1.2 Health planning and budgeting

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

The country starts planning for the next year in June/July of the preceding year with Parliament passing the budget in October/November and implementation starts in January. The Government of the Solomon Islands Government budget cycle is January to December.

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

National Health Strategic Plan (NHSP) 2016-2020.

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

Yes, the cMYP is for 2016-2020 and it is aligned with the NHSP 2016-2020.

Please indicate the national planning budgeting cycle for health

The Ministry of Health and Medical Services (MHMS) together with other line ministries starts planning for the next year in June/July of the preceding year with Parliament passing the budget and implementation beginning in January. The Government of Solomon Islands budget cycle is from January to December.

Please indicate the national planning cycle for immunisation

The national planning cycle for immunization is the same as the Solomon Islands Government budget cycle, namely from January to December each year.

5.1.3 Coverage and equity

Please describe any health systems bottlenecks or barriers to access, utilisation and delivery of immunisation services at district level (or equivalent), for example geographic, socio-economic and/or gender-related barriers. Please indicated if there are specific populations of concern. If available, please provide subnational coverage and equity data highlighting geographic, socio-economic, gender-related, or other barriers and any other relevant categories of vulnerable or high-risk populations.

The Solomon Islands consists of nearly 1,000 islands that together make up a land area of approximately 30,400 sq. km within a sea area of roughly 1.5 million sq. km. The country's six major islands are Choiseul, New Georgia, Isabel, Guadalcanal, Malaita and Makira. The majority of people live along the coast, but there are substantial population pockets in inland areas of Guadalcanal and Malaita. Approximately 84% of the population lives in rural areas, including some very remote areas.

The geographical location of communities and villages means that many parents living in more remote areas have to walk long distances or travel by boat to access immunization services and costs of transportation by boat or land can be high and not affordable for many.

Cultural practices Islands in the Solomon Islands can also lead to barriers. An example is that there may be fewer or possibly no deliveries in remote clinics in which male nurses are posted because of objections to them providing care for women in labor. Gender inequality is a major obstacle in the Solomon Islands, with high rates of violence against women and slow progress in empowering women with economic and political leadership. Gender inequality is an important obstacle in the Solomon Islands, with high rates of violence against women and slow progress in empowering women with economic and political leadership. This might impact HPV vaccination uptake, but it should not impact rotavirus vaccination any more than it would impact immunization with other routine infant vaccines.

The 2015 Demographic Health Survey (DHS) found that overall, 73% of children aged 18–29 months were reported to be fully vaccinated at any time before the survey. Immunization coverage for children increases with mothers who have a secondary level education, with coverage at 79% compared with 70% for children whose mother had only a primary school education. Female babies were slightly more likely to have a higher vaccination coverage rate (74%) for all basic vaccinations than male babies (73%). Children who were birth order six and higher and those living in rural areas and children living in the fourth and fifth (lowest) wealth quintiles were less likely to have received all basic vaccinations. A greater percentage of children with urban residence had received all basic vaccinations than children of rural residence (82.5% vs. 71.4%). There was wide variation in vaccine coverage by region, with rates of receipt of all basic vaccinations highest for Honiara (85.4%), followed by Guadalcanal (75.5%), Western (66.2%), and Malaita (65.6%) regions.

For HPV vaccine delivery during the 2015-2016 HPV vaccine demonstration project in Honiara City Council (HCC) and Isabel Province, geographic barriers were noted but advance microplanning for vaccine distribution and health worker vaccination sessions at schools reduced the impact of these barriers. Lower HPV vaccine coverage in HCC in year 2 of the HPV demonstration program was directly related to a lack of social mobilization in communities, which resulted in parents not being aware of the program.

Vaccine delivery was not impacted by resistance or rumors related to HPV vaccination only of girls during the HPV vaccine demonstration project. Questions were answered by health workers, noting that tetanus toxoid boosters were also only given to girls.

In the HPV vaccine demonstration program, there were few girls in Isabel Province who were reported to be not attending school. HPV vaccine coverage in the first year for out-of-school girls could not be estimated by the coverage survey due to the small sample size. In the coverage survey in the second year in HCC, out-of-school girls aged 9 years made up about 13% of the surveyed households and vaccination coverage in this

group was nearly zero percent. The low coverage among out-of-school girls in HCC was attributed to the lack of social mobilization in communities and parents not being aware of the program. In addition, vaccination teams did not run outreach sessions for HPV vaccine in HCC in the second year of the HPV demonstration program.

Actions taken

The EPI program has prioritized RED (reach every district) for all health facilities so that regular outreach programs will target hard-to-reach communities and reduce geographic barriers of to access. A provincial management posting committee has been working to place as many female nurses as possible to districts and areas to reduce barriers related to cultural practices such as those related to gender issues and which can lead to barriers in access to and use of health services.

The substantial proportion of out-of-school girls aged 9-14 years means that a combination of school-based and outreach approaches will need to be implemented for HPV vaccination to reach all girls targeted for HPV vaccination. The national strategy for HPV rollout includes multiple approaches to provide several opportunities for girls to be vaccinated at schools, in health centers or in the community, and it also includes more targeted social mobilization in communities to ensure parents are aware of the vaccine, the vaccination program, and when and where vaccinations will be administered.

During the HPV project demonstration, the MHMS's Health Promotion Unit participated in designing and producing IEC materials (e.g. posters, brochures, flip charts), printing and distribution of IEC materials, designing a communication plan, distributing letters to schools and communities, briefing school personnel and community leaders, media release, and a launching ceremony. A clear communication was developed to inform the community of the benefits of HPV vaccine and the schedule for the implementation of the demonstration project. The HPV vaccine demonstration project was launched in Honiara on 27 April 2015.

Sensitization sessions were conducted with schools and communities before the demonstration project was launched. The communication plan, sensitization sessions and distribution of factsheets were the methods used to prevent and respond to rumors, such as one that was circulating that HPV vaccine causes sterility.

The Solomon Islands plans to start conducting social mobilization activities at both the national and subnational levels one month prior to introducing HPV vaccine to increase community buy in and participation. The communication strategy and the social mobilization plan are currently being revised so they provide better and more direct information channels for parents during the national rollout (more detail is provided in Section 6.1.3). For the HPV vaccine rollout, microplanning will be done routinely each year and it will be integrated with routine microplanning for outreach targeting children less than 1 year of age. This will help enable health facilities to vaccinate both in-school and out-of-school girls because microplanning for all vaccines on the schedule in one event will allow health facilities to make a plan for the whole year for all vaccines, regardless of the age targeted, as it is health facility nurses who need to plan for going to the schools once a year.

Please explain how the proposed NVS support (activities and budget) will be used to improve coverage and equity of routine immunisation with reference to specifically identified health systems bottlenecks and/or specific populations of concern. For countries that will be receiving Gavi HSS and/or CCEOP funding concurrently with NVS funds, please also highlight how NVS funds will support/complement/leverage specific activities or investments included in those other grants.

The proposed NVS support for rotavirus and HPV vaccination will support routine immunization activities in the Solomon Islands. It is expected that routine immunization activities related to rotavirus vaccine introduction, which would include support for training of staff, increased training in facilities, increased service delivery in provinces, and communications – these activities would use existing routine immunization infrastructure and also complement their activities and so may lead to an increase in coverage for routine immunisations. It is expected that the support for HPV vaccine introduction will increase the capacity for adolescent health and school-based health programs and that training of staff will increase capacity. Applications for HHS and cold chain support will also increase the capacity of the Solomon Islands to implement HPV vaccination and rotavirus vaccination.

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 Solomon Islands Demographic Health Survey (DHS) 2015 was published in June 2017, and gender and equity issues were considered. In 2015, the Asian Development Bank conducted a country gender assessment. In 2020, a national EPI Coverage survey is planned under the HSS application, which will include gender and equity related barriers. This application does not include activities to assess gender and equity related to rotavirus vaccination beyond those currently implemented for other childhood routine immunization activities (e.g. the RED strategy that uses outreach to ensure that hard-to-reach communities are accessed). This application includes activities related to gender and equity related to HPV vaccination in that it targets girls for vaccination, addresses other health issues that adolescent girls face, and makes a concerted effort to reach out-of-school and otherwise hart-to-reach girls.

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

There are ongoing discussions about having the DHIS2 platform report sex disaggregated data. . Gender is captured on daily registers at health facilities, however, currently is not reported in the aggregated monthly report by facilities. Work with the MHMS supported by WHO to improve data reporting, including gender data inclusion/disaggregation, is ongoing.

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.

Solomon Islands is currently classified as a fragile country under the Gavi Fragility Policy. The Solomon Islands is very vulnerable and prone to natural disasters such as flooding, earthquakes, cyclones and tsunamis, as a result of being located on the Pacific Ring of Fire (where 90% of the world's earthquakes occur). In 2014 April, flash floods affected Honiara city council and Guadalcanal provinces, damaging health facilities and cold equipment and displacing children and communities and thereby affecting immunization service delivery. More recently, a fire outbreak affected one of the provincial vaccine distribution centers in Western Province damaging an estimated USD 20,000 worth of essential medical supplies, including vaccines. The regular occurrence of disasters often means that routine service delivery is suspended while resources are diverted to respond to the disasters. This also includes suspension of routine immunization services during these periods. The MHMS has a national disaster management office which plans mitigation strategies to ameliorate the effect of natural disasters on the lives of the people and to help maintain health service delivery. The MHMS Emergency Operation Committee (MHEOC) coordinates health emergency response to disasters and outbreaks and ensures there are also contingency plans in place to guide rapid response to disasters. Development partners also support MHMS efforts by prepositioning supplies in case of emergency.

After the emergency has been appropriately responded to, the MHMS prioritizes catch-up campaigns for immunization to make up for interruptions of services.

Political and ethnic tensions also impact upon service delivery, although the country has enjoyed a period of relative stability over the last 10 years, in part supported by the Australian-led Regional Assistance Mission to the Solomon Islands (RAMSI), in which police officers and troops arrived to quell civil unrest as a result of the 1998-2003 ethnic tensions. The RAMSI mission was officially completed on the June 30, 2017.

5.1.4 Data quality

To support country efforts to strengthen the availability, quality and use of vaccination coverage data for strengthened programme management, Gavi requires that countries applying for all types of Gavi support to undertake routine monitoring of vaccination coverage data through an annual desk review; conduct periodic (once every five years or more frequently where appropriate) in-depth assessments of routine administrative vaccination coverage data; conduct periodic (at least once every five years) nationally representative vaccination coverage surveys; and develop and monitor plans for improving vaccination coverage data quality as a part of their own core work plans.

5.1.5 HPV specific facts

Countries applying for HPV that have already conducted a demonstration or pilot programme, should include details on specific lessons learned for HPV vaccine delivery.

Key programmatic areas	Lessons Learned	How these areas have been addressed in a National Plan
Preparation & planning	• Good collaboration between MHMS and MOE and good participation of partners in the pre-implementation planning was helpful. • Availability of the vaccine introduction guidelines in health facilities was important. • Timely preparatory activities before introduction date is imperative • Guidance and technical assistance from ICC and the EPI Technical Committee provided data to guide future action.	• The preparation plan will be in place 18 months before the HPV vaccine introduction and will be coordinated by the ICC committee. There will be close collaboration between MHMS and MOE in the planning and identification of schools and target populations to be vaccinated. • WHO, UNICEF and PATH will participate in pre-implementation planning and vaccine introduction process. The preparation plan will be implemented 12 month before introduction meetings with provincial and zonal teams to engage collaboration, including nongovernmental organizations, church groups, traditional chiefs and communities to increase awareness and participation. If Gavi funds are not available for this, then Solomon Government will cover expenses. • Lessons learned from new vaccine introductions have been used to improve the EPI program. For example, the recommendations of the post-introduction evaluation and the coverage survey
Communication & social mobilization	• Launching of the HPV demonstration project – Sensitization sessions conducted in schools and communities level were important – The HPV post-introduction evaluation and coverage survey provided valuable lessons on acceptability of vaccines by students, teachers, health workers and community – Pilot testing of key messages, acceptability of new vaccine, etc. of IEC materials promoted acceptance of vaccine by the community including traditional and religious leaders – Timely printing and distribution of IEC materials was helpful – Timely disbursement of funds for social mobilization was important	• The health promotion team (comprised of communication experts and partners) will be in place to coordinate the communication, advocacy and social mobilization plans, and they will: – Plan for early printing of IEC materials to ensure distribution four weeks prior to introduction – Develop a tracking system for distribution of IEC materials • Funds for district-level social mobilisation activities will be advocated in advance of introduction. If Gavi funds are not available for this, then Solomon Government will cover expenses.
Delivery strategies	• All zones should receive vaccine stock prior to launching HPV vaccination – Early prepositioned vaccine stock at provincial and Area Health Centre levels would help obviate potential backlogs and stock-outs. • Procuring, allocating, maintaining and repairing refrigerators and freezers is important to ensure adequate cold chain capacity at all levels • Procuring, allocating, maintaining and repairing refrigerators and freezers is important to ensure adequate cold chain capacity at all levels	• HPV vaccine delivery strategies will be conducted at sessions in schools for girls attending classes and community outreach for out-of-school girls. Tracking and follow up of out-of-schedule girls have to be reinforced at every opportunity. • Vaccines and supplies will be delivered to provincial medical stores and Area Health Centres at least two weeks prior to introducing HPV vaccination. • The allocation of refrigerators and freezers will be reviewed based on updated information to ensure that cold chain capacity is adequate at all levels.
Coverage	• Good coverage can be achieved by delivering vaccines at schools	• To ensure the national rollout of HPV capitalizes on what worked in the HPV vaccine demonstration program, vaccinations will be

	• Outreach sessions in the community and strong social mobilization activities in the community are necessary to reach and achieve good coverage in out-of-school girls	offered in two ways to girls: 1) in schools for those attending school; and 2) through outreach sessions in the community for girls not attending school. • Vaccinations will occur annually using a two-dose (0,12 months) schedule. • Health workers from health facilities will run one vaccination session annually in schools in their areas and one outreach session annually in communities in their areas to reach both in-school and out-of-school girls with HPV vaccine.
Reporting & monitoring	• There was a lack of written feedback and supervisory reports during the demonstration project. • Findings, recommendations and expectations that were raised during supervisory visits were not followed up. • EPI monitoring tools and reports were not available during the demonstration project.	• Supervision is being strengthened. A national plan is being developed that calls for regular support for supervision from national to provincial and provincial to both zonal and health facility levels and which includes on-the-job training. The plan will account for the costing needs for supervision support. • Immunization registers, EPI monitoring charts, vaccine stock registers and temperature monitoring charts are being strengthened and will be monitored routinely. • Coordination and integration of supervisory activities with other health services are being strengthened. • A tracking system/tool to understand where vaccines have been distributed, which trainings have been completed, and which vaccinations have been done is being developed by the MHMS and the EPI team.
Sustainability	• The MHMS pays annually according to invoice received from Gavi through UNICEF Supply Division. This can result in delays in release of funds for activities in the provinces.	• Ensure that all new vaccines that will be introduced are budgeted for in the annual operational plan under the National Medical Store to help ensure that required vaccine will be purchased and that any additional delivery expenses for the program will be paid for.

For each district in which the demonstration/ pilot programme was implemented, please complete the following:

District Information	
Name of the district	Honiara City Council (HCC)
Size of target population of the district	2,250
Describe how the district is divided into rural and urban areas:	HCC is an urban area
Delivery strategy(ies) used (e.g. school based, health centre based, campaign)	In HCC, vaccination sessions were conducted at schools for in-school girls and vaccination was conducted via existing routine outreach and in Area Health Clinics for out-of-school or in-school girls who were absent from school on vaccination days. 71.8% of eligible girls were fully vaccinated according to the coverage survey. There were too few out-of-school girls to accurately estimate coverage in this group, though it was estimated that 8% (22) targeted girls in HCC were reported to not be attending school.
District Information	
Name of the district	Isabel Province
Size of target population of the district	5,800
Describe how the district is divided into rural and urban areas:	The majority of the population in Isabel Province lives in rural areas
Delivery strategy(ies) used (e.g. school based, health centre based, campaign)	Immunization service delivery challenges included the large area and lack of roads on the island. The EPI administrator in this district has divided the province into 5 zones. Each zone has schools, one or more health facilities, and cold chain capacity. Teams administered HPV vaccine to targeted girls at all schools in each zone. In addition, outreach into villages in zones was conducted to reach out-of-school girls and in-school girls who were absent from school on vaccination days. 91.1% of eligible were fully vaccinated. Only 2% (6) targeted girls were reported were reported to not be attending school.

5.2. Baseline and Annual Targets for Routine Vaccines

For HPV, Gavi supports the vaccination of girls aged 9-14 years, based on the following cohorts:

- Routine cohort – countries are required to identify a single year cohort of girls to be immunised on a routine basis. (e.g. 9 years old)
- Additional multi-age cohort – in the first year of introduction (or initial year of each phase, if country choose phased introduction), countries also have the option to immunise additional girls within the recommended age groups (e.g. 10-14 years), that are older than the routine cohort.

Note: Countries may choose proxy age of girls based on a school grade (e.g. grade 5 corresponds to approximately 10 year olds). However, grades usually have a range of different aged girls so it is important to keep in mind that girls under 9 years should not be vaccinated, and doses for girls older than 14 years are not provided by Gavi.

Please specify the chosen age for the routine cohort HPV vaccination: e.g. 9 years

9 years

If relevant, please specify the chosen age range for the additional multi-age cohort in the year of introduction: e.g. 10, 11, 12, 13, 14 years
From :

10 years

To :

14 years

Will a phased introduction approach be adopted?

No

If a phased approach will be adopted, please provide an explanation for this approach.

Not applicable

Please refer to cMYP pages to assist in filling-in this section. For HPV, please also refer to Annex 3 of the HPV Guidelines.
The Base year information should be completed for the year in which the application is being completed.

Table 5.2: Baseline NVS routine figures

Number	Base Year	Baseline and Targets			
	2016	2019	2020	2021	2022
Total births	18,880	20,228	20,699	21,181	21,675
Total infants' deaths	567	607	621	635	650
Total surviving infants	18,313	19,621	20,078	20,546	21,025
Total pregnant women	18,880	20,228	20,699	21,181	21,675
Target population (routine cohort) vaccinated with OPV3*[1]*	18,130	19,425	19,877	20,341	20,815
OPV3 coverage*[2]*	99 %	99 %	99 %	99 %	99 %
Target population (routine cohort) vaccinated with DTP1*[1]*	18,130	19,425	19,877	20,341	20,815
Target population (routine cohort) vaccinated with DTP3*[1]*	18,130	19,425	19,877	20,341	20,815
DTP3 coverage*[2]*	99 %	99 %	99 %	99 %	99 %

Wastage*[3]* rate in base-year and planned thereafter (%) for DTP	5	5	5	5	5
Wastage*[3]* factor in base-year and planned thereafter for DTP	1.05	1.05	1.05	1.05	1.05
Routine Cohort					
Number of girls in the routine cohort	8,151	8,534	8,732	8,935	9,142
Target population (routine cohort) vaccinated with 1st dose of HPV	0	7,681	7,859	8,041	8,228
Target population (routine cohort) vaccinated with 2nd dose of HPV	0	0	7,422	7,595	7,771
HPV quadrivalent coverage 1st dose	0 %	90 %	90 %	90 %	90 %
HPV quadrivalent coverage 2nd dose	0 %	0 %	85 %	85 %	85 %
Additional multi-age cohort					
Number of girls in the additional multi-age cohort	35,309	36,952			
Target population (additional multi-age cohort) vaccinated with 1st dose of HPV quadrivalent	0	33,257			
Target population (additional multi-age cohort) vaccinated with 2nd dose of HPV	0	31,409			
HPV quadrivalent coverage*[2]*	0%	90%	0%	0%	0%
HPV quadrivalent coverage 2nd dose	0%	85%	0%	0%	0%
First Presentation: HPV quadrivalent, 1 dose(s) per vial, LIQUID ROUTINE COHORT + ADDITIONAL MULTI_AGE COHORT					
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 HPV quadrivalent, 1 dose(s) per vial, LIQUID	5 %	5 %	5 %	5 %	5 %
Target population (routine cohort) vaccinated with 1st dose of RV1	0	18,640	19,877	20,341	20,815
Target population (routine cohort) vaccinated with 2nd dose of Rotavirus	0	18,640	19,877	20,341	20,815
RV1 coverage*[2]*	0 %	95 %	99 %	99 %	99 %
First Presentation: RV1, 1 dose/plastic tube, liquid ROUTINE COHORT + ADDITIONAL MULTI_AGE COHORT					
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 RV1, 1 dose/plastic tube, liquid	5 %	5 %	5 %	5 %	5 %
Second Presentation: RV5, 1 dose/plastic tube, liquid ROUTINE COHORT + ADDITIONAL MULTI_AGE COHORT					
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 RV5, 1 dose/plastic tube, liquid	5 %	5 %	5 %	5 %	5 %
Target population (routine cohort) vaccinated with 1st dose of MCV	0	19,425	19,877	20,341	20,815
MCV coverage*[2]*	0 %	99 %	99 %	99 %	99 %

Annual DTP Drop out rate [(DTP1 – DTP3) / DTP1] x 100	0 %	0 %	0 %	0 %	0 %

[1] Indicate total number of children vaccinated with either DTP alone or combined

[2] Number of infants vaccinated out of total surviving infants

[3] The formula to calculate a vaccine wastage rate (in percentage): [(A - B) / A] x 100. 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.

5.2.1 Description of routine and additional multi-age cohorts

Provide the percentage of primary school enrolment

89%

Provide the percentage of secondary school enrolment

85%

Provide the average age of entry for secondary school

12 years

Please provide a source for the enrolment data (e.g., national statistics office, MOE, recent census, school registers, etc.)

Solomon Islands MOE estimate for 2016

Please provide a source for the enrolment data (e.g., national statistics office, MOE, recent census, school registers, etc.)

Solomon Islands MOE estimate for 2016

5.2.2 HPV specific targets

Girls to be vaccinated with HPV should be within the WHO-recommended target population of 9-14 years old girls

Please specify the source of data that was used to estimate the number of girls in the routine and, if relevant, additional multi-age cohorts and reported in the above table under "Target population (routine cohort) vaccinated with HPV" and "Target population (additional multi-age cohort) vaccinated with HPV"

The HPV vaccine target populations for the routine cohort were obtained estimated using the 2009 Solomon Islands census report for population and the proportion of the population that were 9-year girls and projected through 2022, with the assumption that the average annual population growth was 2.32% during these years.

The HPV vaccine target population for the multi-age cohort was obtained estimated using the 2009 Solomon Islands census report for population and the proportion of the population that were girls aged 10-14 years and projected through 2019, with the assumption that the average annual population growth was 2.32% during these years.

5.3. Targets for Preventive Campaign(s)

No NVS Prevention Campaign Support this year

5.4. Targets for One time mini-catchup campaign(s)

No One time mini-catchup campaign this year

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

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
Rotavirus/diarrhea	Syndromic Surveillance: National Diarrhea Data	2013-2016	• Solomon Islands collects syndromic surveillance on diarrheal disease. The average annual umber of diarrhea cases (excluding dysentery) reported annually during 2013-2016 was 7,246: 2013: 5,244 2014: 8,620 2015: 7,096 2016: 8,027
Rotavirus/diarrhea	Jones FK, et al. Increased Rotavirus Prevalence in Diarrheal Outbreak Precipitated by Localized Flooding, Solomon Islands, 2014. Emerg Infect Dis 2016;22:875-9.	2014	• An outbreak of diarrhea was declared in Honiara three weeks after a tropical depression caused extensive flooding in the city of Honiara (population 64,609, 2009 census) and the surrounding province of Guadalcanal (population 158,222). During the next 2 months, diarrhea outbreaks and diarrhea-related deaths were reported from multiple provinces across the country that were not affected by the flooding. – Hospital-based surveillance identified 4,407 diarrhea cases. Among 43 fecal samples collected during the outbreak in Honiara, 18 (42%) tested positive in the rotavirus.
Rotavirus/diarrhea	Jenney A, et al. The burden of hospitalised rotavirus infections in Fiji. Vaccine 2009;27(Suppl5):F108-11.	2006-2007	• During 2006 and 2007, 592 children under 5 years of age were admitted to hospital in Suva, Fiji, with acute diarrhoea. Of the 454 children for whom a stool specimen was tested, 39% were positive for rotavirus. The finding of substantial burden of disease due to rotavirus in Fiji informed the decision of Fiji to introduce rotavirus vaccines into the national immunization schedule in 2012.
Rotavirus/diarrhea	Spotlight: Fiji (Presentation by Fiona Russell, Centre for International Child Health, WHO Collaborating Centre for Research & Training in Child & Neonatal Health, Department of Pediatrics, University of Melbourne; and the Murdoch Childrens Research Institute, Melbourne, Australia)	2007-2015	• In this study from Fiji, a country in the same area as Solomon Islands (~2000 km distance) and which has strong rotavirus surveillance, the incidence of hospitalized all-cause diarrhea was ~1,000 cases per 100,000 children <12 months and ~850 cases per 100,000 children 12-23 months during 2007-2011 (before rotavirus vaccine was introduced). Incidence declined to ~600 cases per 100,000 children <12 months and ~400 cases per 100,000 children 12-23 months during 2014-2015 (after rotavirus vaccine was introduced). Following rotavirus vaccine introduction, there was a 70% decline in rotavirus

			admissions (p<0.001) and a 29% reduction in all-cause diarrhea admissions (p<0.001) in children <5 years.
HPV	Human Papillomavirus and Related Cancers, Fact Sheet 2017 (2017-07-27) ICO HPV Information Centre	May 2017	• In May 2016, MHMS in collaboration with Family Planning-Australia (FPL) introduced visual screening method, Visual Inspection with Acetic Acid (VIA). – Women aged 25-49 years in 7 health centres in HCC and at Good Samaritan Hospital in Guadalcanal Province. – In 2016, 591 women were screened, of whom 27 (4.6%) had positive findings and 2 (0.3%) had suspicious findings – No cryotherapy was performed – 3 women were referred to NRH gynaecology clinic • In 2017, cryotherapy was introduced to the protocol – From January-July, 563 women were screened, 33 (5.9%) had positive and 3 (0.5%) had suspicious findings – 23 had cryotherapy performed – 5 women were referred to NRH gynaecology clinic

6.1.1 HPV burden specific information

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

The Western Pacific Region (WPR), which has more than one-fourth of the world's population and accounts for approximately one-third of the global cancer burden. The WPR is expected to have a 41% increase in cancer burden by 2025. Age-adjusted incidence rates of cancer are relatively high in high-income countries compared with low- and middle-income countries and Pacific Island Countries (GLOBOCAN 2012). The low rates of cancer are partly due to the limitations in diagnostic capacity and incomplete cancer registration.

Cervical cancer is the most common cause of cancer among women in the Solomon Islands. Estimates from the World Health Organization (WHO) indicate that 35 women die each year from cervical cancer in the Solomon Islands, although the National Cancer Registry indicates that these statistics are from the Solomon Islands National Referral Hospital (NRH) and do include data from provincial hospitals. The International Agency for Research on Cancer data indicates an age-standardized incidence rate of 28.5/100,000 among women and a mortality rate of 18.0/100,000 women (Globocan 2012). Data from NRH indicate that during 2011, there were 85 admissions to the Obstetrics & Gynecology ward for cervical cancer. Reports from NRH suggest that the number of women presenting with cervical cancer is increasing over time and they are presenting with late stage disease.

Solomon Islands has an estimated population of 175,642 women ages 15 years and older who are at risk of developing cervical cancer (GLOBOCAN 2012). Current estimates indicate that every year, 57 women are diagnosed with cervical cancer and 31 die from the disease. In Solomon Islands, cervical cancer is the most common cancer among women, accounting for 303 cases during 2004-2014 (most common cause of cancer in Solomon Islands during 2004-2014 and highest cumulative total among cancer types seen at the National Referral Hospital, NRH). During 2015-2016, 48 women were entered into the NRH cancer registry. The majority of the cases of cervical cancer in Solomon Islands are detected in advanced or terminal stages of the disease.

Describe the existing cervical cancer prevention and control activities.

The Solomon Islands has begun to develop an integrated cervical cancer prevention and control plan; progress has been slow, though, due to resource constraints. Primary prevention strategies consist of HPV vaccination and health education. MHMS in collaboration with MOE and working closely with WHO, UNICEF, PATH and ACCF conducted a two-year human papillomavirus (HPV) vaccine demonstration project (2015-2016) in HCC Isabel Province to assess the feasibility and acceptability of HPV vaccination using a school-based and community outreach strategy. The strategy targeted all girls aged 9-12 years in HCC and Isabel

Province in the first year to receive two doses of HPV vaccine (12 month interval between first and second doses) and targeted 9-year old girls in the second year of the demonstration project. The HPV vaccine demonstration project was successful and experiences gained from it are guiding plans for national introduction.

In terms of secondary prevention, NRH and all provincial hospitals conduct Papanicolau test (or pap smears) for women ages 50 and above. The pap smears are sent to NRH which sends them to Brisbane, Australia, to be read. It typically takes over 4 months for results to be sent to Solomon Islands, which causes delays in identifying and treating women with cervical cancer. Women with cervical cancer cases are treated in the Solomon Islands with chemotherapy only because the country lacks the capacity to do radiotherapy. MHMS has an agreement with hospital in Australia to send some women with advanced disease for further treatment, though because of funding issues, MHMS has recently not been able to send women to Australia for more intensive therapy. Currently, there is no policy for screening women in the Solomon Islands according to WHO recommendations. Organized population-based screening is not yet possible due to resource constraints. In May 2016, MHMS in collaboration with Family Planning-Australia (FPL) introduced screening by visual inspection with acetic acid (VIA) to women ages 25-49 in 7 health centres in HCC and at Good Samaritan Hospital in Guadalcanal Province. In 2016, 591 women were screened, of whom 27 (4.6%) had positive findings and 2 (0.3%) had suspicious findings. No cryotherapy was performed, but 3 women were referred to NRH's gynaecology clinic. In 2017, cryotherapy was introduced to the protocol. During January-July, 563 women were screened, 33 (5.9%) had positive and 3 (0.5%) had suspicious findings. Twenty-three women underwent cryotherapy and 5 women were referred to NRH gynaecology clinic.

The availability and use of surgery for invasive cancer is currently at a very minimal level in Solomon Islands, and radical surgical procedures that are needed for some cases are not readily available. Radical hysterectomy is done only at NHR, where there are gynaecologists and one oncologist on staff is responsible for treatment of all cancer cases in the country. Radiotherapy is currently not available in the country. The availability of palliative care for advanced cervical cancer is minimal. Greater efforts are still required in the Solomon Islands in the areas of advocacy, resource mobilization, capacity building research, treatment and palliative care, rehabilitation, and other aspects that are necessary components of an effective comprehensive cervical cancer prevention and control program.

Has the country developed a strategy for establishing or strengthening a national comprehensive approach to cervical cancer prevention and control? **Not selected**

If Yes, please attach and refer to section 10. Attachments. (Document N°**15,16**)

If No, are there plans for the country to develop such a roadmap or strategy in the future? Please describe- when, who will be leading the development of the plan, and which agencies will be involved.

Yes. Please see attachment.

6.1.2 Description of province/ region profile

Countries are required to attach a description of the profile for each province/ region, using the template provided by Gavi

Please attach the relevant documents "HPV Region/ Province profile " template provided by Gavi and attach as a mandatory document in the Attachment section. Document number **16**)

6.1.3 Delivery strategies for HPV vaccine

Please provide information on each of the following **delivery strategies** that will be:

- Using outreach to schools as a location for vaccinations
- Using health facilities as a location for vaccinations
- Using community outreach as locations for vaccinations
- Campaign

Using schools as a location for vaccinations

Please describe why this delivery strategy has been chosen for the selection region/ district(s). Will this delivery strategy be used for every year? If so, please describe how this strategy will be financed in future years.

A school-based strategy was chosen because ≥85% of the target population are enrolled in school (89% of those who are primary school age and 85% of those who are secondary school age) and so this approach offers the best opportunity to reach a large number in a particular setting. The coverage survey conducted in 2016 during HPV vaccine demonstration project revealed that nearly all girls received HPV vaccine at school. Ninety-eight percent of girls in HCC and 93% of girls who received two doses received both at the same location.

The school-based strategy will be used every year to reach girls in school and HPV vaccination will be integrated into the routine immunization system.

The Solomon Islands Government has committed to co-finance the percentage allocated by Gavi's policies for copayment. One of the priority agenda items at the 2016 Pacific Regional Forum Ministers Meeting was to get countries to commit to implement the HPV vaccine.

Please specify whether girls will be vaccinated by selection of a specific age or a specific school grade

Girls will be eligible for HPV vaccine based on their age. In the first year of the national rollout, all girls,aged 9-14 years whether in school or out of school who have not already received HPV vaccine will be targeted for HPV vaccination. However, in HCC and Isabel Province, where the HPV vaccine demonstration project was conducted during 2015-2016, only girls aged 9 years, whether in school or out of school, will be targeted because 10-14 year old girls have already been vaccinated in these provinces.

After the first year, only the new cohort of 9 year old girls will be eligible for HPV vaccination.

The age of girls will be determined by birth year, consistent with the methods used by the national census to determine population estimates. Thus, eligibility will be as follows, by birth year: 2019 national rollout – routine (9 year olds) + multi-age cohort (10-14 year olds), which means girls born during 2004-2008.

(Note that 88% births are registered and 26% of girls have birth certificate. Use of birth year could be used if girls lack a birth certificate.)

Please complete table 6.1.3a vaccination by specific age or table 6.1.3b by specific school grade, depending on above choice

Table 6.1.3 a: Vaccination by specific age

Routine Cohort	
Specific age chosen	9 years
Target population of girls in chosen age	8534
Girls of chosen age enrolled in schools	89

Aditional multi-age cohort	
Specific age-range chosen	Start 10 years End 14 years
Target population of girls in chosen age	36952
Girls of chosen age range enrolled in schools	88

Table 6.1.3 b: Vaccination by specific school grade

Routine Cohort		
School grade	**Average age of girls on school grade**	**Number of girls in grade**
	9 years	7595

Aditional multi-age cohort		
School grade	**Average age of girls on school grade**	**Average age of girls on school grade**
	12 years	32518

If you are vaccinating by grade, provide information on how you will ensure girls under 9 or over 14-years will not be vaccinated

Not applicable

Please describe when vaccinations will be scheduled (school year, holidays, examinations), where vaccinations will be administered, who will do vaccinations, how will the vaccine logistics be assured when using schools as a location for vaccination.

National HPV vaccination will be launched in April 2019 during National Immunization Week (National Immunization Week is the 3rd week of April each year). The HPV vaccine rollout will start two weeks later, in May 2019, so that HPV vaccination can be promoted fully during National Immunization Week and to allow preparation and advocacy to be done between active promotion of the program and the initiation of vaccination.

All (in-school and out-of-school) girls will be encouraged to go to schools for vaccinations during the roll out. The ICC committee will ensure that the vaccination period does not coincide with examinations or school holidays.

EPI microplanning, with input from MOE, will ensure that preparation activities, including social mobilization, coordination, administration of vaccines, etc., are integrated. Teachers will responsible for conferring with parents to verify ages of school girls from class registers / birth certificates one month prior to the vaccine roll out. Each health facility will be responsible for to assist the schools in their catchment areas – they will deploy nurses to vaccinate girls in the schools -- with the support from zonal supervisors and will adhere to existing procedures and protocols for logistics, cold chain management, vaccine injection safety and appropriate waste disposal.

Vaccination cards will be used and will capture contact information for girls to help ensure that they receive the second HPV vaccine dose a year later.

There will be an opportunity for school girls who are not vaccinated in May to receive the vaccine at the nearest health clinic over a two-week period following administration of HPV vaccine at the schools. Social mobilization activities will be used to promote vaccination at schools and at health facilities for girls who miss the vaccination days at schools.

Vaccinations will be given in early May and since schools are in close proximity to health facilities, all unused vaccines will be stored in the nearest health facilities in all provinces except HCC and Guadalcanal Province. This will ensure that health facilities have vaccine stocks on hand to provide to girls missed during school vaccination days. In HCC and Guadalcanal Province, all unused vaccines will be returned to National Medical Stores (NMS).

Will additional personnel need to be hired in order to vaccinate the introduction year multi-age cohorts? If so, how will this be financed?

Existing infrastructure and personnel for routine immunization services will be utilized for HPV vaccine delivery during the roll out because this will be part of routine immunization and there will be enough staff engaged in routine immunization activities to assist with HPV vaccination.

Additional personnel (e.g. nurses) will be hired for the roll out among the multi-age cohort. Financing for these additional personnel will be covered by Gavi operational funds for HPV vaccine introduction.

Please describe the strategy to capture girls who may miss the initial vaccination session or any of the remaining doses

There will be an opportunity for school girls who are not vaccinated in May to receive the vaccine at the nearest health clinic over a two-week period following administration of HPV vaccine at the schools. Social mobilization activities will be used to promote vaccination at health facilities for girls who miss the vaccination days at schools. Social mobilization will include support through the community and religious leaders (e.g. community and church announcements) to refer girls who were not vaccinated already to health facilities.

Teachers will be enlisted to assist with referral of girls who were absent during school vaccination days to health facilities.

Registers in health facilities that record which girls were and were not vaccinated during school vaccination days will need to be harmonized with school and community outreach registers.

Will the vaccination strategy need to be adapted for at private or religious schools? If so, please elaborate.

The school-based strategies described above apply to private and religious schools. The HPV vaccine demonstration project did not reveal any issues or concerns with providing the vaccine at private and religious schools. EPI microplanning will include discussions with authorities of all schools to ensure their collaboration and support to reach targeted girls.

Using health facilities as a location for vaccination

Please describe why this approach has been chosen for the selection region/ district(s). Will this approach be used every year?

Health facilities have been used as a setting for following up in-school and out-of-schools girls who were not vaccinated during school vaccination days. They will provide HPV vaccines to girls who were not vaccinated during the two weeks in May following school vaccination days.

Will additional personnel need to be hired in order to vaccinate the introduction year multi-age cohorts? If so, how will this be financed?

There will be no need to hire additional personnel for to vaccinate girls in the multi-year cohort at health facilities during the introduction year. The existing personnel who conduct routine immunization services are adequate to conduct provide HPV vaccine to girls in this cohort who are not vaccinated during school vaccination days.

Please provide details of demand generation activities to encourage girls to come to the health facility?

The advocacy and social mobilization materials developed for the HPV vaccine demonstration project have to be revised for the national HPV vaccine introduction. The Health Promotion and EPI teams will meet to revise the existing IEC materials.

MHMS and MOE will work with the Solomon Islands Christian Association (SICA), the Solomon Islands Full Gospel Association (SIFGA) and the Solomon Islands Red Cross to provide services that primarily target adolescent girls in the following areas:

1. Institutional systems strengthening
2. Training of service providers
3. IEC and social mobilization
4. Advocacy for partnerships for increased participation
5. Sustained demand for service delivery

A talk radio show will be developed for the HPV vaccine launch event and radio announcement will be developed in both English and Pidgin for broadcast prior to, during and following National Immunization Week to increase awareness and generate demand for HPV vaccination.

Please provide details on how the country plans to link with schools. Some examples of how schools can be leveraged to increase HPV vaccine uptake include facilitating sensitization and mobilization of parents/communities, identification/validation of the target population (i.e. use of school enrolment lists), and assisting with vaccination call/recall mechanisms. If the country does not plan to link with schools please provide a justification for this decision (i.e. low school enrolment).

There was good collaboration between MHMS and MOE in the planning and identification of schools and target populations to be vaccinated for HPV vaccine demonstration project. For the national introduction, teachers will be trained to help identify the target population suing school enrolment lists and facilitate communication with parents. Social mobilization activities will be conducted in schools/ communities to promote awareness and communication between teachers and parents about the HPV vaccine decision making. Teachers play an important community leadership role and the between communities and teachers is an opportunity for MHMS to convey information to communities.

Describe if/how this delivery strategy will increase coverage, particularly amongst “hard to reach”/ vulnerable girls.

The goal will be to increase awareness about the benefits of HPV vaccination which can access all targeted girls, including hard-to-reach and vulnerable girls. A key strategy will be to use teachers and health workers to engage parents and community leaders and thereby increase community awareness, buy in, support and participation.

Describe what follow-up mechanism will be used to ensure girls receive their second dose.

Vaccination will be during May, two weeks after National Immunization Week, each year in schools and follow up immunization will be available in health facilities for two weeks following school vaccination days to reach girls missed during school vaccination days. Adequate processes are in place at health facilities help identify, contact and track missed girls and to ensure administration of the second dose of the vaccine through vaccination cards and registers.

Using community venues as locations for vaccinations

Please describe why this approach has been chosen for the selection region/ district(s).

Few targeted out-of-school girls will receive vaccinations at schools and a limited number may have access to or use health facilities. Community outreach will be the primary means of reaching these girls because it will bring vaccination services to the communities in which they live or near to where they live. This approach will also allow school girls who are missed school vaccine days be provide receive HPV vaccination.

Will this approach be used for every year? If so, please describe how this strategy will be financed in future years.

Community outreach will be conducted every year and will be included in HPV routine immunization activities. The cost of this strategy will be supported by the EPI budget as part of their routine immunization activities.

Please describe how your community health care workers/ volunteers will be involved with this strategy

Community health workers and volunteers in provinces will be enlisted to assist with identifying and registering out-of-school girls.

Will additional personnel need to be hired in order to vaccinate the introduction year multi-age cohorts? If so, how will this be financed?

Additional personnel (e.g. nurses) will be hired to assist with vaccination of the multi-age cohort in the introduction year. Community health workers and volunteers in some provinces will be enlisted to assist with identifying and registering out-of-school girls. These will be covered with Gavi operational funds.

Where in the community will the girls be vaccinated? E.g. schools, fixed outreach sites, streets, parks, malls, markets

Health facilities will use existing satellite sites that were successfully used during the HPV vaccine demonstration project.

What interventions will be established to increase community based acceptance and increase community support?

Community health workers will engage with communities and increase awareness of HPV vaccine by assisting with printing and distribution of IEC materials (e.g. posters, brochures, and flip charts).

The communication plan developed for the HPV vaccine demonstration project will be revised and expanded and it will be instrumental in informing the community of the benefits of HPV vaccine and the vaccination schedule. It will include key messages to raise awareness about the national launch of HPV vaccination. In addition, civil organizations such as the Solomon Islands Christian Association (SICA), the Solomon Islands Full Gospel Association (SIFGA) and the Solomon Islands Red Cross will be enlisted to increase acceptance and generate demand because these organization have strong networks of members, especially in the provinces.

Please provide details of demand generation activities e.g. awareness building and information dissemination via community or education sector and/or mass media, including through youth clubs and street theatre

The advocacy and social mobilization materials developed for the HPV vaccine demonstration project have to be revised for the national HPV vaccine introduction. The Health Promotion and EPI teams will meet to revise the existing IEC materials.

MHMS and MOE will work with the Solomon Islands Christian Association (SICA), the Solomon Islands Full Gospel Association (SIFGA) and the Solomon Islands Red Cross to provide services that primarily target adolescent girls in the following areas:

1. Institutional systems strengthening

2. Training of service providers
3. IEC and social mobilization
4. Advocacy for partnerships for increased participation
5. Sustained demand for service delivery

A talk radio show will be developed for the HPV vaccine launch event and radio announcement will be developed in both English and Pidgin for broadcast prior to, during and following National Immunization Week to increase awareness and generate demand for HPV vaccination

Describe if/how this delivery strategy will increase coverage, particularly amongst “hard to reach”/ vulnerable girls?

The goal will be to increase awareness about the benefits of HPV vaccination which can access all targeted girls, including hard-to-reach and vulnerable girls. A key strategy will be to use teachers and health workers to engage parents and community leaders and thereby increase community awareness, buy in, support and participation.

Describe what follow-up mechanism will be used to ensure girls receive their second dose.

Enrolment lists of out-of-school girls will be kept in communities by designated community leaders (e.g. a women's group leader or someone active in church) and this list will be used to identify and find girls so they can receive their second vaccine dose at satellite sites or at health facilities.

A strategy is being developed to register and track missed girls. Vaccination cards and lists that include contact information are available in the health facilities to support tracking and following up in and out of school girls to receive the second dose and a similar tracking mechanism could be used in communities.

In addition, community service organizations and community and traditional leaders (e.g. church, social mobilization partners) will be engaged to support efforts to reach eligible girls to receive the second dose. EPI microplanning will include these activities and collaboration with partners.

Using campaigns to deliver HPV vaccines

Please describe why this approach has been chosen for the selection region/ district(s).

Linking HPV vaccination to National Immunization Week activities is similar to use of a traditional “catch up campaign”, though it differs in that it will be an annual exercise that is in alignment with the HPV vaccine dosing schedule that has been selected (0,12 months). Gavi has provided funding to allow for the first year of the national rollout to include a multi-age cohort (10-14 years) of girls in addition to the routine cohort of 9-year old girls.

What type of campaign will be used for HPV vaccine delivery e.g. Child Health Days/ Weeks, Measles Rubella or tetanus containing vaccines, supplementary immunisation activities, health education activities? If the campaign is planned to be standalone, please explain why?

Solomon Islands has coordinated national immunization events, such as National Immunization Week with the national launch of new vaccines (e.g. PCV, IPV, MR) since 2015.

How will this campaign impact routine service delivery? For example, will health facility personnel be used for this campaign?

Additional personnel (e.g. nurses) will be hired to assist with vaccination of the multi-age cohort in the introduction year. Community health workers and volunteers in some provinces will be enlisted to assist with identifying and registering out-of-school girls. These will be covered with Gavi operational funds.

Will additional personnel need to be hired in order to vaccinate the introduction year multi-age cohorts? If so, how will this be financed?

Additional personnel (e.g. nurses) will be hired to assist with vaccination of the multi-age cohort in the introduction year. Community health workers and volunteers in some provinces will be enlisted to assist with identifying and registering out-of-school girls. These will be covered with Gavi operational funds.

What location(s) will be used to deliver vaccinations during the campaign?

HPV vaccine campaigns will use the same strategies used for routine vaccination that are mentioned above. Vaccine will be delivered in schools and in the health facilities and by community outreach during the two weeks following school vaccination days.

Will this delivery strategy be used for every year? If so, please describe how this strategy will be financed in future years.

This strategy will be used during the first year of the HPV national introduction. Gavi funds f will cover these activities.

Describe if/how this delivery strategy will increase coverage, particularly amongst “hard to reach”/ vulnerable girls?

The goal will be to increase awareness about the benefits of HPV vaccination which can access all targeted girls, including hard-to-reach and vulnerable girls. A key strategy will be to use teachers and health workers to engage parents and community leaders and thereby increase community awareness, buy in, support and participation.

6.1.4 Social Mobilisation

Please complete the table below to provide details on the types of information and/ or materials that will be used/ disseminated, to which audience, by which mechanism and the frequency of each.

Types of information or materials	**Audience receiving material**	**Method of delivery**	**Who delivers**	**Frequency & Timing**
e.g., leaflet, poster, banner, handbook, radio announcement, etc.	**e.g., girls, parents, teachers, health workers, district officials, community groups, etc.**	**e.g., parent meetings, radio, info session at school, house visit, etc.**	**e.g., teachers, health workers, district official, etc.**	**e.g., daily, weekly, twice before programme starts; day of vaccination, two weeks before programme begins, etc.**
Press release	Parents, teachers and target girls, Health service providers, other family members and relatives, neighbors, community, traditional, religious leaders, and community out-reach workers	Radio panel and news papers	EPI program and Health promotion Radio panel and news papers	1 week before launching Radio panel and news papers
SMS text		Phones	EPI program and health promotion	Once per week for 1 month during the introduction
Radio announcement	Public audience	Local media	EPI program and health promotion	1 month before the introduction
Talk radio	Parents, teachers and target girls, other family members and relatives, neighbors, community, traditional, religious leaders, and community out-reach workers	Local media	EPI program and health promotion, WHO, UNICEF	During the launch
Daily radio health program	Parents, teachers and target girls, other family members and relatives, neighbors, community, traditional, religious leaders, and community	Local media	EPI program and health promotion EPI program and health	1 month before introduction (every Tuesday)

	out-reach workers	Letter	promotion, community/church leaders	
Church announcement	Parents, teachers and target girls, other family members and relatives, neighbors, community, traditional, religious leaders, and community out-reach workers	Local media	EPI program and health promotion, community/church leaders	During the introduction
Routine immunization video	Parents, teachers and target girls, other family members and relatives, neighbors, community, traditional, religious leaders, and community out-reach workers	Newspaper, letter	EPI program and health promotion, community/church leaders	Vaccination week 1 month before the introduction
Briefing paper	Parents, teachers and target girls, other family members and relatives, neighbors, community, traditional, religious leaders, and community out-reach workers High level policy makers, national leaders, health service providers, Members of Parliament, other government divisions, policy-makers, national media			

Please describe a crisis communication plan to response to rumors and misconceptions to HPV vaccination.

MHMS developed a plan to respond to misinformation about the HPV vaccine circulated during the HPV vaccine demonstration project. This misunderstanding was handled by Distributing of factsheets, conducting sensitization activities and communication were used to prevent and control misconceptions and rumors.

MHMS's plan reminded the public that information on the internet can be written by anyone and is not always accurate.

It emphasized that there is a substantial amount of unreliable information about vaccines on the internet. It referred readers to authoritative sources of health information (e.g. MHMS and WHO) to ensure that they were reliably and accurately informed.

In addition, MHMS responded to some common myths and false rumors regarding the HPV vaccine. The communication plan developed for the national introduction will ensure that a crisis communication approach is fully described.

6.1.5 Adolescent health integration

Irrespective of the strategies, provide a description of existing health services and/or health education currently being provided to young adolescents (both girls and/or boys) within the 9-14 year old age group and indicate and potential synergy by integrating with HPV vaccination:

a. For health services (this can include: what health services are provided, to which age/sex group, whether it’s mandatory or voluntary, regularly or ad-hoc, in school or out of school, who provides these (government, NGOs), how often, what is the uptake in the community, how is it perceived by the community.)

Existing health interventions targeting adolescents include deworming, health education on menstrual hygiene, sexuality, nutrition, sexually transmitted infections (STIs) and human immunodeficiency virus (HIV), counseling emergency care, diagnosis and treatment of minor ailments and mental health promotion. Gender norms and sociocultural beliefs and practices as well as traditional authority structures and kinship patterns all impact access to and use of the health services.

Based on a prioritization exercise, there was a consensus among stakeholders that deworming and tetanus toxoid/oral polio vaccine (TT/OPV) vaccination could be integrated with HPV vaccination and that information, education and communication on adolescent health issues could be delivered during the pre-HPV and post HPV vaccination periods. This topic will be explored by MHMS after the first year of delivery of HPV vaccines nationally to ensure that the HPV vaccination program is well integrated into the routine activities and schedule of EPI prior to adding more services and burden for health workers.

b. For health education (this can include: the topic, whether it is national, sub-national, in school or out of school, who provides the education, how often, is it in the school curriculum, are there NGOs providing these? How is it perceived by the community? Has there been an evaluation and if so, how was it evaluated and what were the findings?)

MHMS is the primary government ministry responsible for providing adolescent health services. The National Adolescent Health Development Program is organized under the Reproductive and Child Health Division of MHMS.

The MOE has incorporated adolescent health education into the school curriculum and teachers are trained by MHMS staff to educate and guide students. The health education syllabus was designed using learning outcomes which identify the knowledge, attitude and values that all students should achieve and demonstrate. The health education curriculum has been organized into learning strands. The four strands in health education are: 1) personal health, growth and development, food and nutrition; 2) personal body care and safety; 3) healthy communities and environment; and 4) diseases and drug education. These strands provide the broad learning contexts and are further subdivided into sub-strands as units and topics.

It provides information and education through Family Life Education (FLE) and peer education; youth friendly services through adolescent health development (AHD) centers and health facilities; and enabling environment through communities, families and government departments.

Under MHMS, the STI/HIV Department provides advocacy to schools, church group, community, condom distribution, training of health workers and secondary school teachers, HIV testing and counseling through clinics, and distribution of IEC materials such as leaflets and posters. MHMS's Mental Health Department provides health education to schools and communities on mental health issues.

c. For improving adolescent immunization platform (this can include integration with: other vaccines provided to adolescents (e.g. measles-rubella, tetanus containing vaccines or Dengue), broader health education services)

WHO and other partners provide albendazole as a deworming treatment at schools for children aged 5-15 years in HCC once a year and it has a plan to expand the service to the other provinces in 2017.

Under the MHMS's Reproductive and Child Health Division (RCH), the Expanded Program on Immunization (EPI) provides TT and OPV at the age of 6 years at school entry once a year. These vaccinations are given at schools as an outreach program.

The Nutrition Unit under RCH provides albendazole as deworming treatment with vitamin A at schools for children aged 3-5 years in HCC once a year and has a plan to include older age groups and to expand the program to other provinces.

6.1.6 CSO engagement

Please describe how and which CSOs will be included in the delivery of HPV vaccines e.g. demand generation activities, increase coverage of "hard to reach" girls.

Consultations for the development of the new GAVI HSS proposal for the period 2017-2021, have shown that civil society, including churches, nongovernmental organizations (NGOs), the Red Cross and World Vision work are committed to work at the community level to enhance communication and information and generate demand for immunization. At the national level, a specific briefing event will be held with all stakeholders including NGOs, business and faith-based organizations. Relationships have already been established with some important stakeholders. The following groups have indicated their support for the strategy:

- Solomon Islands Christian Association (SICA) and Solomon Islands Full Gospel Association (SIFGA): National level associations have been contacted and expressed interest in support out-reach and dissemination of messages through enlistment of their networks.
- Solomon Islands Red Cross: Because Red Cross has a strong network of members, especially in the provinces, enlisting their support as part of wider social mobilization efforts will be very useful especially in terms of locations where additional support is limited.

6.1.7 Key stakeholder and technical partner roles and responsibilities

Please complete the Gavi provided template, to define the respective roles and responsibilities of all in-country stakeholders and technical partners.

Please attach the relevant documents and refer to section 10. Attachments. (Document N°**17**)

6.2. Requested vaccine (RV1, 1 dose/plastic tube, liquid)

As reported in the cMYP, the country plans to introduce RV1, using RV1, 1 dose/plastic tube, liquid.

When is the country planning to introduce this vaccine? **February 2019**

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.

Please summarise the cold chain capacity (at central and other levels) and readiness to accommodate new vaccines, taking into consideration training, cold chain equipment and other logistical requirements. If cold chain expansion is required, state how it will be financed, and when it will be in place. The Independent Review Committee requires assurance that the cold chain is ready or will be ready for the routine introduction of the new vaccine, and evidence/plans need to be provided. All proposals that include Gavi- financing for cold chain equipment intended for vaccine storage shall need to procure equipment pre-qualified 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.

The 2017 Solomon Islands Effective Vaccine Management (EVM) assessment found that in general, vaccines and diluents are stored at safe temperature ranges, cold and dry storage and transport capacities are sufficient, buildings and cold chain equipment are adequate and appropriate vaccine management policies are adopted and implemented. However, the assessment has revealed systemic weakness in storage temperatures, particularly at the central level, vaccine stock management and the preventive maintenance of cold chain equipment.

During the 2012 EVM assessment, the annual total value of vaccines passing through the Central Vaccine Store was estimated to be at US$ 438,000. This was before the introduction of PCV-13 and inclusion of IPV. With the plan for introduction of HPV and rotavirus vaccines (in 2018) into the routine vaccination schedule; this value will increase significantly, approximately by three folds, and cost approximately US $ 1.3 million per year.

The 2017 EVM assessment found that 140 (38%) of the 366 facilities in the 10 regions of Solomon Islands did not have any active cold chain equipment, and that 38 (16%) of 241 refrigerators/freezers were not in working condition. The highest number of facilities without any cold chain equipment is Central Region (54%). In terms of number of facilities without any active cold chain equipment is Malaita with 35 facilities (41% of total facilities).

Conclusions of the 2017 EVM assessment included: 1) with the rising cost of vaccines and the greater storage capacity now required at every level of the cold chain, the Solomon Islands immunization programme must reduce wastage, accurately forecast vaccine requirements, and prevent equipment break-down; 2) the Central Vaccine Store, as part of the National Medical Store, was in a chaotic situation and needs attention to improve: the post of the national cold chain coordinator has been vacant for over a year, however, the majority of the recommendations related to the Central Vaccine Store are of managerial nature and do not require a significant amount of funds; the other two levels of the supply chain were in better condition than the central level; 3) attention from partners and supervision from central EPI Office will address most of the problems and this will improve the situation; 4) important problems are storage temperatures and temperature monitoring, particularly at the central level – the data-logger, which is already available in the Central Vaccine Store, should be installed immediately, standard operating procedures (SOPs) should be developed based on the EVM criteria, and the SOPs should be field tested, printed and relevant ones should be sent to facilities after all staff is trained of their use; and 5) the Gavi CCEOP, if it is funded, should obviate problems related to equipment and maintenance and this in turn should lead to increased coverage and improved equity.

The current available CCE capacity for the Solomon Islands will allow for a successful introduction of both HPV and rotavirus vaccines while replacement and extension of capacity continue. Solomon Islands has a walk-in cold room (WICR) with 30 cubic metres capacity at the national level, with a net current vaccine storage capacity at +5°C storage temperature of 8,571 liters. The estimated vaccine storage capacity requirement, including planned new vaccine introductions, is 3,426 liters. There are two domestic chest freezers which serve the negative storage capacity at the national level. These two freezers will be replaced with WHO Performance, Quality and Safety (PQS) freezers in 2018. The 18 subnational vaccine distribution centers also have sufficient capacity, with net storage capacity at +5°C of 1,505 liters; the uninstalled capacity is 1,448 liters. These will also accommodate the vaccine volume requirements at the level of the vaccine distribution centers. However, replacement of older cold chain equipment is needed and this will be implemented during 2018-2019 to sustain the positive capacity. Of the 352 service points in the country, 259 have cold chain equipment. The 93 health facilities without cold chain equipment are slated to receive solar

direct drive refrigerators if the CCEOP proposal is approved. This will increase cold chain equipment (CCE) coverage to all service delivery points. Currently, there are 96 gas absorption refrigerators which will be replaced with WHO PQS solar direct drive refrigerators, which are more efficient and appropriate for the settings in which they will be used. The current cold chain capacity has been achieved with investment by the Solomon Islands government and partners, including Gavi, UNICEF, WHO and the Korean International Cooperation Agency (KOICA). The current available CCE capacity will allow for successful introduction of both HPV and rotavirus vaccines while replacement and extension of capacity continue.

6.2.1. Vaccine Prices

Vaccine	Presentation	2017	2018	2019	2020	2021	2022
RV1, 1 dose/plastic tube, liquid	1	2.012	2.012	2.012	2.012	2.012	2.012

6.2.2. 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	Accelerated transition phase

	2019	2020
minimum co-financing per dose	0.43	0.82
your co-financing per dose (please change if higher)		

	2021	2022
minimum co-financing per dose	1.22	1.62
your co-financing per dose (please change if higher)		

6.2.2.1.Specifications of vaccinations with new vaccine for routine cohort

	Source		2019	2020	2021	2022
Number of children in routine cohort to be vaccinated with the first dose	Table 5.2	#	18,640	19,877	20,341	20,815
Number of children in routine cohort to be vaccinated with the second dose	Table 5.2	#	18,640	19,877	20,341	20,815
Immunisation coverage with the second dose	Table 5.2	%	95%	99%	99%	99%
Country co-financing per dose	Table 6.2.2	$	0.43	0.82	1.22	1.62

6.2.3 Portion of supply for routine cohort to be procured by the country (and cost estimate, US$)

		2019	2020
Number of vaccine doses	#		
Number of AD syringes	#		
Number of re-constitution syringes	#	0	0
Number of safety boxes	#		
Total value to be co-financed by the Country ***[1]***	**$**	21,286	35,671

[1] The co-financing amount for intermediate and graduating countries indicates costs for the vaccines, related injection safety devices 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.

		2021	2022
Number of vaccine doses	#		
Number of AD syringes	#		
Number of re-constitution syringes	#	0	0
Number of safety boxes	#		
Total value to be co-financed by the Country ***[1]***	**$**	53,071	72,901

[1] The co-financing amount for intermediate and graduating countries indicates costs for the vaccines, related injection safety devices 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 New and Under-Used Vaccine Introduction Grant

Calculation of Vaccine Introduction Grant for the RV1, 1 dose/plastic tube, liquid

Year of New Vaccine Introduction	Births (from Table 5.2)	Share per Birth in US$	Total in US$
2019	20,228	0.80	16,182

This is a one-time cash grant of US$0.80/child in a single birth cohort or a lump sum of $100,000 (whichever is higher). It should be noted that for introduction applications submitted from January 2017 onwards and for all Gavi vaccine introductions planned for implementation in 2018 onwards, this grant will be adjusted according to transition stage of the country. Countries in preparatory transition phase (Phase 1) will be provided with $0.70 per targeted person in a single birth cohort, and countries which have entered accelerated transition phase (Phase 2) $0.60 per targeted person in a single birth cohort. For low income countries, the amount will remain at $0.80 per targeted person.

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 vaccine introduction grant will be used to support all activities to support a successful rotavirus vaccine introduction. There will be pre-introduction, during introduction and post-introduction activities, which will consist of:

1. Pre-introduction activities: these will include planning and preparatory activities such as proposal development, stakeholder engagement and sensitization, advocacy and social mobilization activities. The country will also review the availability of training materials and immunization data tools to ensure sufficient quantity have been produced. Training of health workers will be conducted starting with a national training-of-trainers followed by provincial-level cascade training where all health workers providing immunization services at the hospital- and clinic-level will be trained on the measles rotavirus vaccination while also providing refresher training on overall immunization programme management in areas of vaccine management, cold

chain and logistics, social mobilization, adverse events following immunization monitoring, the updated immunization schedule and data tools.

Other activities will include receipt and distribution of the vaccines to all provinces and clinics, including injection supplies and safety boxes. Additional cold chain equipment to be procured will also be distributed to areas of critical need. Waste management practices will be reviewed and proper plans will be put in place for the provinces as appropriate.

2. During introduction: the introduction will likely be kick started with a national launch in January 2019 by the MHMS executive. The VIG will also be used to send monitoring teams to clinics to monitor the roll out and provide on-the-job technical support with the rotavirus vaccine implementation.

3. Post-introduction activities: these will include conducting a post introduction evaluation 6-12 months after the roll out of rotavirus vaccination to identify the strengths and also to identify areas that might need to addressed immediately and also be used to support future introduction of new vaccines. There will also be ongoing data management and supportive supervision as well.

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

Detailed budget attached as Document No. 22.

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.

Gavi support is expected to cover the full exceptional costs associated with introduction, whereas government funding will cover costs associated with routine immunization. WHO will provide some support for health worker training and for the post-introduction evaluation and technical assistance amounting to approximately USD 30,000. UNICEF will provide in-country technical assistance in planning and roll out of the introduction and delivery of vaccines to the country; an additional USD 20,000 is committed by UNICEF to the rotavirus vaccination introduction for social mobilization activities.

6.2.5.Integrated disease control

a) Please describe **any** existing interventions for **the** prevention and treatment of pneumonia and diarrhoea and the status of implementation.

Solomon Islands introduced PCV13 in 2015. In addition to the PCV13 introduction, the Solomon Islands has implemented a number of strategies/interventions that include:

1) **Protect** 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) **Prevent** children becoming ill from pneumonia and diarrhea vaccines through: a) vaccines pertussis, measles, Hib, PCV13; b) hand washing with soap; c) safe drinking water and sanitation; and d) reduced household air pollution.

3) **Treat** 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 of low osmolality oral rehydration solution, zinc, antibiotics and oxygen; and d) continued feeding including breast feeding.

RWASH (rural WASH): Addresses diarrhea and sanitation, and thus has an impact on pneumonia.

Role Delineation Policy (RDP) (annex XXX): RDP is a policy is a tool to better define the range and level of services – or packages of care – to be delivered to groups throughout the Solomon Islands. The RDP aims to inform the standard requirements of health facilities across the country, including EPI and reproductive, maternal, newborn, child and adolescent health (RMNCAH). RDP:

- defines the different levels of service in the Solomon Islands health system;

- was developed based on the principles of primary health care;
- acts as a catalyst for health sector reform to strengthen the quality of service delivery;
- lays down the service delivery foundations for future development of the Solomon Islands health system;
- provides guidance on types of services (e.g. service delivery packages) that should be provided at each of the 6 levels of service to inform service planning and improve service quality; and
- defines the referral pathway for linking the health sector to the community as part of the referral system with strong continuity of care.

In the RDP, nurses play a crucial role in providing primary health care services, in part because of their knowledge of their communities. It is expected that this will lead to effective engagement and to increase local demand for primary health care services. The RDP promotes an integrated package of essential services available to the entire population and is key to promoting equity in health care and efficiency of service delivery.

b) Please provide any considerations for how vaccination could strengthen delivery and communication of additional health interventions. Please highlight any barriers that you may foresee with integrating vaccination with other health interventions.

Facilitators

The rotavirus vaccine introduction will provide an opportunity to support delivery and communication of additional interventions in the following ways:

1. Support integration of district/provincial micro-planning and supervision of health facilities and the community level activities on the child health survival interventions;
2. Prioritize districts and provinces with the highest burden of diarrheal diseases and lowest indicators on breastfeeding, hand washing, access to water, sanitation and treatment seeking for targeted approaches;
3. Support harmonized outreach and child health promotion campaigns which facilitate a host of activities such as caregiver sensitization, vitamin A supplementation, etc.; and
4. Establish and maintain linkages between the different departments especially at the provincial level (Health, Water and Sanitation; Community Based Services).

Barriers

The Rotavirus vaccine introduction may present some barriers, including:

1. Coordination: Integrated implementation of activities across different sectors may pose a challenge; to mitigate this, the MHMS will continue to work closely with partners and various sectors;
2. 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;
3. 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; and
4. Primary health care integration, particularly at the sub-national level, is often channeled through EPI, which increases the burden on health workers; continued advocacy to increase staffing levels, timely release of funds and use of community health structures can significantly help address this challenge and, at the provincial level, micro-planning will be emphasized.

6.2.6.Technical assistance

Please describe any particular area(s) the Ministry would require technical assistance to support the introduction of RV1. Please consider the support in the context of developing and implementing an integrated approach to disease prevention and control.

MHMS benefits from ongoing technical assistance from development partners, particularly UNICEF and WHO, in immunization strengthening and new vaccines introductions, which have included pentavalent vaccine, IPV, PCV13, and also the HPV vaccine demonstration project. MHMS may request assistance from WHO and other partners to develop implementation plans, integration, technical assistance for monitoring and evaluation of the introduction of rotavirus vaccine (e.g. a post-introduction evaluation and coverage survey), and possibly to support a health systems strengthening technical officer position funded under the transition plan.

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

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

When is the country planning to introduce this vaccine? **May 2019**

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.

Please summarise the cold chain capacity (at central and other levels) and readiness to accommodate new vaccines, taking into consideration training, cold chain equipment and other logistical requirements. If cold chain expansion is required, state how it will be financed, and when it will be in place. The Independent Review Committee requires assurance that the cold chain is ready or will be ready for the routine introduction of the new vaccine, and evidence/plans need to be provided. All proposals that include Gavi- financing for cold chain equipment intended for vaccine storage shall need to procure equipment pre-qualified 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.

The 2017 Solomon Islands Effective Vaccine Management (EVM) assessment found that in general, vaccines and diluents are stored at safe temperature ranges, cold and dry storage and transport capacities are sufficient, buildings and cold chain equipment are adequate and appropriate vaccine management policies are adopted and implemented. However, the assessment has revealed systemic weakness in storage temperatures, particularly at the central level, vaccine stock management and the preventive maintenance of cold chain equipment.

During the 2012 EVM assessment, the annual total value of vaccines passing through the Central Vaccine Store was estimated to be at US$ 438,000. This was before the introduction of PCV-13 and inclusion of IPV. With the plan for introduction of HPV and rotavirus vaccines (in 2018) into the routine vaccination schedule; this value will increase significantly, approximately by three folds, and cost approximately US $ 1.3 million per year.

The 2017 EVM assessment found that 140 (38%) of the 366 facilities in the 10 regions of Solomon Islands did not have any active cold chain equipment, and that 38 (16%) of 241 refrigerators/freezers were not in working condition. The highest number of facilities without any cold chain equipment is Central Region (54%). In terms of number of facilities without any active cold chain equipment is Malaita with 35 facilities (41% of total facilities).

Conclusions of the 2017 EVM assessment included: 1) with the rising cost of vaccines and the greater storage capacity now required at every level of the cold chain, the Solomon Islands immunization programme must reduce wastage, accurately forecast vaccine requirements, and prevent equipment break-down; 2) the Central Vaccine Store, as part of the National Medical Store, was in a chaotic situation and needs attention to improve: the post of the national cold chain coordinator has been vacant for over a year, however, the majority of the recommendations related to the Central Vaccine Store are of managerial nature and do not require a significant amount of funds; the other two levels of the supply chain were in better condition than the central level; 3) attention from partners and supervision from central EPI Office will address most of the problems and this will improve the situation; 4) important problems are storage temperatures and temperature monitoring, particularly at the central level – the data-logger, which is already available in the Central Vaccine Store, should be installed immediately, standard operating procedures (SOPs) should be developed based on the EVM criteria, and the SOPs should be field tested, printed and relevant ones should be sent to facilities after all staff is trained of their use; and 5) the Gavi CCEOP, if it is funded, should obviate problems related to equipment and maintenance and this in turn should lead to increased coverage and improved equity.

The current available CCE capacity for the Solomon Islands will allow for a successful introduction of both HPV and rotavirus vaccines while replacement and extension of capacity continue. Solomon Islands has a walk-in cold room (WICR) with 30 cubic metres capacity at the national level, with a net current vaccine storage capacity at +5°C storage temperature of 8,571 liters. The estimated vaccine storage capacity requirement, including planned new vaccine introductions, is 3,426 liters. There are two domestic chest freezers which serve the negative storage capacity at the national level. These two freezers will be replaced with WHO Performance, Quality and Safety (PQS) freezers in 2018. The 18 subnational vaccine distribution centers also have sufficient capacity, with net storage capacity at +5°C of 1,505 liters; the uninstalled capacity is 1,448 liters. These will also accommodate the vaccine volume requirements at the level of the vaccine distribution centers. However, replacement of older cold chain equipment is needed and this will be implemented during 2018-2019 to sustain the positive capacity. Of the 352 service points in the country, 259

have cold chain equipment. The 93 health facilities without cold chain equipment are slated to receive solar direct drive refrigerators if the CCEOP proposal is approved. This will increase cold chain equipment (CCE) coverage to all service delivery points. Currently, there are 96 gas absorption refrigerators which will be replaced with WHO PQS solar direct drive refrigerators, which are more efficient and appropriate for the settings in which they will be used. The current cold chain capacity has been achieved with investment by the Solomon Islands government and partners, including Gavi, UNICEF, WHO and the Korean International Cooperation Agency (KOICA). The current available CCE capacity will allow for successful introduction of both HPV and rotavirus vaccines while replacement and extension of capacity continue.

6.3.1. Vaccine Prices

Vaccine	Presentation	2017	2018	2019	2020	2021	2022
HPV quadrivalent, 1 dose(s) per vial, LIQUID	1	4.500	4.500	4.500	4.500	4.500	4.500

6.3.2. Co-financing information

The co-financing requirement applies to vaccines for the **routine cohort** (i.e. the cohort that will be routinely vaccinated on an annual basis for the routine immunisation programme). However, Gavi will fully finance vaccines for the **additional multi-age cohort** during the introduction year.

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

Country group	Accelerated transition phase

	2019	2020
minimum co-financing per dose	0.95	1.84
your co-financing per dose (please change if higher)		

	2021	2022
minimum co-financing per dose	2.73	3.61
your co-financing per dose (please change if higher)		

6.3.2.1.Specifications of vaccinations with new vaccine for routine cohort

	Source		2019	2020	2021	2022
Number of girls in routine cohort to be vaccinated with the first dose	Table 5.2	#	7,681	7,859	8,041	8,228
Number of girls in routine cohort to be vaccinated with the second dose	Table 5.2	#	0	7,422	7,595	7,771
Immunisation coverage with the second dose	Table 5.2	%	0	85%	85%	85%
Country co-financing per dose	Table 6.2.2	$	0.95	1.84	2.73	3.61
Number of girls in the additional multi-age cohort to be vaccinated with the first dose	Table 5.2	#	33,257	0	0	0
Number of girls in the additional multi-age cohort to be vaccinated with the second dose	Table 5.2	#	31,409	0	0	0
Immunisation coverage with the second dose	Table 5.2	%	85.00%	0	0	0

6.3.2.2.Specifications of vaccinations with new vaccine for additional multi-age cohort

	Source		2019	2020	2021	2022
Number of girls in the additional multi-age cohort to be vaccinated with the first dose	Table 5.2	#	33,257	0	0	0

Number of girls in the additional multi-age cohort to be vaccinated with the second dose	Table 5.2	#	31,409	0	0	0
Immunisation coverage with the second dose	Table 5.2	%	85.00%	0	0	0

6.3.3 Portion of supply for routine cohort to be procured by the country (and cost estimate, US$)

		2019	2020
Number of vaccine doses	#	1,592	6,132
Number of AD syringes	#	2,210	7,626
Number of re-constitution syringes	#	0	0
Number of safety boxes	#	25	85
Total value to be co-financed by the Country *[1]*	$	9,597	33,305

[1] The co-financing amount for intermediate and graduating countries indicates costs for the vaccines, related injection safety devices 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.

		2021	2022
Number of vaccine doses	#	9,310	12,596
Number of AD syringes	#	10,302	13,939
Number of re-constitution syringes	#	0	0
Number of safety boxes	#	114	154
Total value to be co-financed by the Country *[1]*	$	45,319	61,010

[1] The co-financing amount for intermediate and graduating countries indicates costs for the vaccines, related injection safety devices 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.

6.3.3.1 Portion of supply for routine cohort to be procured by Gavi (and cost estimate, US$)

		2019	2020
Number of vaccine doses	#	6,089	9,149
Number of AD syringes	#	8,458	11,378
Number of re-constitution syringes	#	0	0
Number of safety boxes	#	93	125
Total value to be co-financed by Gavi	$	36,721	49,693

		2021	2022
Number of vaccine doses	#	6,326	3,403
Number of AD syringes	#	7,000	3,766
Number of re-constitution syringes	#	0	0
Number of safety boxes	#	77	41
Total value to be co-financed by Gavi	$	30,796	16,483

6.3.3.2 Portion of supply for additional multi-age cohort to be procured by Gavi (and cost estimate, US$)

		2019	2020
Number of vaccine doses	#	67,900	0
Number of AD syringes	#	74,690	0
Number of re-constitution syringes	#	0	0
Number of safety boxes	#	822	0

		2021	2022
Number of vaccine doses	#	0	0
Number of AD syringes	#	0	0
Number of re-constitution syringes	#	0	0
Number of safety boxes	#	0	0

6.3.4 New and Under-Used Vaccine Introduction Grant

Calculation of Vaccine Introduction Grant for the HPV quadrivalent, 1 dose(s) per vial, LIQUID

Year of New Vaccine Introduction	Girls in routine cohort (From Table 5.2)	Share per Girls in routine cohort in US$	Total in US$
2019	8,534	2.40	20,482

The Grant will be based on a maximum award of $2.4 per girl in the routine 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 vaccine introduction grant will be used to support all activities related to the HPV introduction:

- HPV vaccination will be conducted once in every year targeting girls 9 years old in routine. Some provinces will use funds to hire community workers and volunteers will to identify / register out-of-school girls.
- Activities that need to be implemented prior to vaccine introduction, including microplanning ; training of health workers; development of a comprehensive communication plan; production of communication support materials; sensitization of teachers, parents, and faith-based and community leaders; and development and printing of data collection tools and a training manual.
- Engagement of CSOs and community and traditional leaders (e.g. church, social mobilization partners) to reach eligible girls to be vaccinated.

In the implementation phase, activities would include: transportation of vaccinators and supplies to vaccination sites and monitoring and supervision of vaccination sessions.

Please complete the ‘Detailed budget for VIG / Operational costs’ template provided by Gavi and attach as a mandatory document in the Attachment section.

Detailed budget attached as Document No. 22.

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.

Gavi support is expected to cover the full exceptional costs associated with introduction, whereas government funding will cover costs associated with routine immunization. WHO will provide some support for health worker training and for the post-introduction evaluation and technical assistance amounting to approximately USD 30,000. UNICEF will provide in-country technical assistance in planning and roll out of the introduction

and delivery of vaccines to the country; an additional USD 20,000 is committed by UNICEF to the rotavirus vaccination introduction for social mobilization activities.

6.3.5.New and Under-Used Operational support

Calculation of Operational Support for the HPV quadrivalent, 1 dose(s) per vial, LIQUID

Year of New Vaccine Introduction	Girls in additional multi-age cohort (From Table 5.2)	Share per Girls in additional multi-age cohort in US$	Total in US$
2019	36,952	0.45	16,628

Please describe how the Gavi Operational support will be used to reach the additional multi-age cohorts? How will these funds be used to strengthen routine activities e.g. reinforcing routine outreach activities, additional personnel, additional demand generation activities?

Note: These funds can be used over a longer period than the introduction year in order to strengthen routine immunisation. For example to reinforce routine outreach activities in difficult to access districts.

The main objective of this proposal is to ensure that girls aged 9-14 years are vaccinated with 2 doses of HPV vaccine countrywide. Routine cohorts of 9-year old girls will receive HPV annually as part of Solomon Islands' routine immunization program. A multi-age cohort of girls in and out school aged 10-14 years will be vaccinated in campaign in the first year of the HPV introduction.

Activities to be implemented prior to vaccine introduction will include microplanning ; training of health workers; development of a comprehensive communication plan; development and production of communication support materials; sensitization of teachers, parents, and faith-based and community leaders; and development and printing of data collection tools and a training manual.

In the implementation phase, activities will include; transportation of vaccinators and supplies to vaccination sites and monitoring and supervision of vaccination sessions.

Additional personnel (e.g. nurses) will be hired to help vaccinate girls in the multi-age cohort in the introduction year. In some provinces, community workers and volunteers will be hired to identify and register out-of-school girls.

CSOs and community and traditional leaders (e.g. church, social mobilization partners) will be engaged to help reach eligible girls to be vaccinated.

Detailed budget attached as Document No. 22.

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.

Gavi support is expected to cover the full exceptional costs associated with introduction, whereas government funding will cover costs associated with routine immunization. WHO will provide some support for health worker training and for the post-introduction evaluation and technical assistance amounting to approximately USD 30,000. UNICEF will provide in-country technical assistance in planning and roll out of the introduction and delivery of vaccines to the country; an additional USD 20,000 is committed by UNICEF to the rotavirus vaccination introduction for social mobilization activities.

6.3.6.Technical assistance

Please describe any particular area(s) the Ministry would require technical assistance to support the introduction of HPV quadrivalent.

PATH, WHO and UNICEF provided technical support to the Solomon Islands country related to the HPV vaccine demonstration project, including technical assistance for the coverage survey and the post-introduction evaluation. MHMS has requested PATH's assistance for HPV vaccine decision-making and vaccine delivery. PATH provided assistance to support the national application with development of the

introduction plan and an integrated approach for the HPV vaccine introduction. PATH technical assistance will support the national preparation of IEC and social mobilization materials. WHO and UNICEF provided technical assistance on the application and will be provide technical assistance for the introduction of HPV vaccine and monitoring and evaluation activities following introduction.

7. NVS Preventive Campaigns

No NVS Prevention Campaign Support this year

8. NVS Follow-up Campaigns

No NVS Follow-up Campaign Support this year

9. Procurement and Management

9.1 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):

Solomon Islands procures all its vaccines and through UNICEF from WHO prequalified manufacturers and it expects vaccine costs will be given to UNICEF Supply Division by Gavi for procurement and delivery. Other funds will be received in country to plan and implement activities that will support successful introduction of rotavirus vaccine, including health worker training, social mobilization and demand generation, data tools, strengthening of the immunization data collection system, supportive supervision and evaluation.

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.

The VIG should be transferred to the Central Bank of Solomon Islands (CBSI) Gavi account being managed by the Ministry of Health and Medical Services. The accounts details have being provided in the banking form section of the application.

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

The country co-financing amounts will be paid to UNICEF Supply Division for vaccine procurements. The Permanent Secretary of MHMS monitors and ensures the funds are disbursed and utilized using the relevant SIG rules through the Ministry of Finance and Treasury. The National Medical Stores has included a vaccine procurement budget line item for vaccines and supplies in its annual operational plan.

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

The Solomon Islands Government processes and rules are applied in the management and utilization of Gavi funds in country which covers cash disbursement and liquidation, procurement processes and guidelines with necessary tendering procedures and also payment of any supplemental staff duty allowances.

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

The immunization data in the country is collected through the District Health Information System 2 (DHIS2). Summaries from the health facilities are compiled every month ending and submitted to the provincial HIS office who enters the data into the DHSI portal. The National and Provincial programme officers have access to the online portal where they monitor progress and review performance. The National EPI program reviews

and discussed the data coverage trends at its weekly EPI technical committee meetings and advises provinces on necessary actions to be taken.

g) If applying for measles second dose, does the country wish to have the support in cash or in-kind? **N/A**

9.2 Procurement and Management for NVS Preventive Campaign(s)

No NVS Prevention Campaign Support this year

9.3 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.

WHO prequalification is sufficient for vaccines used in Solomon Islands.

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

HPV vaccine

Quadrivalent HPV vaccine,1-dose vial. No licensing required. No licensing required.

Rotavirus vaccine

Preferred: RV1, 1 dose. Alternative: RV5, 1 dose. No licensing required.

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.

There are no special conditions or documentations required for HPV or rotavirus vaccines and no delays anticipated.

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

The Solomon Islands does not have an NRA. However, there However, the Solomon Islands only uses WHO-prequalified vaccines. In addition, the National Pharmacy and Therapeutic Committee serves NRA functions.

9.4 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).

Rotavirus vaccine

Rotavirus vaccine is an oral vaccine. Hospitals, clinics and outreach sites will use incinerators, open pit burning and/or burying to dispose of rotavirus immunization waste.

HPV vaccine

Solomon Islands has adopted the WHO and UNICEF joint policy on safety of injections that recommends the use of only AD syringes and safety boxes together with quality vaccines for all types of immunization activities including routine and supplemental immunization activities. Therefore only AD syringes will be used to administer measles second dose and other vaccines integrated in the immunization program. Adequate amount of injection supplies and safety boxes will be procured and distributed to all vaccination sites.

Injectable vaccines are provided by only skilled nurses and nurses are trained and practice safe use of AD syringes. After injection, the plunger will automatically lock and this will ensure that the syringe cannot be reused. After use, needles are not re-capped and the needle and syringe are disposed in a safety box.

In hospitals, incinerators are used for disposal of injection waste and clinics use open pit burning and burying.

To improve waste management there is a plan that UNICEF will procure 3 incinerators every year for 5 years using the Gavi HSS grant 2017-2022. The Secretariat of the Pacific Regional Environment Program (SPREP), an international NGO, donated 5 incinerators for 5 hospitals in 2016.

There will be supportive supervision to monitor the appropriate practice of safe injections including discarding used HPV vaccine according to WHO Guidelines.

9.5 Procurement and Management for Follow up Campaign(s)

No NVS Follow-up Campaign Support this year

10. List of documents attached to this proposal

Table 1: Checklist of mandatory attachments

Document Number	Document	Section	File
Endorsements			
1	MoH Signature (or delegated authority) of Proposal	4.1.1	HPV & Rota -Ministers Signatures.pdf **File desc:** **Date/time :** 06/09/2017 05:33:52 **Size:** 251 KB
2	MoF Signature (or delegated authority) of Proposal	4.1.1	HPV & Rota -Ministers Signatures.pdf **File desc:** **Date/time :** 06/09/2017 05:34:56 **Size:** 251 KB
3	MoE signature (or delegated authority) of HPV Proposal	4.1.1	HPV & Rota -Ministers Signatures.pdf **File desc:** **Date/time :** 06/09/2017 05:34:56 **Size:** 251 KB
4	Terms of Reference for the Coordination Forum (ICC/HSCC or equivalent) including all sections outlined in Section 5.2 of the General Application Guidelines (Note: countries applying before May 2017 can submit their existing Terms of Reference)	4.1.2	The National Inter-Agency_Coordinating Committee for Family Health TOR.pdf **File desc:** **Date/time :** 06/09/2017 05:35:32 **Size:** 196 KB
5	Minutes of Coordination Forum meeting endorsing Proposal	4.1.3	Doc5_Family Health committee meeting Minutes 01092017.pdf **File desc:** **Date/time :** 08/09/2017 08:43:01 **Size:** 219 KB
6	Signatures of Coordination Forum members in Proposal	4.1.3	Doc6_Signatures of Coordination Forum Members.pdf **File desc:** **Date/time :** 08/09/2017 01:26:16 **Size:** 258 KB
7	Minutes of the Coordination Forum meetings from the past 12 months before the proposal	4.1.3	Doc7_Minutes from the meeting of the NationalICC_August 2016 - May 2017.pdf **File desc:** **Date/time :** 08/09/2017 01:22:49 **Size:** 951 KB
8	Role and functioning of the advisory group, description of plans to establish a NITAG	4.2.1	Doc8_Role of the functioning advisory group (National ICC TORs).pdf **File desc:** In the Solomon Islands, the ICC serves the functions of a NITAG. The ICC TORs are attached. Discussions are ongoing regarding whether to form a sub-regional NITAG for the Pacific Islands. **Date/time :** 07/09/2017 09:05:31 **Size:** 200 KB
31	Minutes of NITAG meeting with specific recommendations on the NVS introduction or campaign	4.2	Doc31_Minutes from the meeting of the NationalICC_August 2016 - May 2017.pdf **File desc:** In the Solomon Islands, the ICC serves the functions of a NITAG. The ICC minutes for the past year are attached.

			Date/time : 08/09/2017 01:24:42 **Size:** 951 KB
Planning, financing and vaccine management			
9	Comprehensive Multi Year Plan - cMYP	5.1	Final version of cMYP 2016-2020 -Solomon Is..pdf **File desc:** SI cMYP 2016-2020 **Date/time :** 06/09/2017 05:31:04 **Size:** 1 MB
10	cMYP Costing tool for financial analysis	5.1	Doc10_Solomon Islands Costing tool cMYP_V3_9.1.xls **File desc:** cMYP costing tool was created for the Solomon Islands 2016-2020 cMYP. The country's cMYP will be updated in the next few months to extend through 2022 and a revised cMYP costing tool will be created for the extended plan. **Date/time :** 07/09/2017 09:08:09 **Size:** 7 MB
11	M&E and surveillance plan within the country's existing monitoring plan	5.1.4	Doc12_Solomon Islands Rotavirus-HPV Vaccine Introduction Plan_09082017(Final).doc **File desc:** Attachment 12, the new vaccine introduction plan, includes a discussion of M&E and surveillance within the country's existing monitoring plan. **Date/time :** 08/09/2017 12:03:53 **Size:** 1 MB
12	New vaccine introduction plan (NVIP), New Vaccine Introduction Checklist and Activity List & Timeline for routine vaccines or Plan of Action (PoA) for campaign vaccines	5.1,7.2.3	Doc12_Solomon Islands Rotavirus-HPV Vaccine Introduction Plan_09082017(Final).doc **File desc:** **Date/time :** 08/09/2017 12:03:22 **Size:** 1 MB
15	HPV Region/ Province profile	6.1.1	Doc15_HPV_natl_elig_by_province_2018-2022.xlsx **File desc:** **Date/time :** 07/09/2017 09:09:48 **Size:** 45 KB
16	HPV Key Stakeholder Roles and Responsibilities	6.1.1,6.1.2	Doc16_Stakeholder Roles & Responsibilities_2017_SolomonIslands_09082017.xlsx **File desc:** **Date/time :** 08/09/2017 12:32:05 **Size:** 22 KB Doc16_Stakeholder Roles & Responsibilities_2017_SolomonIslands_09082017.xlsx **File desc:** **Date/time :** 08/09/2017 12:34:43 **Size:** 22 KB
19	EVM report	9.3	EVM_report_Solomon Islands_v2- final_07102017.pdf **File desc:** **Date/time :** 08/09/2017 01:13:16 **Size:** 1 MB
20	Improvement plan based on EVM	9.3	EVM_report_Solomon Islands_v2- final_07102017.pdf **File desc:** 2017 EVM contains EVM improvement plan. **Date/time :** 08/09/2017 01:14:19 **Size:** 1 MB

21	EVM improvement plan progress report	9.3	Doc21_SolomonIsland-EVM_improvement_plan_03 07 17v2.xls **File desc:** **Date/time :** 07/09/2017 09:16:20 **Size:** 41 KB
22	Detailed budget template for VIG / Operational Costs	6.x,7.x.2,6.x.2,8.2.3	Doc22_SI_HPV_Detailed_Budget_VIG&OperGrant.xlsm **File desc:** Attached is the SI HPV detailed budget/VIG-Operational Grant. I have attached the SI HPV detailed budget/VIG-Operational Grant at an "Other" attachment (35) because I could only attach one document here. **Date/time :** 08/09/2017 08:55:23 **Size:** 2 MB
32	Data quality assessment (DQA) report	5.1.4	SI_DQAReportSI2017Final.pdf **File desc:** Solomon Islands DQA Report **Date/time :** 07/09/2017 06:27:18 **Size:** 1 MB

Table 2: Checklist of optional attachments

Document Number	Document	Section	File
14	Annual EPI Plan with 4 year forward view for measles and rubella		No file loaded
17	Evidence of commitment to fund purchase of RCV (in place of the first dose of MCV) / for use in the routine system	5.1.6, 6.1.7	No file loaded
18	Campaign target population documentation	8.x.1, 6.x.1	No file loaded
24	Risk assessment and consensus meeting report for Yellow Fever, including information required Section 5.3.2 in the General Guidelines on YF Risk Assessment process	5.1	No file loaded
25	Post Introduction Evaluation report from any recent NVS introduction	5.1	Doc25_SI HPV PIE Report - April 2016- Final.pdf **File desc:** **Date/time :** 08/09/2017 05:15:55 **Size:** 797 KB
26	List of areas/districts/regions and targets to be supported for meningitis A mini catch up campaigns		No file loaded
27	National Measles (& Rubella) elimination plan if available		No file loaded

28	A description of partner participation in preparing the application	4.1.3	No file loaded
30	For countries applying for measles/rubella support that are not yet financing the measles monovalent component of MCV1, ICC minutes committing to finance from 2018 onwards.		No file loaded
33	DQA improvement plan	5.1.4	No file loaded
34	Plan of Action for campaigns	8.1, 8.x.4	No file loaded
35	Other		Doc35_Other--BankingForm_With signatures.pdf **File desc:** Attached is the Banking Form with signatures as Section 12 of this application does not seem to permit uploading this document or signing electronically. **Date/time :** 08/09/2017 01:48:40 **Size:** 378 KB Dpc22_SI_Rota_Detailed_Budget_VIG&OperGran.xlsm **File desc:** **Date/time :** 08/09/2017 09:01:13 **Size:** 2 MB
36	Strategy for establishing or strengthening a national comprehensive approach to cervical cancer prevention and control		Doc36_Strategic Plan For The Prevention And Control Of Cervical Cancer in SI.pdf **File desc:** **Date/time :** 08/09/2017 05:16:27 **Size:** 769 KB
37	Evidence of self-financing MCV1	5.1.5	No file loaded
38	For countries applying for measles/rubella support that are not yet financing the measles monovalent component of MCV1, a signed letter from the Minister of Health and the Minister of Finance committing to finance from 2018 onwards.		No file loaded
39	Epidemiological analysis/evidence	8.3.1	No file loaded
40	Post Campaign Coverage Survey report for MR catch-up applications	5.1.x	No file loaded

41	cMYP addendum on measles and rubella		No file loaded
42	Offline cofinancing calculator for this campaign	5.5, 8.2.3	No file loaded

11. Annexes

Annex 1 - NVS Routine Support

Annex 1.1 RV1, 1 dose/plastic tube, liquid

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

		2019	2020	2021	2022
Number of vaccine doses	#				
Number of AD syringes	#				
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#				
Total value to be co-financed by the Country *[1]*	$	21,286	35,671	53,071	72,901

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

Portion of supply for routine cohort to be procured by Gavi (and cost estimate, US$)

		2019	2020	2021	2022
Number of vaccine doses	#	0	0	0	0
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	$	84,882	57,628	40,228	23,615

Table Annex 1.1 D: Estimated numbers for RV1, 1 dose/plastic tube, liquid, associated injection safety material and related co-financing budget (page 1)

		Formula	2019		
			Total	Government	Gavi
A	Country co-finance	*V*	20.05 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	18,640	3,738	14,902
C	Number of doses per child	*Vaccine parameter (schedule)*	2		
D	Number of doses needed	*B x C*	37,280	7,475	29,805
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	39,144	7,848	31,296
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]*	9,786	1,962	7,824
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	49,500	9,924	39,576
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.10*	0	0	0
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	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)*	99,594	19,968	79,626
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	0	0	0
P	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)*	6,574	1,318	5,256
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	106,168	21,286	84,882
U	Total country co-financing	*I x country co-financing per dose (cc)*	21,285		
V	Country co-financing % of Gavi supported proportion	*U / T*	20.05 %		

Table Annex 1.1 D: Estimated numbers for RV1, 1 dose/plastic tube, liquid, associated injection safety material and related co-financing budget (page 2)

		Formula	2020		
			Total	Government	Gavi
A	Country co-finance	*V*	38.23 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	19,877	7,600	12,277
C	Number of doses per child	*Vaccine parameter (schedule)*	2		
D	Number of doses needed	*B x C*	39,754	15,199	24,555
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	41,742	15,959	25,783
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]*	650	249	401
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	43,500	16,631	26,869
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.10*	0	0	0
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	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)*	87,522	33,462	54,060
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	0	0	0
P	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)*	5,777	2,209	3,568
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	93,299	35,671	57,628
U	Total country co-financing	*I x country co-financing per dose (cc)*	35,670		
V	Country co-financing % of Gavi supported proportion	*U / T*	38.23 %		

Table Annex 1.1 D: Estimated numbers for RV1, 1 dose/plastic tube, liquid, associated injection safety material and related co-financing budget (page 3)

		Formula	2021		
			Total	Government	Gavi
A	Country co-finance	*V*	56.88 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	20,341	11,571	8,770
C	Number of doses per child	*Vaccine parameter (schedule)*	2		
D	Number of doses needed	*B x C*	40,682	23,141	17,541
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	42,717	24,299	18,418
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]*	244	139	105
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	43,500	24,744	18,756
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.10*	0	0	0
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	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)*	87,522	49,784	37,738
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	0	0	0
P	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)*	5,777	3,287	2,490
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	93,299	53,071	40,228
U	Total country co-financing	*I x country co-financing per dose (cc)*	53,070		
V	Country co-financing % of Gavi supported proportion	*U / T*	56.88 %		

Table Annex 1.1 D: Estimated numbers for RV1, 1 dose/plastic tube, liquid, associated injection safety material and related co-financing budget (page 4)

		Formula	2022		
			Total	Government	Gavi
A	Country co-finance	*V*	75.53 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	20,815	15,722	5,093
C	Number of doses per child	*Vaccine parameter (schedule)*	2		
D	Number of doses needed	*B x C*	41,630	31,444	10,186
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	43,712	33,017	10,695
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]*	249	189	60
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	45,000	33,990	11,010
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.10*	0	0	0
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	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)*	90,540	68,387	22,153
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	0	0	0
P	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)*	5,976	4,514	1,462
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	96,516	72,901	23,615
U	Total country co-financing	*I x country co-financing per dose (cc)*	72,900		
V	Country co-financing % of Gavi supported proportion	*U / T*	75.53 %		

Annex 1.2 HPV quadrivalent, 1 dose(s) per vial, LIQUID

Table Annex 1.2 A: Rounded up portion of supply that is procured by the country and estimate of relative costs in US$

		2019	2020	2021	2022
Number of vaccine doses	#	1,592	6,132	9,310	12,596
Number of AD syringes	#	2,210	7,626	10,302	13,939
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	25	85	114	154
Total value to be co-financed by the Country *[1]*	$	9,597	33,305	45,319	61,010

Table Annex 1.2 B: Rounded up portion of supply that is procured by Gavi and estimate of relative costs in US$

Portion of supply for routine cohort to be procured by Gavi (and cost estimate, US$)

		2019	2020	2021	2022
Number of vaccine doses	#	6,089	9,149	6,326	3,403
Number of AD syringes	#	8,458	11,378	7,000	3,766
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	93	125	77	41
Total value to be co-financed by Gavi	$	36,721	49,693	30,796	16,483

Portion of supply for additional multi-age cohort to be procured by Gavi (and cost estimate, US$)

		2019	2020	2021	2022
Number of vaccine doses	#	67,900	0	0	0
Number of AD syringes	#	74,690	0	0	0
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#	822	0	0	0

Table Annex 1.2 C: Summary table for vaccine HPV quadrivalent, 1 dose(s) per vial, LIQUID

	Source		2019	2020	2021	2022
Number of girls in the additional multi-age cohort to be vaccinated with the first dose	Table 5.2	#	33,257	0	0	0
Number of girls in the additional multi-age cohort to be vaccinated with the second dose	Table 5.2	#	31,409	0	0	0
Immunisation coverage with the second dose	Table 5.2	%	85.00%	0	0	0

Table Annex 1.2 D: Estimated numbers for HPV quadrivalent, 1 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget (page 1)

		Formula	2019		
			Total	Government	Gavi
A	Country co-finance	*V*	20.72 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	7,681	1,592	6,089
B1	Number of children to be vaccinated with the second dose	*Table 5.2*	31,409		
C	Number of doses per child	*Vaccine parameter (schedule)*	1		
D	Number of doses needed	*B + B1*	7,681	1,592	6,089
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	8,066	1,671	6,395
G	Vaccines buffer stock	*Buffer on doses needed = (D - D of previous year) x 25% Buffer on wastages = ((F - D) - (F of previous year - D of previous year)) x 25%, = 0 if negative result G = [buffer on doses needed] + [buffer on wastages]*	2,017	418	1,599
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	10,100	2,093	8,007
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.10*	10,668	2,210	8,458
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(K + L) / 100 x 1.10*	118	25	93
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	45,450	9,416	36,034
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	385	80	305
P	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)*	55	12	43
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	428	89	339
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	46,318	9,597	36,721
U	Total country co-financing	*I x country co-financing per dose (cc)*	9,595		
V	Country co-financing % of Gavi supported proportion	*U / T*	20.72 %		

Table Annex 1.2 D: Estimated numbers for HPV quadrivalent, 1 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget (page 2)

		Formula	2020		
			Total	Government	Gavi
A	Country co-finance	*V*	40.13 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	7,859	3,154	4,705
B1	Number of children to be vaccinated with the second dose	*Table 5.2*	0		
C	Number of doses per child	*Vaccine parameter (schedule)*	1		
D	Number of doses needed	*B + B1*	15,281	6,132	9,149
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	16,046	6,439	9,607
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]*	1,995	801	1,194
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	18,100	7,263	10,837
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.10*	19,004	7,626	11,378
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(K + L) / 100 x 1.10*	210	85	125
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	81,450	32,683	48,767
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	685	275	410
P	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)*	97	39	58
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	766	308	458
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	82,998	33,305	49,693
U	Total country co-financing	*I x country co-financing per dose (cc)*	33,304		
V	Country co-financing % of Gavi supported proportion	*U / T*	40.13 %		

Table Annex 1.2 D: Estimated numbers for HPV quadrivalent, 1 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget (page 3)

		Formula	2021		
			Total	Government	Gavi
A	Country co-finance	*V*	59.54 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	8,041	4,788	3,253
B1	Number of children to be vaccinated with the second dose	*Table 5.2*	0		
C	Number of doses per child	*Vaccine parameter (schedule)*	1		
D	Number of doses needed	*B + B1*	15,636	9,310	6,326
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	16,418	9,776	6,642
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]*	93	56	37
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	16,600	9,884	6,716
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.10*	17,302	10,302	7,000
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(K + L) / 100 x 1.10*	191	114	77
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	74,700	44,476	30,224
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	623	371	252
P	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)*	89	53	36
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	703	419	284
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	76,115	45,319	30,796
U	Total country co-financing	*I x country co-financing per dose (cc)*	45,318		
V	Country co-financing % of Gavi supported proportion	*U / T*	59.54 %		

Table Annex 1.2 D: Estimated numbers for HPV quadrivalent, 1 dose(s) per vial, LIQUID, associated injection safety material and related co-financing budget (page 4)

		Formula	2022		
			Total	Government	Gavi
A	Country co-finance	*V*	78.73 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	8,228	6,478	1,750
B1	Number of children to be vaccinated with the second dose	*Table 5.2*	0		
C	Number of doses per child	*Vaccine parameter (schedule)*	1		
D	Number of doses needed	*B + B1*	15,999	12,596	3,403
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	16,799	13,226	3,573
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]*	96	76	20
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	16,900	13,306	3,594
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.10*	17,705	13,939	3,766
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	Total of safety boxes (+ 10% of extra need) needed	*(K + L) / 100 x 1.10*	195	154	41
N	Cost of vaccines needed	*I x vaccine price per dose (g)*	76,050	59,873	16,177
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	638	503	135
P	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)*	90	71	19
R	Freight cost for vaccines needed	*N x freight cost as of % of vaccines value (fv)*	715	563	152
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	77,493	61,010	16,483
U	Total country co-financing	*I x country co-financing per dose (cc)*	61,009		
V	Country co-financing % of Gavi supported proportion	*U / T*	78.73 %		

Annex 2 - NVS Routine – Preferred Second Presentation

Annex 2.1 - NVS Routine Support (RV5, 1 dose/plastic tube, liquid)

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

		2019	2020	2021	2022
Number of vaccine doses	#				
Number of AD syringes	#				
Number of re-constitution syringes	#	0	0	0	0
Number of safety boxes	#				
Total value to be co-financed by the Country *[1]*	$	31,735	52,399	79,057	107,164

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

Rounded up portion of supply for the additional cohort that is procured by Gavi and estimate of relative costs in US$

		2019	2020	2021	2022
Number of vaccine doses	#	0	0	0	0
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	$	220,012	165,577	141,989	118,487

Table Annex 2.1 D: Estimated numbers for RV5, 1 dose/plastic tube, liquid, associated injection safety material and related co-financing budget (page 1)

		Formula	2019		
			Total	Government	Gavi
A	Country co-finance	*V*	12.61 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	18,640	2,350	16,290
C	Number of doses per child	*Vaccine parameter (schedule)*	3		
D	Number of doses needed	*B x C*	55,920	7,050	48,870
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	58,716	7,402	51,314
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]*	14,679	1,851	12,828
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	73,800	9,303	64,497
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.10*	0	0	0
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	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)*	236,160	29,770	206,390
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	0	0	0
P	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)*	15,587	1,965	13,622
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	251,747	31,735	220,012
U	Total country co-financing	*I x country co-financing per dose (cc)*	31,734		
V	Country co-financing % of Gavi supported proportion	*U / T*	12.61 %		

Table Annex 2.1 D: Estimated numbers for RV5, 1 dose/plastic tube, liquid, associated injection safety material and related co-financing budget (page 2)

		Formula	2020		
			Total	Government	Gavi
A	Country co-finance	*V*	24.04 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	19,877	4,779	15,098
C	Number of doses per child	*Vaccine parameter (schedule)*	3		
D	Number of doses needed	*B x C*	59,631	14,335	45,296
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	62,613	15,052	47,561
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]*	975	235	740
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	63,900	15,361	48,539
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.10*	0	0	0
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	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)*	204,480	49,154	155,326
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	0	0	0
P	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)*	13,496	3,245	10,251
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	217,976	52,399	165,577
U	Total country co-financing	*I x country co-financing per dose (cc)*	52,398		
V	Country co-financing % of Gavi supported proportion	*U / T*	24.04 %		

Table Annex 2.1 D: Estimated numbers for RV5, 1 dose/plastic tube, liquid, associated injection safety material and related co-financing budget (page 3)

		Formula	2021		
			Total	Government	Gavi
A	Country co-finance	*V*	35.76 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	20,341	7,275	13,066
C	Number of doses per child	*Vaccine parameter (schedule)*	3		
D	Number of doses needed	*B x C*	61,023	21,825	39,198
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	64,075	22,917	41,158
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]*	366	131	235
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	64,800	23,176	41,624
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.10*	0	0	0
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	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)*	207,360	74,162	133,198
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	0	0	0
P	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)*	13,686	4,895	8,791
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	221,046	79,057	141,989
U	Total country co-financing	*I x country co-financing per dose (cc)*	79,056		
V	Country co-financing % of Gavi supported proportion	*U / T*	35.76 %		

Table Annex 2.1 D: Estimated numbers for RV5, 1 dose/plastic tube, liquid, associated injection safety material and related co-financing budget (page 4)

		Formula	2022		
			Total	Government	Gavi
A	Country co-finance	*V*	47.49 %		
B	Number of children to be vaccinated with the first dose	*Table 5.2*	20,815	9,886	10,929
C	Number of doses per child	*Vaccine parameter (schedule)*	3		
D	Number of doses needed	*B x C*	62,445	29,656	32,789
E	Estimated vaccine wastage factor	*Table 5.2*	1.05		
F	Number of doses needed including wastage	*D x E*	65,568	31,139	34,429
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]*	374	178	196
I	Total vaccine doses needed	*Round up((F + G) / Vaccine package size) * Vaccine package size*	66,150	31,416	34,734
J	Number of doses per vial	*Vaccine parameter*	1		
K	Number of AD syringes (+ 10% wastage) needed	*(D + G) x 1.10*	0	0	0
L	Reconstitution syringes (+ 10% wastage) needed	*(I / J) x 1.10*	0	0	0
M	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)*	211,680	100,529	111,151
O	Cost of AD syringes needed	*K x AD syringe price per unit (ca)*	0	0	0
P	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)*	13,971	6,635	7,336
S	Freight cost for devices needed	*(O+P+Q) x freight cost as % of devices value (fd)*	0	0	0
T	Total fund needed	*(N+O+P+Q+R+S)*	225,651	107,164	118,487
U	Total country co-financing	*I x country co-financing per dose (cc)*	107,163		
V	Country co-financing % of Gavi supported proportion	*U / T*	47.49 %		

Annex 3 - NVS Preventive campaign(s)

No NVS Prevention Campaign Support this year

Annex 4

Table Annex 4A:Commodities costs

Estimated prices of supply are not disclosed

Vaccine	Presentation	2017	2018	2019	2020
HPV quadrivalent, 1 dose(s) per vial, LIQUID	1	4.500	4.500	4.500	4.500
RV1, 1 dose/plastic tube, liquid	1	2.012	2.012	2.012	2.012

Vaccine	Presentation	2021	2022
HPV quadrivalent, 1 dose(s) per vial, LIQUID	1	4.500	4.500
RV1, 1 dose/plastic tube, liquid	1	2.012	2.012

Supply	Form

Note: WAP - weighted average price (to be used for any presentation: For DTP-HepB-Hib, it applies to 1 dose liquid, 2 dose lyophilised and 10 dose liquid. For Yellow Fever, it applies to 5 dose lyophilised and 10 dose lyophilised)

Table Annex 4B: Freight cost as percentage of value

Vaccine Antigen	Vaccine Type	2019	2020
RV1, 1 dose/plastic tube, liquid	ROTA	6.60 %	6.60 %
HPV quadrivalent, 1 dose(s) per vial, LIQUID	HPV	0.94 %	0.94 %

Vaccine Antigen	Vaccine Type	2021	2022
HPV quadrivalent, 1 dose(s) per vial, LIQUID	HPV	0.94 %	0.94 %
RV1, 1 dose/plastic tube, liquid	ROTA	6.60 %	6.60 %

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

Vaccine	2019	2020

RV1, 1 dose/plastic tube, liquid	0.43	0.82
HPV quadrivalent, 1 dose(s) per vial, LIQUID	0.95	1.84

Vaccine	2021	2022
RV1, 1 dose/plastic tube, liquid	1.22	1.62
HPV quadrivalent, 1 dose(s) per vial, LIQUID	2.73	3.61

12. Banking Form

In accordance with the decision on financial support made by the Gavi, the Government of Solomon Islands hereby requests that a payment be made via electronic bank transfer as detailed below:

Name of Institution (Account Holder):	Ministry of Health and Medical Services		
Address:	PO.BOX 3.t9, China Town		
City Country:	Honiara, lomon Islands		
Telephone no.:	00677 21791/00677 23492	**Fax no.:**	00677 23513
	Currency of the bank account:		SBD
For credit to:			
Bank account's title:	GAVI Health Sector Support Programme		
Bank account no.:	0540045		
Bank's name:	Central Bank of Solomon Islands		

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

By who is the account audited? External Private Auditors

Signature of Government's authorizing official

		Seal
Name:	Dr Gregory Jilini	
Title:	Permanent Secretary, Supervisiong Ministry of Health and Medical Services	
Signature:		
Date:	9/4/2017	

FINANCIAL INSTITUTION		**CORRESPONDENT BANK (In the United States)**	
Bank Name:	Central Bank of Solomon Islands		
Branch Name:	Honiara, Solomon Islands		
Address:	Mud Alley Str. P.O. Box 634		
City Country:	Honiara, Solomon Islands		
Swift Code:	CBSISBSB		
Sort Code:			
ABA No.:			
Telephone No.:	00677 23513/00677 23492		
FAX No.:	0067 23513		

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

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

1		
	Name:	Dr Divinal Ogaoga
	Title:	Director of Reproductive and Childhealth Division
2		
	Name:	Ms Yvonne Lipi
	Title:	Chief Accountant-MOH
3		
	Name:	Ms Esther Tekulu
	Title:	Senior Project Officer-MOH

Name of bank's authorizing official
Mr Ali P. Homelo, Chief Manager, International Department
Signature:
Date: 9/5/2017
Seal: