GUINEA-BISSAU
Programme Support Rationale
[2018-2022]

The Programme Support Rationale (PSR) presents the rationale and high-level objectives for the programming of Gavi's support for the upcoming period (and together with the Vaccine Support Rationale mentioned below), replaces the application forms previously used to request new support).

- The PSR is developed approximately once every five years based on and in alignment with the national health and immunisation strategic plan(s) and budgets.
- It incorporates the joint appraisal in the year of its review.
- Stock levels and requests for renewals or product switches need to be reported on the Gavi Country Portal between late March and May 15 2017
- The PSR builds upon robust analysis of country data and evidence of progress made (or persistent challenges) on the coverage and equity situation.
- In parallel to the PSR, the operational work plan and budget and Gavi grant performance framework (GPF) are developed to complement the objectives presented in the PSR. The operational budget and work plan will be updated annually to align with country's operational planning processes, and informed by the joint appraisal.
- The PSR will be reviewed by independent technical experts who will make a recommendation to Gavi on the full portfolio of support for the duration of the PSR, including any current support that needs to be renewed.
- A complementary Vaccine Support Request will be developed to support requests and Gavi approval for New Vaccines Support nearer the time of their implementation (~12-18 months ahead of launch).

For more information about the processes supporting the development, review and approval of the support requests consolidated in the PSR, please see Guidance on Gavi's country engagement framework (available from the Gavi SCM). A list of mandatory country documents is provided there (Annex 4).

Signatures – Endorsement of the PSR

Please note that final approval of Gavi's support will require signatures of both the Minister of Health and Minister of Finance or their delegated authority (and Minister of Education for HPV support). Gavi also requires endorsement of the PSR and the grant performance framework by the relevant government-led Coordination Forum (Inter-agency Coordinating Committee (ICC), Health Sector Coordinating Committee (HSCC) or equivalent body), through submission of Coordination Forum member signatures together with the minutes of the endorsing meeting. Signatures and endorsement of the PSR are required before a recommendation for support can be issued by Gavi's independent reviewers.

We, the undersigned, affirm that the objectives and activities in the Gavi PSR are fully aligned with the national health and immunisation strategic plans (or equivalent), and that funds for implementing all activities, including domestic funds and any needed vaccine co-financing will be included in the annual budget of the Ministry of Health.	
Minister of Public Health, Family and Social Cohesion (or delegated authority)	**Minister of Economy and Finance** (or delegated authority)
Name: Maria (illegible) Mendes Sanha	**Name:** SULEIMANE SEIDI
Signature: (signature) [stamp: REPUBLIC OF GUINEA-BISSAU, MINISTRY OF PUBLIC HEALTH, MINISTER]	**Signature:** [signature] [stamp: REPUBLIC OF GUINEA-BISSAU, MINISTRY OF ECONOMY AND FINANCE, MINISTER'S OFFICE]
Date: 06 (illegible)	**Date:** 07.09.2018

Part A: Overview of portfolio of support

1. Vaccines: Country co-financing and Gavi support requested for current and new Gavi funded vaccines

1.1 Current vaccines supported by Gavi		Estimated projections [1]				
		Year 1	Year 2	Year 3	Year 4	Year 5
Vaccine 1. (e.g. Pentavalent routine)	Country co-financing (US$)	$35,729	$38,733	$41,881	$43,981	$45,791
	Gavi support (US$)	$101,828	$110,388	$119,359	$125,347	$130,505
Vaccine 2. (e.g. Rotavirus routine)	Country co-financing (US$)	$14,292	$15,493	$16,752	$17,592	$18,317
	Gavi support (US$)	$189,255	$205,166	$221,840	$232,967	$242,555
Vaccine 3 (YFV)	Country co-financing (US$)	14,292	15,493	16,752	17,592	18,317
	Gavi support (US$)	62,168	67,395	72,872	76,527	79,677
Vaccine 4 (PCV13)	Country co-financing (US$)	33,493	36,312	39,263	41,232	42,929
	Gavi support (US$)	477,317	517,445	559,497	587,562	611,743
Vaccine 5 (IPV)	Country co-financing (US$)	33,849	36,694	39,976	41,666	43,381
	Gavi support (US$)	93,083	100,909	109,110	114,583	119,298
a) Total country co-financing for current vaccines (US$)		**$ 131,655**	**$95,961.73**	**$104,030.73**	**$154,624**	**$162,063**
b) Total Gavi support for current vaccines (US$)		**$ 923,651**	**$923,651**	**$1,001,303**	**$1,082,678**	**$1,136,986**
c) *Total cost of current vaccines (a+b) (US$)*		**1,055,306**	**$1,019,612.73**	**$1,105,333.73**	**$10,237,302**	**$1,299,049**
1.2 New vaccine support requested						
Vaccine 1 (MenA routine)	Population in the target age cohort (#)		66,461	67,923	69,418	70,945
	Target population (first or only dose) (#)		33,231	53,339	59,006	63,851
	Target population for last dose (#)					
	Estimated wastage rates[2]		25.0%	25.0%	25.0%	25.0%
	Country co-financing (US$)		22,342	32,066	32,365	34,995

[1] These estimates provide visibility to the total funding needs that a country should plan to complement the Gavi financing. These estimates are projections and may differ from actual commitments, which are calculated year-by-year and reflected in Gavi decision letters. The source of these estimates are the latest inputs received from country, with adjustments performed by the Gavi Secretariat (e.g. price updates, supply constraints, etc.).

[2] For indicative wastage rates for preferred presentations (%), please refer to the detailed product profiles available here: http://www.gavi.org/library/gavi-documents/supply-procurement/detailed-product-profiles/

	Gavi support (US$)		66,461	67,923	69,418	70,945
Vaccine 2 [HPV routine]	Population in the target age cohort (#)				120,134	122,777
	Target population (first or only dose) (#)				72,080	98,222
	Target population for last dose (#)				72,080	98,222
	Estimated wastage rates[3]				1.0%	1.0%
	Country co-financing (US$)	$			12,135	22,377
	Gavi support (US$)	$			266,965	492,284
d) Total co-financing for new vaccines (US$)		$	22,342	32,066	44,500	57,372
e) Total Gavi support for new vaccines requested (US$)		$	34,295	49,221	316,645	546,001
f) Total cost of new vaccines requested (d+e) (US$)		**$**	**56,637**	81,287	361,145	603,373
1.3 Total cost and co-financing summary						
g) Total country co-financing for current and new vaccines requested (a+d) (US$)		**95,961.73**	**126,372.73**	**186,690**	**206,563**	**226,107**
h) Total Gavi support for current and new vaccines requested (b+e) (US$)		**923,651**	**927,946**	**1,131,899**	**1,453,631**	**1,729,779**
i) Total cost of current and new vaccines requested (g+h) (US$)		**1,019,613**	**1,054,318.73**	**1,318,589**	**1,660,194**	**1,955,886**

1.4 Request for vaccine presentation switches for current support (if applicable)4. Please note that this requires further documents containing cold chain capacity, current product stock levels, and a costed activity plan (to submit via the Country Portal in the "Supporting Documents" section).

Gavi aims to meet a country's preferences on vaccine presentation **to the extent possible. When there is not enough supply of a desired product to meet country demand, Gavi will consider the rationale for the switch in order to prioritise supply between countries.**

Desired presentation	Desired introduction month	Rationale for the switch in presentation including any anticipated impact on coverage and equity
…	…	…

[3] For indicative wastage rates for preferred presentations (%), please refer to the detailed product profiles available here: http://www.gavi.org/library/gavi-documents/supply-procurement/detailed-product-profiles/

[4] For a detailed description of the vaccine product profiles, visit the Gavi website (click on 3rd tab): http://www.gavi.org/about/gavis-business-model/vaccine-supply-and-procurement/

1.5 Vaccine presentation and implementation dates: Country to complete all columns for each new vaccine introduction and campaign planned over the duration of the Programme Support Rationale (PSR) and for which the country seeks support.

Programme and type of support	Preferred presentation[5]	Desired date for vaccines to arrive	Planned launch date	Support requested until
[MenA]	See detailed product profiles	07/2019	10/2019	2022
[HPV]	See detailed product profiles	12/2020	03/2021	2022

[5] For vaccine presentations, please refer to the detailed product profiles available here: http://www.gavi.org/library/gavi-documents/supply-procurement/detailed-product-profiles/

2. Financial support

2.1 Currently active Gavi financial support (only amounts already approved but not yet completed) Entire table prefilled by Gavi

Type of support		Amount approved	Amount disbursed	Amount remaining	Year(s) of support
HSS 1			*$11,343,375*	*$100,000*	*2008-2015*
VIG IPV			*$568,989*	*$25,000*	*2017-2019*

2.2 New financial support requested Country to complete table below

Please note the country's total HSS ceiling for the coming 5 years[6]: (US$ 3,750,000)	Indicative estimates[7]					
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Health System Strengthening (HSS) support						
Strengthen the management and coordination of the Expanded Programme on Immunisation at all levels, make it more effective and efficient in order to improve immunisation coverage and equity	219,134	148,790	133.817	128.512	129.035	759.287
Increase immunisation coverage for immunised children, increasing VAR coverage from 81.3% in 2017 to at least 95% and Penta 3 coverage from 82% to at least 95% in 2022, in an equitable manner across the 8 health regions	295,653	122,812	123.764	123.764	123.764	789.757
Increase the effective vaccine management score at all levels from 57.3% in 2014 to 80% by the end of 2022	643.673	247.127	94.659	95.941	70,423	1151823
By 2022, 90% of mothers and guardians of children under one year of age, including special populations, are aware of the importance of immunisation and attend immunisation services	151,420	76,152	75,721	75,454	75,414	454,160
Reduce the gap between administrative data and immunisation coverage survey data for fully immunised children from 15% (80%-65%) [8] in 2017 to 5% in 2022 in all regions	291,841	47,729	47,729	47,729	47,729	482,757

6 If circumstances warrant, and the source of the country investment for the CCEOP is Gavi HSS, this amount should be deducted from the HSS ceiling.
7 To determine the ceiling (total) of these complementary allocations (VIGs and Ops) the country needs to specify their target population for the associated vaccine
[8] 2017 local coverage survey

Programme management costs	56,108	56,108	-	-	-	112,216
Total HSS (US$)	**1,657,829**	**698,717**	**475,690**	**471,399**	**446,364**	**3,750,000**
Cold Chain Equipment Optimisation Platform (CCEOP)						
CCEOP Gavi joint investment[9]						
CCEOP country joint investment[10]						
• National funds	$83,237	$83,791				$167,028
• Gavi HSS (with this amount clearly budgeted for within the HSS ceiling to avoid double counting)	$332,946	$335,165				$668,112
• Other partners						
Total CCEOP[11] (US$)	$416,183	$418,957	0	0	0	$835,140
New vaccine support (vaccine introduction grants, or operational support for campaigns, or switch grants)						
e.g. Measles second dose routine VIG	0	$98,187				$98,187
e.g. MenA routine VIG	0					
e.g. MenA immunisation campaign Ops	0	$98,187				$98,187
HPV	0		$100,000	$100,000		$196,374
Total HSIS (Health System and Immunisation Strengthening) support requested (US$)	**2,997,663**	**2,241,994**	**1,707,589**	**2,025,030**	**2,176,143**	**11,148,420**

2.3 Data verification options for calculating HSS/Performance Based Funding (PBF) payments **Country to complete entire table**

Use of country administrative data (Yes/No):	…	**Use of WHO/UNICEF estimates (Yes/No):**	…	**Use of surveys (Yes/No):**	…

9CCEOP Gavi joint investment = 50% or 80% of the total amount for the CCEOP, depending on the World Bank's GNI group (and Gavi co-financing status)
[10] CCEOP Gavi joint investment = 20% or 50% of the total amount for the CCEOP, depending on the World Bank's GNI group (and Gavi co-financing status)
[11] Total CCEOP = CCEOP country joint investment + CCEOP Gavi joint investment

Part B: Country immunisation system analysis

> **!** The Gavi Strategy 2016-2020 focuses on increasing coverage and equity of immunisation services to reach every child with vaccine support. The analysis presented in Part B is key to identifying those areas of low coverage and inequities that may need to be targeted with future Gavi support (described in Part D).

3. Country contextual information

Years of National Health Plan	**2018-2022**
Years of immunisation strategy (e.g. cMYP)	**2018-2022**
Start and end dates of fiscal period	**January-December**
Timing of annual national operational work-planning	**January-December**
Transition and co-financing status (list the status: initial self-financing, preparatory transition phase, accelerated)	Initial self-financing
Total annual immunisation budget for Government and partners (past year)	Not available
Total health expenditure/per capita (past year)	$38

4. Results achieved by the country in relation to the main indicators of vaccine results in line with the Gavi Strategy (2016-2020), based on the country's updated **performance framework** (including source and year).

Total spending on routine immunisation per child (from JRF and UNWPP data)	Prefilled by Gavi Secretariat (IF&S)
Vaccines (not financed by Gavi) in the current immunisation schedule (e.g. OPV)	Country to complete
Other status relevant within Gavi (e.g. PEF tier, Fragility, Ebola, Coverage & Equity)	Not under any specific category
Penta 3 coverage at national level (Penta 3[12])	2017 : Admin : 79% Official : 79% WUENIC : 87% Enquête (2016) : 83%
Measles-containing vaccine (first dose) **coverage** at national level (MCV1)	2017 : Admin : 66% Official : 66% WUENIC : 81% Enquête (2016) :86%
Drop-out rate between Penta 1 and Penta 3	2017 : Admin : 13% Official : 13% WUENIC : 8% Enquête (2016) :7%

[12] See Annex 3 in CEF Guidance for the minimum requirements for eligibility

Equity of immunisation coverage by geography: percentage of districts or equivalent administrative areas with Penta 3 coverage greater than 80%	2017 : Admin : 64%
Equity of immunisation coverage by poverty status: percentage point difference in Penta 3 coverage in highest vs. lowest wealth quintile	2012 : Enquête : 15.9%
Immunisation coverage by education status of mother/caretaker: percentage point difference in Penta 3 coverage among children whose mother/caretaker received no education vs. completed secondary education or higher	2012 : Enquête : 15.5%
Data quality: percentage point difference between Penta 3 national administrative coverage and coverage survey estimate	2016 : Enquête : -14%
Country composite score of last Effective Vaccine Management (EVM) evaluation (annual and aggregate score)	2014 : 55

5. Coverage and equity situation

Improving sustainable coverage and addressing inequities requires the ability to identify the populations that are not getting immunised, understand the bottlenecks or challenges that keep them from being immunised, and tailor interventions to address those specific bottlenecks. This section sets the context for targeting specific populations, communities or geographic areas for intensive support in an effort to improve coverage among such groups in an equitable way.

5.1 **Describe** national and sub-national evidence on the coverage and equity **of immunisation in the country and constraints to improvement. In particular, identify the areas and groups of low coverage or high inequity relative to geographic, socioeconomic, cultural or female literacy considerations, as well as systematically marginalised communities. Specify** both the areas and/or populations with low coverage (%) and those with the largest absolute numbers of un-/under-immunised children**. Among data sources, consider administrative data, immunisation coverage surveys, DHS/MICS, equity analyses, Knowledge-Attitude-Practice surveys, and data on diseases like measles.**

5.2 **Describe the** challenges underlying the performance of the immunisation system, **including at the level of the vaccine supply chain, demand generation/community mobilisation, data quality/availability/use and leadership, management and coordination.**

5.3 Describe any issues related to the financing of the immunisation programme that impact the ability to increase coverage, including bottlenecks related to planning, budgeting, disbursement and provision of resources.

5.4 Describe lessons learned and best practices on the effectiveness of implemented activities to improve coverage and equity; recommendations, changes or new interventions that might be required to accelerate progress (include relevant data to support any findings, recommendations).

5.1. Equity and immunisation coverage

According to data from the Vaccine Coverage Survey (ECV) conducted by INE in 2017, national coverage in PENTA3
is 82% (raw data table 1):

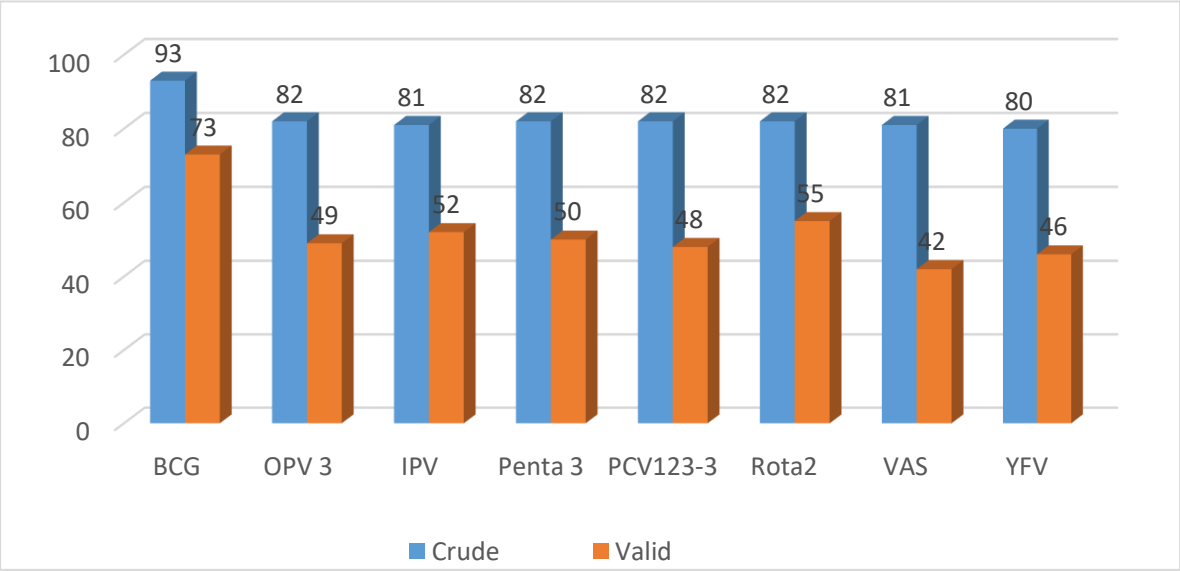
- ✓ only one region has an immunisation coverage (IC) rate of at least 90%: Cacheu 92.6%
- ✓ 4 out of 11 regions (Quinara; Oio; Biombo and Bafatá) reached coverage between 80% and 89%
- ✓ 6 regions have an IC rate below 80%. These are: Tombali; Farim; Bolama; Bijagós; Gabú and BAS.

Table1: Penta 1 and Penta 3 crude and valid immunisation coverage by card

Health Region	Penta 1				Penta 3				Sample	
	Crude		Valid		Crude		Valid			
	(%)	IC: 95%	(%)	IC: 95%	(%)	95% IC (%)	(%)	IC: 95%	N	Weight
Guinea-Bissau.	83.2	(79.6, 86.3)	77.7	(74.2, 80.8)	82.0	(78.0, 85.3)	49.8	(45.4, 54.1)	1408	1408
Tombali	77.5	(67.1, 85.3)	73.0	(63.6, 80.7)	76.0	(65.2, 84.3)	43.9	(31.8, 56.8)	130	88
Quinara	87.1	(71.5, 94.8)	84.6	(69.5, 93.0)	86.6	(70.8, 94.5)	48.0	(39.2, 57.1)	116	59
Oio	86.9	(81.9, 90.7)	81.7	(75.0, 87.0)	86.6	(81.8, 90.2)	45.3	(36.6, 54.2)	178	162
Farim	75.4	(60.3, 86.0)	67.9	(52.5, 80.3)	75.4	(60.3, 86.0)	42.4	(32.3, 53.2)	197	47
Biombo	88.0	(79.4, 93.3)	84.0	(73.8, 90.7)	87.0	(78.5, 92.5)	56.5	(47.4, 65.1)	107	91
Bolama	71.7	(43.8, 89.1)	61.4	(37.1, 81.1)	71.2	(43.5, 88.8)	50.4	(30.7, 70.1)	77	10
Bijagós	70.2	(51.8, 83.7)	61.9	(44.1, 77.0)	68.6	(49.8, 82.9)	41.9	(28.6, 56.5)	53	21
Bafatá	86.2	(78.9, 91.3)	81.1	(71.9, 87.8)	85.4	(78.2, 90.5)	59.9	(47.6, 71.1)	165	195
Gabú	75.7	(62.7, 85.2)	66.2	(55.0, 75.9)	74.7	(62.7, 83.8)	33.4	(25.8, 41.9)	185	200
Cacheu	92.6	(85.8, 96.3)	86.1	(78.3, 91.4)	92.6	(85.8, 96.3)	55.4	(40.0, 69.9)	116	180
BAS	80.9	(69.5, 88.8)	77.1	(67.0, 84.8)	78.0	(64.7, 87.3)	54.1	(42.5, 65.2)	84	355

The differences between the crude and valid immunisation coverage rates in the immunisation coverage survey are 32% for Penta 3 (82%-50%), and measles (73%-41%). Non-compliance with the vaccination schedule would justify the differences observed between the gross and valid vaccination coverage for the same antigen in children with a vaccination card. The situation is as follows: BCG 9.6%; Penta 3 32.2% and VAR 35.4%. (Figure 1 & 2).

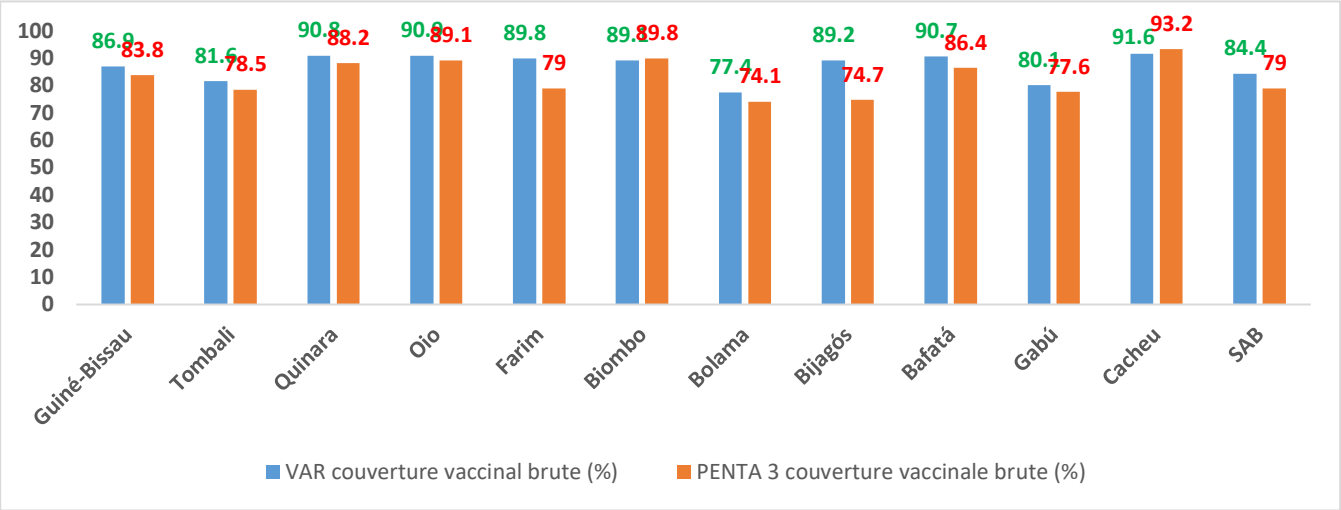
Figure1: Crude vs. valid immunisation coverage with card, by antigen, 2017 ICS



It is apparent that the difference between the gross and valid immunization coverage rates in the immunization coverage survey is respectively 32% for Penta 3 (82%-50%), and measles (73%-41%). It was noted that the proportion of children completely and properly vaccinated is 24%, which remains very low. According to the

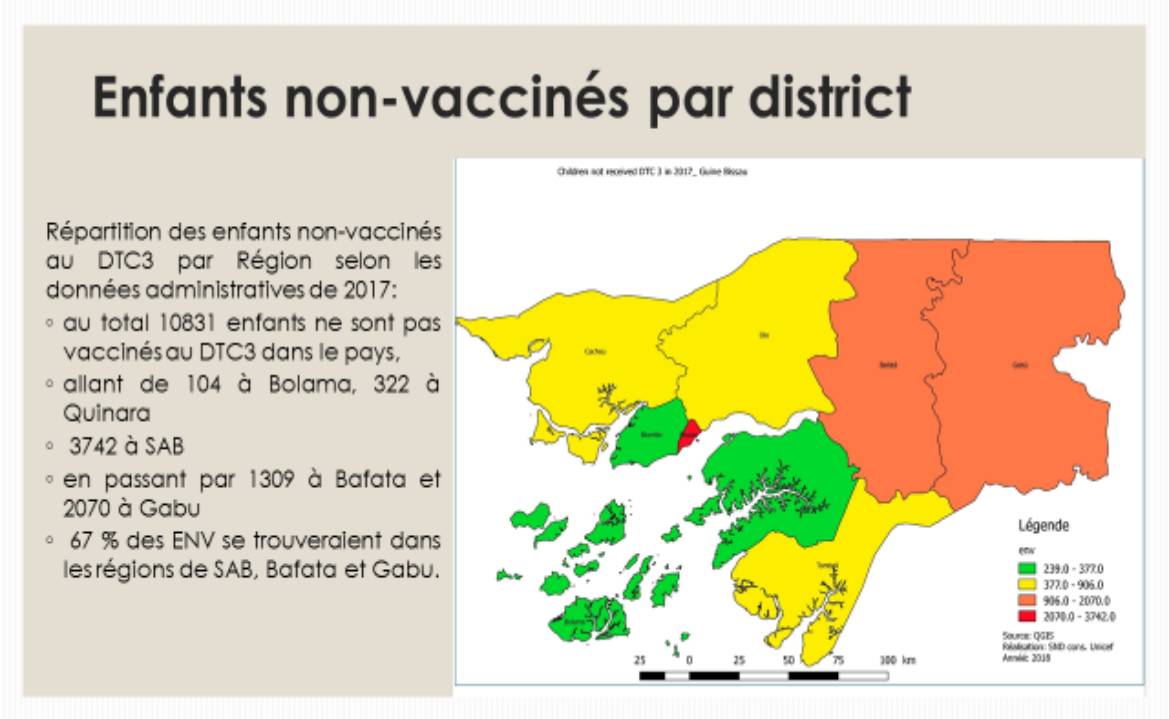
results of the same survey, six (06) regions have Penta 3 immunisation coverage of less than 80% (BAS [Bissau Autonomous Sector], Gabú, Tombali, Farim, Bijagós and Bolama). For the measles vaccine, coverage rates range from 77.4% in Bolama and 91.6% in Cacheu (see Fig. 1 & 2).

Figure 2: Crude VAR and Penta 3 immunisation coverage (%)



According to 2017 administrative data, the three regions with the largest absolute number of unimmunised children are: Cacheu, Gabú and BAS. These three regions have a total of 10,831 children out of 13,693 children not immunised for Penta 3 and 12,541 out of 22,311 children not vaccinated for VAR. (Chart 1).

Diagram 1: Unimmunised children by region

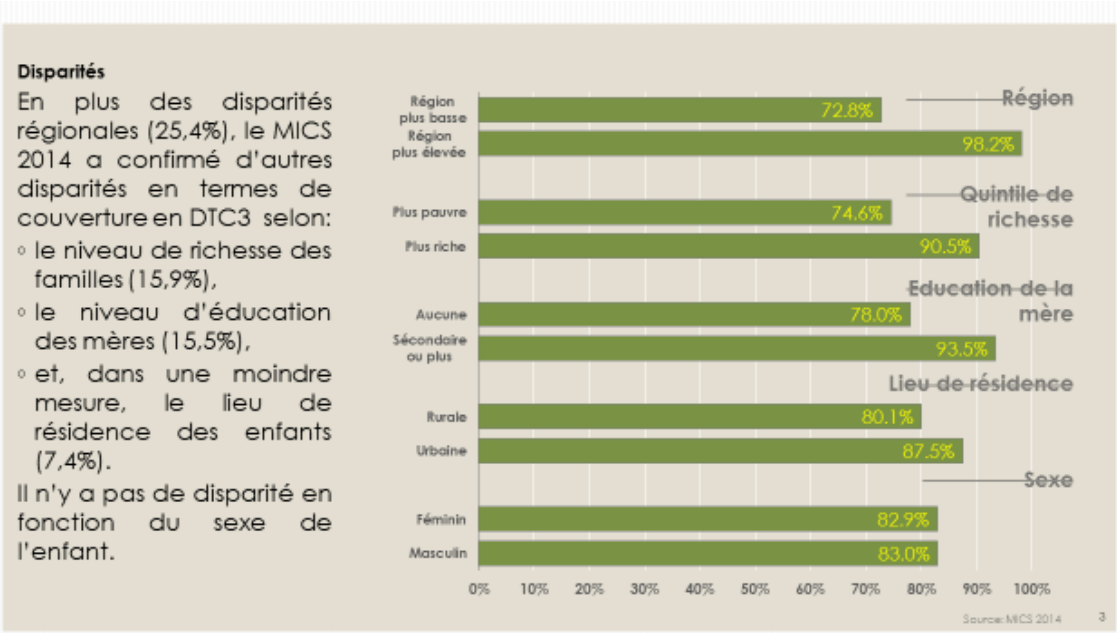


FR	EN
Répartitiion des enfants non-vaccinés au DTC3 par district selon les données administratives de 2015	Distribution of children not immunised with DTP3 by district according to 2015 administrative data
●au total 10831 enfants ne sontpas vaccines au DTC3 dans le pays.	● A total of 10,831 of the country's children are not immunised with DTP3

●allant de 104 à Bolama, 332 a Quinara	● Ranging from 104 in Bolama, 332 in Quinara
● 3742 à SAB	● 3,742 in BAS
● en passant par 1309 à Bafata et 2070 à Gabu	● with 1309 in Bafatá and 2070 in Gabú
● 67 % des ENV se trouverainet dans le régions de SAB, Bafata et Gabu.	● 67% of unimmunised children are in the regions of BAS, Bafatá and Gabú.

It should be noted that immunisation coverage varies according to certain socio-economic characteristics. Thus, according to the results of the equity analysis carried out in 2017 in the regions of Cacheu, Gabú, Tombali and SAB, immunization coverage related to the level of maternal education was uneven (15.5 percentage points between levels the highest and lowest).In 2014, the MICS[13]Survey pointed out that the vaccination coverage of Penta3 in the wealthiest quintile was 90.5%,Compared to 74.6% in the poorest quintile. There were no differences in immunisation coverage based on sex — 0.1 percentage point.of percentage.

Chart 2: Immunisation coverage based on socio-economic characteristics



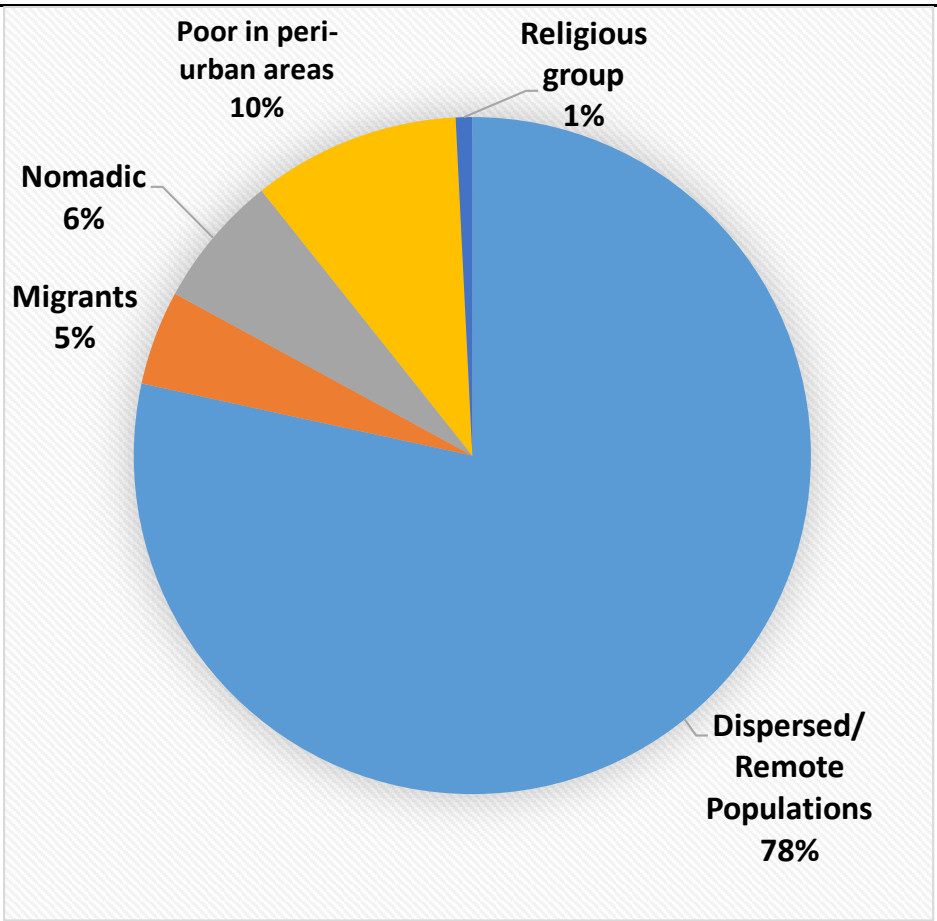
FR	EN
Disparités	Disparities
En plus des disparités régionales (25.4%),	In addition to regional disparities (25.4%),
le MICS 2014 a confirmé d'autres disparités en termes de couverture en DTC3 selon:	The 2014 MICS has confirmed further disparities in terms of DTP3 coverage according to:
● le niveau de richesse des familles (15.9%),	● Families' level of wealth (15.9%);
● le niveau d'éducation des mères (15.5%),	● Mothers' level of education (15.5%);
● et, dans und moindre mesure, le lieu de résidence des enfants (7.4%),	● And, to a lesser extent, children's place of residence (7.4%).

[13]2014 MICS Survey Report

il n'y a pas de disparité en donction du sexe de l'enfant	There is no disparity based on the sex of the child.
Région plus basse	Lower region
Région plus élevée	Higher region
Région	Region
Plus pauvre	Poorer
Plus riche	Richer
Quintile de richesse	Wealth quintile
Aucune?	None
Sécondaire ou plus?	Secondary or higher
Education de la mère	Mother’s education
Rurale	Rural
Urbaine	Urban
Lieu de residence	Place of residence
Féminin	Female
Masculin	Male
Sexe	Sex

The equity analysis conducted in 2017 and 2018 concerned the 11 health regions of the country. The results will come out that 78% of communities with difficult access are represented by dispersed/remote populations, followed by the poor in peri-urban areas (

Figure 3 : Communities with difficult/disadvantaged/reluctant access



In Tombali, it is estimated that only 25% of children aged 0 to 11 months live within 5 km of a healthcare facility (33% to Gabu and 42% to CACHEU). Outreach and mobile strategies suffer from a lack of transport logistics (maintenance, fuel) and motivation.

5.2. Challenges underlying the performance of the immunisation system

5.2.1. Insufficient human resources in terms of quantity and quality

Quantitative and qualitative insufficiency in human resources (HR) is a major obstacle to the performance of the immunization system at all levels.

According to the National Health Plan (PNDS) III, there are 1050 nurses in total across the country with ratios ranging from 3.62/10,000 inhabitants in Oio/Farim to 20.93/10,000 inhabitants in Bolama/Bijagós. In general, there is a work overload for the nurse who is responsible for all the components of the Essential Services Package. Tables 2 and 3 below give the current situation in terms of human resources by region and shows the staff radio in relation to the population. A 2013-2017 HR development plan has expired since last year. An evaluation is planned as well as the development of a new Plan with the financial support of the World Bank. This assessment will help clarify what the current needs are. As can be seen, SAB and Biombo are doing relatively well, while Bafata, Gabu and Oio have huge HR deficits. These areas also include a number of difficult access areas.

In order to curb a little bit the problem, efforts have been made by the Government this year for the recruitment of 815 health workers. To date, recruitment and allocation of 581 agents have been completed. The process continues.

Table 2: Summary of Human Resource Requirements by Healthcare Facility and Distribution Map of Workers by Region[14]

N°	Nomes de Estrutura	Medicos	Enfermeiros	Parteiras	Laboratorio	Farmacia	Tec de Radiologia	Psicologo	Inspetoris Saniamento	Bioanalis	Total Por Estrutura
1	SAB	10	20		15	14					59
2	HNSM	30	100		18	12	10	2	2	3	177
3	HRF	3	8		4		7				22
4	CSM	2	4		2	1		1			10
5	Bafata	5	25	6	7	5	7			1	56
6	Gabu	5	25	7	6	5	7			1	56
7	Tombali	10	50	10	10	5	7			1	93
8	Quinara	9	43	10	5	6					73
9	Oio	11	20	5	4	3	4			1	48
10	Farin	3	13	3	2	1					22
11	Cacheu	13	25	8	7	4	4			1	62
12	Biombo	9	16	5	10	3	4	1		1	49
13	Bolama	2	15	5	3	2					27
14	Bubaque	3	15	6	4	2					30
	Total Por Categoria	115	379	65	97	63	50	4		9	784

Bor	3
Quenhamel	3
3 de Agostos	1

DSSHP	15

HNSM	1 Assistene S	Istrumentista e anestesist	3

The table below provides information on the updated status of health personnel by region

Table 3: Update of staff ratios 2018

	Doctors for 10,000 inhabitants	Nurses for 10,000 inhabitants	Midwives for 10,000 inhabitants	Technicians _ Labo for 10,000 inhabitants
BAFATÁ	0.8	3.7	0.4	0.5
BIJAGÓS	1.5	18.6	2.2	1.5
Biombo	2.4	11.0	2.5	2.3
Bolama	1.7	29.1	5.1	3.4
Cacheu	1.1	4.4	0.8	0.6
Farim	0.7	4.7	1.2	0.8

Gabu	0.8	3.1	0.4	0.4
Oio	0.9	2.7	0.3	0.3
Quinara	1.5	6.3	1.3	1.1
BAS	3.6	10.3	1.5	2.8
Tombali	0.9	5.6	0.9	0.4

Table 4 : Summary of agents actually deployed to date

	Medical Doctors	**Nurses**	**Midwives**	**Total**
BAFATÁ	10	25	7	42
Biombo	9	23	7	39
Bolama	2	15	2	19
BIJAGÓS	3	15	3	21
Cacheu	14	25	11	50
Farim	2	9	3	14
Gabu	10	25	6	41
Oio	12	14	6	32
Quinara	8	43	7	58
BAS	16	23	0	39
Tombali	8	50	7	65
Centro Saude Mental	2	5	0	7
HMP	1	11	0	12
HNSM	34	100	0	134
HRF	3	5	0	8
Total	134	388	59	**581**

The external review of the ENP and the Evaluation of programmatic capacities conducted in 2017, conducted an analysis of existing human resources and made recommendations for the recrutement/allocation of human resources for both the EPI and the Directorate General for the Administration of the Sanitary System (DGASS).

At the EPI level, according to the information available, there are 12 agents who payroll the national budget. According to the salary grid in force for state officials, the total of their monthly salary would amount to one million hundred eighteen thousand four hundred and ninety-three CFA francs (1,118,493) and twenty-six million eight hundred forty-three thousand eight one hundred and thirty-two CFA francs (26,843,832) for 24 months i.e. forty-eight thousand two hundred and fifty seven USD (48,257). For the support of the 9 staffs requested in Gavi, it is forty-four thousand nine hundred and fifty-five USD (44,955). The overall amount of all staffs (state + GAVI) for 2 years would be ninety-three thousand two hundred and twelve (93,212) and the GAVI contribution is estimated at 48%. In other words the salary of the 9 staffs for 2 years being forty-four thousand nine hundred and fifty-five USD (44,955) GAVI will pay 100% of the costs of these 9 positions which is going to represent 1% of the contribution of GAVI in the framework of the bid.

[14] Ministry of Public Health (MINSAP)

Currently, Government commitments range from 2018 to 2020 (3 years). There is no budget yet for years beyond 2020. The amounts of total government commitments are 24,292,137 USD compared to US $8,151,200 as EU and WB contributions.

In order to partially fill the gap in human resources, the recruitment of a number of staff members is proposed to Gavi. The State of Guinea-Bissau will progressively integrate the workers recruited using funding from public service partners. The urgent human resource needs that will be addressed in the HSS component of this current application in Gavi are:

At the EPI level

1. Head of planning, monitoring & Evaluation Public Health Profile
2. Logistics Manager
3. Communication Manager
4. Manager of data
5. Accounting officer for EPI
6. Administrative Assistant/Executive Secretary

At the level of the General Directorate of Administration of the Health System (DGASS)

7. National TA tasked with Strategic Planning
8. National TA tasked with Administration and accounting
9. National TA tasked of implementing ACC/ACE

The additional requirements at TA will be discussed between Gavi, who, UNICEF and MINSAP and will be dealt with in the framework of EFP/TCA 2019-2020.

With regard to local capacity-building and skills transfer, UNICEF will develop and implement a capacity-building plan in the context of additional measures. Discussions should be initiated as soon as possible with Gavi.

It is also important to underline the crucial role of Community Health Workers (CHWs), who are intermediaries between the population and the reference institutions. Guinea Bissau has a national community health programme with a network of about 4500 community health workers promoting essential family practices, preventing and treating simple cases of malaria, pneumonia and diarrhea.

According to the Community health policy in Guinea,[15] each CHW is formed to cover 50 households and is responsible for the implementation of the high impact business package in particular promoting the 16 PFE in the Communities/Tabancas/Bairroqui. Since the CHW is often approached by several programs, it is recommended to use it in a versatile way. The CHW identifies children under the age of one year who are not up-to-date with their immunization schedule. In addition, during these visits, it sensitizes and mobilizes parents for the vaccination of their children and proceeds to search for those who have been lost.
As part of this grant, an emphasis will be placed on not only identifying unvaccinated children, but also ensuring that they are recovered (vaccinated). For this, all CHW will be recycled and informed about the actions necessary to ensure that the children are fully vaccinated.
In the field of surveillance, each CHW provides active research and notification of all cases of disease under surveillance, including acute flaccid paralysis (AFP), measles, maternal and neonatal tetanus, and yellow fever.

In order to carry out their daily work, the CHW has a kit with a minimum of equipment (thermometer, stethoscope, blood pressure monitor, etc.) and medicines (ACT, ORS, Zinc, amoxicillin...). They also have a bicycle to ensure their travel and home visits.

The recruitment of CHW is done locally, in its place of residence according to established criteria and with the involvement of community leaders following a predetermined selection process. The 4500 CHW distributed across all villages throughout the territory is supervised by health area officials (RAS) and field operational Supervisors (SOT). The SOT have been recruited specifically for the community health program because the person in charge of the sanitary area does not have the capacity to fully supervise them even if he is technically the hierarchical manager of the CHW.

Under the GAVI-supported programme, special emphasis will be placed on the supervision of the CHW in the 4 Category 1 regions with the support of NGOs to improve the quality of delivery.

[15] National Community Health Policy

To date, CSOs do not receive specific financial support for their contribution to the expanded programme on immunization. As part of the implementation of the ACD approach, the CHW and CSOs will be involved in the micro-planning and implementation of the activities.

An international TA is requested to support the strengthening of civil society's capacity for routine immunization, including networking.

Currently the CHW work on a voluntary basis, but receive a financial incentive of CFAF 6.000 per month through UNICEF on EU funding until October 2019. The CHW also receives 12,000 FCFA every 6 months on the basis of their personal and collective performance in the health area. Four performance indicators for which the number of children fully vaccinated allows this premium to be granted. An agreement between the Ministry of Health, the World Bank and UNICEF is being finalized to continue granting this incentive to the CHW until 2023. But the funding of supervision and regular monitoring of performance is not guaranteed to cover the entire period.

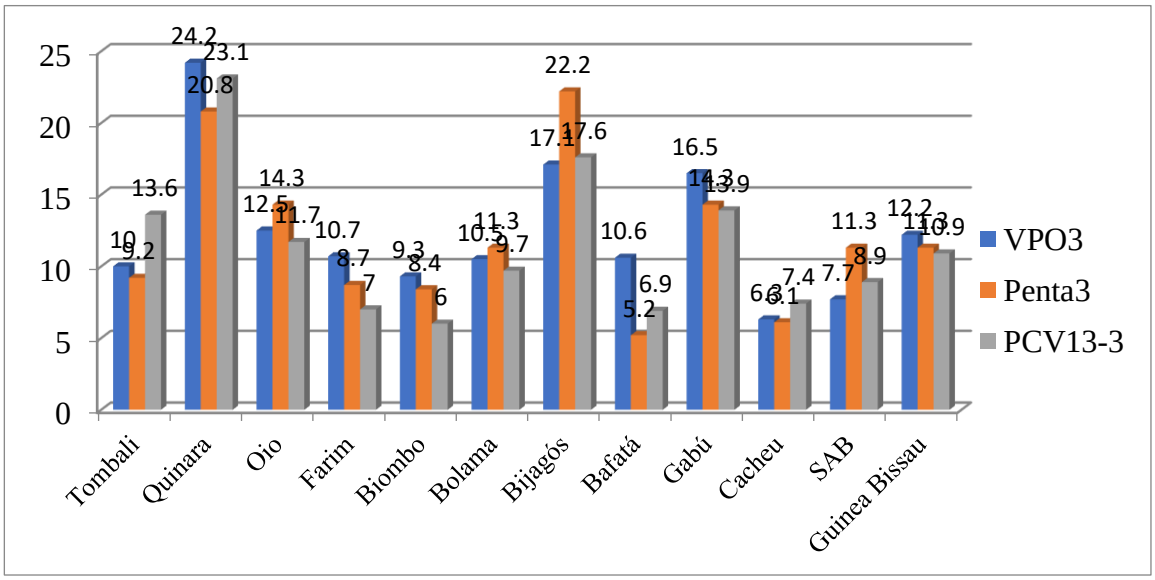
In the context of ESP's budgetary reprogramming for the last 3 years 2021-2023, this aspect is taken into account and the support of 25% related to monitoring and supervision costs (121,140 USD) in the four Category 1 regions is budgeted.

5.2.2. Bottlenecks related to the supply of services

Insufficient human resources in terms of quantity and quality does not allow for permanent availability and continuity of routine immunisation services. It should be noted that the Minimum Package of Activities (MPA) is not provided in each health area as laid down in the PNDS III[16] and this has a negative effect on demand for services. According to the analysis of the Service Delivery indicators collected in the first half of 2018, approximately 59% of health centres do not have essential equipment such as scales, measuring tape, thermometer, stethoscope, blood pressure monitor etc. In addition, the centres are not in a position to provide at least one essential drug in 20 (antibiotics, anti-inflammatory drugs, analgesics etc.). On average, only 60% of the drugs considered essential are available.

Although the country has a drop-out rate of 7.1% (PENTA1/Penta3), some health regions such as Farim and Bijagos suffer from high drop-out rates of 15.6% and 12.5% (PENTA1/Penta3), respectively (LCA 2017).
The quality of immunisation services is inadequate as can be seen in the difference between vaccines that should be administered simultaneously. According to 2017 ICS data, no health region has an equal proportion for antigens such as OPV3, Penta 3 and PCV13.
(source: 2017 ICS);

Figure 4: Proportion of missed simultaneous immunisation opportunities for the 3rd dose



There is a lack of integration of high impact activities for child survival and development. Each programme evolves vertically and there is no integrated plan of the various programmes of the Ministry of Health (expanded programme on immunisation, nutrition, sexual and reproductive health, community health, national malaria control

[16] 2018-2022 PNDS III

programme).

In the field of community health, it is worth noting some problems such as:

- The lack of a sustainable strategy for the payment of the motivation of community Agents and their supervisor to the extent that the Government does not contribute to this cost. This situation is a real obstacle to the delivery of community-based interventions;
- the need to strengthen mechanisms for monitoring and evaluating Community Health Workers.

The motivation of Community Health Workers and their supervisors guarantees the success and sustainability of a community health programme.
In addition, geographic accessibility is a major constraint for access to immunisation services. Indeed more than 66% of the population lives more than 5 km from a health Centre (CS). Therefore, even to reach a HC the majority of the population must overcome significant physical obstacles. The inadequacy in the conduct of advanced and mobile strategies decreases EPI performance. Difficult access conditions are worse in the island part of the country, as well as in the south, due to the lack of adequate means of transport. Indeed, the inventory of the logistical means of the EPI carried out in 2017 highlights two vehicles at the central level, including one dedicated to the transport of vaccines. The second is used for supervision. These vehicles were acquired from the RSS1/Gavi funds. At the regional level, there were 14 vehicles, 8 of which were made available by the Government as part of its cooperation with the Government of the Federal Republic of Nigeria. The remaining 6 were made available by the WHO (Oncho Project), WFP (Ebola), UNHCR (Ebola), UNICEF, PLAN Guinea-Bissau and HSS-Gavi. The average age of these vehicles is 5 years. These vehicles are assigned primarily to regional activities (supervision, outreach strategies etc.).

5.2.3. Creating demand/mobilising the community
A ' knowledge-Attitudes-practices survey conducted by UNICEF in 2018[17] covered seven regions and identified some barriers to the creation of vaccination demand among which one can cite: the long distance between the health centre and the Tabancas; beliefs and myths about the vaccine; lack of money and lack of information on side effects.

The survey also highlighted the following aspects:

• 64.8% of mothers and fathers do not know the immunisation schedule;
• 60.1% of parents do not understand the information contained in the immunisation logbook;
• The long distances to travel to get to the healthcare centre (HC), difficult access and limited transport are also reasons given by households to explain non-compliance with the immunisation schedule;
• Among the parents surveyed, 53.5% believe that children receive numerous vaccines and doubts regarding side effects still persist among 16.8% of the population;
• Most respondents (73%) believe that vaccines prevent all diseases, which may contribute to a certain discredit if the child falls ill and may influence immunisation drop-out;
• Some parents associate vaccines with treating diseases and others (mothers) associate them with intellectual stimulation, promoting children's intelligence;
• The persistence in communities of beliefs, myths and rumours that are likely to have a negative impact on the immunisation of children was recorded during focus groups.

Despite the existence of an elaborate communication plan, implementation and follow-up of the activities were not carried out in a systematic and adequate way. It is necessary to strengthen local communication strategies to educate the population about the merits of immunisation and the benefits of following the immunisation schedule for full immunisation of children. In addition, there are not enough interpersonal communication activities between the provider and the parents. This could be explained by inadequate training of health professionals in the field of communication, the low level of knowledge about the importance of immunisation and the low level of education of the population.

5.2.4. Challenges related to the supply chain and the cold chain
In Guinea-Bissau, vaccine distribution remains a major challenge. Indeed, there is no well-defined collection or distribution system. Health areas receive supplies from the Regional Health Department at monthly coordination meetings. If the quantity of vaccines is not well calculated, there may be vaccine shortages, which jeopardise immunisation activities as the next supply will only be provided at the next coordination meeting. The regional warehouse receives its supplies from the central warehouse every three months. There is no formal collection plan; the health areas take advantage of any arrivals in Bissau to collect vaccines and consumables. This situation has

[17] KAP (Knowledge, Attitudes, Practices) Survey Report 2018; UNICEF

led to anarchic distributions. For example, in 2016, the regions made between 8 and 21 vaccine collections instead of 4 as expected.

In order to provide a solution to this major supply challenge, a project modelled on the project implemented in Senegal—called "Projet Optimise" (Optimise Project—has been developed by adapting it to the context of Guinea-Bissau in order to improve the vaccine supply chain, and its management of the cold chain (CC) and waste generated by immunisation. This system of mobile warehouses—called **"Mininus San" project**[18]—has been tested in the 3 regions of **Bafatá, Gabú and Cacheu** for a period of 3 months, which has enabled lessons to be learned that will allow full-scale deployment.

5.2.5. Challenges related to data quality, availability and use:

The Expanded Programme on Immunisation (EPI) is based on immunisation coverage administrative data but also on regularly-conducted surveys, such as the ICS. Significant challenges remain with regard to the collection and transmission of information from the HCs to the regions and then to the central level as well as with regard to data validation. The 2017 review report showed that the programme recorded good levels of completeness and timeliness — 100% and 98% respectively. However, data from the Bijagós and Tombali regions are always delayed.

High-quality data produced in real time is essential for programme planning and decision-making. At present, the quality of data provided by the peripheral level does not enable this requirement to be met and does not enable effective decision-making; therefore, it does not promote the emergence of strategies to improve immunisation coverage and equity in Guinea-Bissau.

Challenges include: non-harmonised and misused tools in HCs, and incomplete filling of data collection materials. At the central level, data from reports from different sources (DVD/MT-EPI, DHIS2-INASA) show an inconsistency (source: 2017 EPI external review report[19]).

Table 5: Evolution of performance class compared to monthly use of vaccines (Q-data = children immunised above the doses used); Clas_D = percentage loss larger than expected

Antigens	January	February	March	April	May	June
BCG	clas_A	clas_A	clas_A	clas_A	clas_A	clas_A
OPV	clas_A	clas_A	clas_A	clas_A	clas_A	clas_A
IPV	**clas_D**					
DTP-HepB-Hib	clas_A	clas_A	clas_A	clas_A	clas_A	clas_A
PCV-13	clas_A	clas_A	clas_A	clas_A	**Q_data**	**Q_data**
Rota	**Q_data**	clas_A	clas_A	**Q_data**	**Q_data**	**Q_data**
VAR	clas_A	clas_A	clas_A	clas_A	clas_C	clas_C
YFV	clas_A	clas_A	clas_A	clas_A	clas_C	clas_C
TT	**clas_D**	**clas_D**	**clas_D**	**clas_D**	**clas_D**	**clas_D**

Source: 2017 EPI

Poor data quality also applies to epidemiological monitoring data.
This low level of timeliness of data transmission does not allow rapid feedback from the central level to the regional level, and from the regional level to the HA level. No newsletter is prepared to provide feedback from the central level to the health regions and other relevant healthcare facilities.
According to the EPI external review report, the completion rate of the reports received is 90% across the four years (2013-2017 cMYP and the first half of 2017).
However, regional health authorities seldom use coverage data and demographic data for decision-making during the preparation of immunisation campaigns in order to achieve greater immunisation coverage using existing resources.

[18] Feasibility study regarding the establishment of a mobile warehouse type distribution system in Guinea-Bissau (pilot region of Bafatá, Cacheu, Gabú).

[19] 2017 EPI External Review Report

The EPI data has not yet been entered into the DHIS2 database. The lack of texts on the revision of tools delayed the incorporation of EPI data. However, there is a strategic National Health Information System (SNIS) plan, which provides for the integration of all data from the various national programmes (public and private). The EPI plans to develop an integration plan with the support of the INASA and international technical assistance.

In order to better understand the situation and the magnitude of the low data quality, a survey on the quality of the data accompanied by an improvement plan is necessary in the context of this submission.

5.2.6 Management and coordination challenges

The coordination of the programme is insufficient because neither the CCIA nor the Coordinating Committee of the Health Sector (CCSS) are functional. This results in a lack of monitoring, planning and implementation of plans and a lack of regular communication between stakeholders. The CCSS was set up in 2015 in all regions under the H4 + initiative, which the country has benefited from in order to accelerate the reduction of maternal, neonatal and child mortality, but this does not work because Guinea-Bissau is confronted with Multiple challenges such as: i) weak local governance and a lack of accountability at the political, administrative and community levels; II); A lack of commitment and clear strategies for adequate and sustainable funding of immunization. (iii) Inefficient planning and management of human and technical resources; IV) A mismatch between the efforts to converge and integrate vaccination with other interventions both within the health sector and outside, V) low involvement of communities in general and community-based Associations in Particular.

The absence of a moph-level planning department hinders planning and coordination at all levels, and prevents MINSAP from being able to support the various regional health services, programs and Directorates (DRS) In the planning area. Data and databases at the ministry, programme and regional levels are underused as the health workforce does not have a true understanding of what planning is. Finally, like everywhere else, the country is faced with recurrent industrial action by MINSAP staff. This often leads to a loss of knowledge and experience.

From a financial point of view, the immunisation programme is highly dependent on external financing. There are currently no budget lines in the National Budget (OGE) to support the operational activities of the EPI. This low resource mobilisation is due to the lack of a strong strategy for the mobilisation of resources, especially domestic resources, in favour of health in general and in particular immunisation.

The vaccine co-financing payment has often been delayed due to the inability of the Ministry of Health to monitor the preparation and implementation of the budget. The few resources allocated are very often poorly managed as demonstrated by the findings of the Programme Capacity Assessment conducted in 2017. This situation could be explained by the lack of an administrative and financial management procedures manual within the MINSAP.

In Guinea-Bissau, there is no law on immunisation or formal legal texts that define EPI governance or financing strategies. In terms of financing, the most significant contribution of the State is made through the salaries of public officials.

The EPI Directorate is the entity of the MINSAP that is responsible for managing the programme and its leadership is expected within coordinating bodies such as the ICC and the HSCC. However, many factors such as insufficient technical staff and the dependence on external funds contribute to weakening the leadership of the EPI Directorate and its ownership of the programme (cMYP, 2018-2022).

It should also be noted that there are no partnerships between the EPI and civil society organisations (CSOs) for the implementation of activities to promote community engagement, social mobilisation and advocacy to increase demand for health services and in particular, immunisation services. Annual operational plans are not developed on a regular basis and these plans lack monitoring/evaluation.

5.3. Immunisation programme financing

The situation to date is that the financing and supply of vaccines are very dependent on external aid. Besides Gavi, the most important partners in terms of financing and technical support for the health sector are the World Bank (planned total support between 2018 and 2022 of 45 million dollars), The Global Fund (aid of 22 million euros between 2018 and 2020), the European Union (planned support of 20 million euros between 2018 and 2022) and Médecins Sans Frontières (approximately 6 million euros per year), which supports the paediatric department of the Hospital Nacional Simão Mendes. Gavi is by far the most important partner in the immunisation programme. Besides Gavi, UNICEF also supports the immunisation programme with approximately 100,000 euros per year, a source that can be used for planning, training, distribution or purchase of vaccines, supervision, studies and technical assistance. Other partners such as the WHO and Plan International also support the immunisation programme. In recent years, the government has increased its contribution to the health sector and to the financing of vaccines.

Moreover, the lack of legislation on immunisation does not promote access to additional financing. In the past, most of the time, the amount that the State allocated to immunisation was used only to fulfil the State's obligation to co-finance new vaccines and underused vaccines. This contribution was often received late, which had implications, including countrywide vaccine shortages.

According to the Ministry of Economy and Finance (MEF), the main problem relating to co-financing payments in Guinea-Bissau is the inability of the Ministry of Health to monitor preparation and implementation of the immunisation budget.

It should be noted, however, that the country worked hard to regularise the vaccine co-financing payment in 2017 and measures are being taken to consolidate this situation in 2018. In 2017, thanks to the Government's commitment, the country also purchased traditional vaccines and immunisation cards.

Political instability and successive changes within the MINSAP and the MEF make the new leaders somewhat hesitant to make decisions as they do not yet have a full understanding of the decision-making processes regarding co-financing and the purchase of traditional vaccines. Strong advocacy/lobbying will have to be carried out at their level.

5.4. Lessons learned and best practices for improving immunisation coverage ***are:***

1. **The HIV/AIDS programme organises** a quarterly coordination meeting between the regional focal points for monitoring. As an example of this programme, the immunization programme should share or take advantage of this experience for the epidemiological surveillance of MAPI and vaccine-preventable diseases in order to improve its indicators.

2. **Following the** implementation of the free programme for mothers and Children (PiMi I and PiMi II on EU funding) there has been an increase in the demand for services (e.g. 43749 EIC en 2013, 162661 eic en 2017 , 21091 growth segments of < 2 years 2013, 88163 in 2017. This shows the importance of free immunisation and related services.

3. **The participation of ASC in** the awareness and identification of children who must be vaccinated: the CHW conduct various advisory and education activities within their communities for their involvement in health activities, including immunization and adoption of other essential family practices (PFE)

4. **The results of the external review** of EPI 2017 point out that the main tasks undertaken by the CSA are: support for the organization of immunization sessions, promotion of immunization in collaboration with a local leader including recovery of lost children and support for micro-planning.

5. **Importance of the advanced and mobile strategy** for immunization coverage: Current 2016 and 2017, UNICEF staffing of DRS in motorcycles and vehicles contributed to increased immunization coverage (e.g., immunization coverage PENTA3 2016: 68% 2017: 79%; PCV3 2016: 67%, 2017: 79%).

6. **The equity analysis** enables the identification of growing inequalities in service delivery and makes it possible to focus on plans and activities aimed at reaching disadvantaged populations. For example, the analysis conducted in 2017 identified populations that were difficult to access and then developed a plan to reach these populations. It also makes it possible to plan activities taking into account the socio-cultural habits of the people: so for example there are times when families leave their homes because of agricultural work.

7. **Monitoring of EPI activities** at all levels requires the data to be analysed in relation to the target population. For example, decentralised monitoring is performed every 6 months. This exercise is a self-evaluation of performance at the operational level. The Cacheu region has been the pilot region since 2012 and currently has the best indicators. According to the Tanahashi model, this monitoring uses determinants of supply (availability of inputs, HR, accessibility) and demand (use, continuity and quality) of the services. The entire CS team is involved in the process of identifying problems up to the decision-making process and developing a CS action plan for the next six months.

8. **Strengthening the vaccine and input supply system**

The EPI is currently replacing gas refrigerators with solar-powered refrigerators to ensure the availability of high-quality vaccines in all HCs.
The EPI, with the support of its TFPs, has put in place a single supply system (PUSH) through the "**Mininus San" project** from the central level to the regions on a quarterly basis and from the regions to the HCs on a monthly basis.
Full-scale deployment of this initiative will require the mobilisation of both material and financial resources.
The EPI and its partners must ensure the training of all providers on the management of vaccines and inputs.
Supportive supervision must incorporate aspects specific to the cold chain and management of EPI inputs in addition to specific supportive supervision in the "PUSH" context.

6. Programme, vaccine and financial management

Summarise the priority needs to be addressed in subsequent objectives (Part D) to strengthen the programmatic, vaccine and financial management components that require strengthening, taking into account findings from the Programme Capacity Assessment (PCA), recent audits, and EVM assessment (if applicable).

6.1 Programme management**: Leadership and management capacity and challenges to be tackled by the national EPI team; effectiveness and challenges of the relevant Coordination Forum (ICC, HSCC or equivalent body); constraints to coverage and equity due to sub-national management capacity in priority areas.**

6.2 Vaccine stock management**: Priority areas with regard to improving management of risks related to vaccine stocks, e.g. based upon recent audits or evaluations.**

6.3 Financial management**: Priority areas to address financial management gaps.**

6.1. Programme management

The 2017 programme capacity assessment report made a number of findings and recommendations. With regard to programme management, the following can be said:

- The Directorate General for Prevention and Health Promotion (DGPPS) has insufficient HR for effective monitoring of programmes including the EPI (12 programmes):
- at this stage, the country does not have integrated software to monitor public expenditure.
- according to the information received, up to the period of the Programme Capacity Assessment (PCA), the activities of the General Inspectorate of the Ministry of Health covered only the technical (medical) and non-financial aspects of donor financing and Gavi financing.
- There is no Creation Act (Decree) from the CCIA.
- Accounting is currently in Excel. However, we understand that the process of installing the software is in progress (servers already installed at the time of the mission);

Recommendations have been made for this purpose, including:

- ✓ The appointment of a process lead;
- ✓ the MINSAP should make the necessary arrangements to strengthen the DGPPS and enable it to effectively play its role of coordinating and supervising programme activities;
- ✓ Reinforcement of staff with, for example, the assignment of research officers responsible for the various programmes;
- ✓ the Ministry should put in place a mechanism and a procedure for archiving Ministry documents; this archiving should be physical and electronic;
- ✓ the audit plan should be subject to regular implementation;
- ✓ the PNDS-MC (National Health Plan Management Cell) and the Ministry are encouraged to proceed with the search and recruitment process for a Management of Purchases and Procurement (GAS) team leader as soon as possible.

6.2. Vaccine stock management

The EPI in Guinea-Bissau led its latest EVM in 2014 with the support of TFPs, UNICEF and the WHO. Following this evaluation, an improvement plan has been developed and implemented.
However, it should be noted that over the last three years, implementation and monitoring of the plan has been inadequate. Shortcomings include: inadequate monitoring of vaccine temperature at all levels and inadequate management of vaccine stocks. The achievement level of activities is estimated at 44%. A number of priority activities could not be carried out, including the equipment

and buildings servicing and maintenance system, the organisation of a Standard Operating Procedures (SOP) workshop and the lack of an emergency plan (malfunctions etc.) in the national context.

To sum up, priority must be given to strengthening the management of vaccine stocks, in order to better manage the risks associated with the storage of vaccines, taking into account recent audits or evaluations. The most important needs at the country level as a whole and especially in the priority regions, are as follows:

- ensure the quarterly distribution of vaccines from the central level to regional warehouses via the Push system, thus allowing adequate supply throughout the year;
  Full-scale deployment of the "Mininus San" project, monthly distribution of vaccines from the regional level to health zones via the Push system and extension to the other eight;
- Train the EPI focal points, health officials at all levels of the supply chain and implement a formative supervision programme to ensure the proper functioning of the EPI;
- proceed with the acquisition and installation of refrigerators throughout the country to meet the needs of storage and replacement of old refrigerators/those without adequate storage capacity. Develop a plan to monitor vaccine wastage;
- ensure the training of cold chain maintenance technicians
- ensure, through an insurance agency and at a reasonable cost, all programme property: vaccines and consumables, CC equipment and other buildings at all levels;

Monitoring of the cold chain through the LogTag system is done once a month. Every three months, the central level supplies the regions with vaccines and consumables while taking the opportunity to take a stock inventory, communicate data, carry out CC maintenance and collect full safety boxes. The same system is developed at the peripheral level in order to have a country-wide model. Vaccine distribution at the regional level remains low: 30% for Penta, 65% for PCV13, 73% for adeno-associated virus (AAV) and 65% for Rota. A stock shortage of auto-disable (AD) syringes in the months of May and June 2017 resulted in a cessation of immunisation activities in the Gabú region, which reduced its performance to below 4% for all antigens to be injected using 0.5-ml AD syringes.

0.5-ml AD syringes left over from the MenA campaign helped overcome this problem: due to the context of Guinea-Bissau (lack of electricity, lack of authorised technicians, presence of islands etc.), the country opted for an initial support phase (from the second year) during submission of the CCEOP Gavi platform in order to better meet the needs identified above and to enable users and technicians to use and maintain new equipment.
In 2017, poor management of vaccines and consumables at all levels was due to the lack of effective implementation of the procurement system, namely management of stocks through the Stock Management Tool (SMT) in the regions and use of the stock management book in health zones.

6.3. Financial management

The audit of cash support programs[20] showed that financial management conditions were not met. Significant weaknesses were identified in the following areas:

- Planning, budgeting and coordination/supervision
- Budget execution
- Procurement
- Accounting and financial reporting
- External audit and internal checks.

The programme would benefit from being supported in order to significantly improve these weaknesses. A few months of technical assistance could be useful for putting in place appropriate financial management tools and training financial managers.
Improvement of the functioning and involvement of public accountants, administrators and the RHD in the management of Gavi funds is central to achieving the programme objectives.

With regard to internal financial management, we propose to strengthen the institutional capacity of the Ministry of Health, including the EPI.

Each region should establish its annual budget and monitor the execution of this budget.

The Ministry and the EPI should have a statement of account in the absence of Excel files (reviews, bank account, bank reconciliations, fixed asset register, periodic physical inventory of fixed assets etc.).

[20] 2017 Financial and Programme Capacity Assessment

Accounting and financial procedures that meet the minimum requirements of Gavi's finance/accounting obligations will have to be developed and implemented.

It was decided that as a temporary measure, funds for all cash grants will be disbursed to UNICEF.[21] For this purpose, it will have to undertake to carry out a number of activities to strengthen risk management and control mechanisms to ensure management of the funds (portion to be transferred to the Ministry of Public Health) of the Gavi grant. These include:

- Provide the EPI/RHD/HC with standard fund management tools
- Set up an accounting/financial information system for the EPI and for each RHD
- Conduct an orientation session of accountants involved in implementing the grant
- Develop a schedule of regular programme visits and disseminate it to all people concerned
- Conduct regular programme visit missions
- Develop a schedule of additional spot-checks and disseminate it to all people concerned
- Carry out spot-checks every 3 months
- Carry out financial audits
- Identify potential providers at the local level with whom tariff agreements may be established.

[21] Gavi/Grant management requirements

Part C: Review of implementation progress (to replace the Joint Appraisal) (3-4 pages)

Part C describes the progress achieved in the past year in the immunisation system. By completing the data presented in the country portal (e.g. the updated performance framework for grants, financial reports, data quality evaluation etc.), this section explains the results in relation to the targets and objectives, associated implementation difficulties and key lessons learned from the previous reporting period (thus replacing the joint appraisal report for this year). Persistent challenges described here are to be considered in Part D for future programming.

7. Past grant performance, implementation challenges and lessons

Briefly comment on the performance of the vaccine support and health systems and immunisation strengthening support (HSS, Ops, VIGs, CCEOP) received from Gavi:

7.1 **Performance of the immunisation system in terms of**

- Implementation of annual operational plan for immunisation
- Engagement of different stakeholders (including the WHO, UNICEF, CSOs, donors) in the immunisation system

7.2 **Performance of Gavi grants in terms of**

- Achievements against agreed targets
- Overall implementation progress, lessons learned and best practices
- Progress and achievements specifically obtained with Gavi's HSS and CCEOP support
- Usage and results achieved with performance-based funding (PBF)

7.3 **Financial management performance, in terms of**

- Financial absorption and utilisation rates
- Compliance with financial reporting and progress in addressing audit requirements
- Major problems arising from cash grant audits or monitoring reviews
- Financial management systems, including any modifications from previous arrangements

7.4 **Sustainability and (if applicable) transition planning**

- Fulfilment of co-financing commitment
- For countries with a transition plan, implementation progress of planned activities

7.1 Performance of the immunisation system in terms of

- **Implementation of annual operational plan for immunisation**

The table below summarises the activities planned and the activities carried out in 2017 following the reprogramming of the funds initially allocated.

Table 6: Summary of the activities carried out as part of the implementation of the 2017 operational plan

Planned activities	Implementation rate	Comments
Carry out supportive supervision, monitoring and evaluation at all levels	Partially (54%)	Surveys were conducted in 6 of the 11 health regions. On account of lack of funds, there was no regional supervision of health zones.
Conduct an external review and immunisation coverage survey	Completed	
Carry out a logistical inventory, develop a maintenance and distribution plan	Completed	
Conduct a survey on equity in the four health regions with the lowest IC: Cacheu, Gabú, BAS and Tombali	Completed	
Carry out outreach strategies every month in all health zones	Completed	Data not available.
Implement the MININUS SAN pilot project in 3 regions (Bafatá, Cacheu and Gabú)	Completed	
Organise a national polio immunisation campaign	Completed	Carry out integrated vitamin A supplementation and deworming using Mebendazole in children aged 0 to 59 months.
Advocate among economic telecommunications mobile phone operators to increase the number of handsets and free lines for health services	Not completed	
Organise World Immunisation Week	Completed	

Organise a meeting between MINSAP/EPI, INASA and INE head office to harmonise the target populations	Completed	An official note from the MINSAP in collaboration with the INE will be sent to partners.
Organise information and awareness sessions with community leaders (religious and traditional leaders) and agencies in favour of immunisation	Completed	
Organise quarterly meetings to mobilise NGOs and private sector actors in immunisation	Not completed	Lack of financial resources did not enable implementation of this activity.
Involvement of NGOs and private sector actors in immunisation	Completed	
Organise awareness-raising meetings with the Ministry of Economy and Finance on the need to create a simple mechanism to finance the purchase of vaccines	Completed	
Hire a cold technical engineer for the maintenance/repair of central-level and cold-room refrigerators	Not completed	Despite several attempts by the MINSAP, it was not possible to find a technician.
Organise an annual inventory of cold materials and EPI equipment	Completed	
Install the new cold room purchased	Not completed	This activity was not completed in 2017, but will be done in September 2018.

It should be noted that some unplanned activities in the operational plan for 2017 were carried out. These are:
- Creation of the cMYP 2018-2022
- Systematic vaccination in fixed and mobile strategies.
- An integrated vitamin A supplementation immunisation campaign against polio and dehydration using Mebendazole in children aged 0 to 59 months in October 2017;
- Follow-up with the Ministry of Finance to mobilise funds for the purchase of traditional vaccines and government counterparts for the purchase of underused and new vaccines;
- Equity analysis in four health regions: Cacheu, Gabú, BAS and Tombali;
- The inventory of the logistics of the cold chain and Plans of distribution and maintenance and rehabilitation created
- An external EPI review
- Survey on immunisation coverage of children from 12 to 23 months and children from 0 to 11 months.

- **Engagement of different stakeholders (including the WHO, UNICEF, CSOs, donors) in the immunisation system**

Procurement of vaccines, consumables, EPI logistics and cold chain equipment and operating costs are financed by partners such as UNICEF, the WHO and Gavi. Plan International intervenes mainly during campaigns, in particular in the regions of Bafatá and Gabú.
The WHO and UNICEF provide EPI technical support in the areas of planning, implementation, monitoring, evaluation and mobilisation of resources. It should be noted that these partners also finance certain activities, such as outreach strategies, immunisation campaigns and epidemiological monitoring. In 2017, the central level received from the WHO an amount of 34,098,750 CFA francs to cover the programmed activities. UNICEF covered social mobilisation activities, the funds for which were directly transferred to Regional Health Departments. Traditional vaccines and consumables are provided by UNICEF.
In 2016, Gavi's total support amounted to 372,700 dollars, or 89% of the cost of new vaccines. This New Vaccine Support resulted in the acquisition of YFV, Penta and PCV13 as well as the introduction of Rota in November 2015 and IPV in July 2016. Preparations prior to the introduction of each vaccine made it possible to strengthen the capacities of health workers in terms of management of the aforementioned antigens.

7.2 Performance of Gavi grants in terms of

- **Achievements against agreed targets**

Achievement of the objectives set during the last two years is summarised in the table below. We can see that the country has not achieved the objectives, neither in terms of coverage or drop-out rates. (Tables 7 and 8).

Table 7: Achievement of 2016 and 2017 immunisation coverage objectives

	2016 objectives	Coverage/2016	2017 objectives	Coverage/2017
BCG	97%	83%	98%	87%
Penta 3	95%	68%	96%	79%
OPV3	95%	69%	96%	79%
Measles	92%	71%	95%	66%
YFV	92%	64%	95%	72%
PCV13-3	95%	67%	96%	79%
Rotavirus	95%	61%	96%	82%

(Source: EPI)

Table 8: Achievement of the 2016 and 2017 drop-out rate objectives

	2016 objectives	Drop-out rate	2017 objectives	Drop-out rate
Penta 1/3 drop-out rate	5%	19%	5%	13%
BCG/VAR drop-out rate	8%	19%	8%	29%

(Source: EPI)

- **Overall implementation progress, lessons learned and best practices**

As can be seen in the table above, immunisation coverage of the various antigens increased from 2016 to 2017, with the exception of measles. In 2016 and 2017, the following progress was made in the implementation of the programme: introduction of polio inactivated vaccine (IPV) in 2016, 2 mass campaigns (MenA 1-29 years, campaign against polio 0-11 months; preparation of management tools, preparation of Routine data sheets, development of plans for the distribution of vaccines and consumables, monitoring and monitoring of the temperature and waste management plan

Lessons learned

• The involvement of national and international NGOs in all immunisation campaign processes enabled the resolution of several problems related to refusal and any rumours;
• Daily monitoring of campaign data at all levels enabled timely detection and error correction;
• The involvement of the association of young people and women and influential people throughout the campaign process helped to increase community awareness;
• The involvement of communities (community leaders, religious and traditional leaders) in immunisation activities, planning meetings and selection of concentration stations during outreach strategies.

Best practices

• Organization of the week of accelerated Vaccination in 2016 has made it possible to catch-up with many children;
• Involvement of CHWs in actively searching for those lost during routine immunisation.

- **Progress and achievements specifically obtained with Gavi's HSS and CCEOP support**

RSS/Gavi Support supports the strengthening of health sector governance; The operational capacity of the health areas in the field of immunization; The capacity of the cold chain and the optimization of the overall management of vaccines. Gavi/HSS improved the supply and quality of vaccines by strengthening the cold chain. Strengthening

the cold chain, mobile logistics and operation of outreach strategies will help boost immunisation coverage and improve geographical equity.

Of the activities planned before the end of December 2016 during the last joint appraisal, 3 were partially completed as part of HSS1. These are 3 outreach strategies, regional supervision and renovation of the EPI building, which gives an implementation percentage of 36%. However, some important activities in the functioning of the programme could not be achieved: the annual review of the EPI, the supervision of the central level, the monitoring and evaluation of the programme, the survey on the quality of the data of the system National Health Information (SNIS), the annual evaluation of data quality, as well as the training/recycling of agents.

Usage and results achieved with performance-based financing (PBF)
Not applicable

7.3 Financial management performance, in terms of

- **Financial absorption and utilisation rates**

Since 2008, Guinea-Bissau has received cash and vaccine support from Gavi. However, following numerous problems relating to grant management, in April 2013, as part of the submission of a request to Gavi to reprogram HSS activities, Guinea-Bissau simultaneously requested the support of the WHO through its office in Bissau to be the recipient of reprogramming funds amounting to a total of US$ 1,081,864. This amount was to be apportioned in accordance with the following implementation modalities: US$ 582,752 for 2013, $US 372,905 for 2014 and US$ 126,207 for 2015. It should be noted that implementation of the activities during 2014 was severely compromised by institutional issues and the wait-and-see climate that prevailed before, during and after the general elections. The rate of utilisation of Gavi funds was lower than expected for the following factors:

- Constant movement of employees of the MINSAP, including frequent changes made by the minister, resulting in delayed decision-making and fund mobilisation;

Of the 36 activities planned in 2014 during HSS1 fund reprogramming, 12 activities were carried out, most of which are related to the purchase of cold chain equipment, generators and mobile logistics, which is a 33% utilisation rate. This investment has contributed to the preservation of quality vaccines, and has led to advanced strategies and operational capacity building. However, the immunisation coverage situation has not improved significantly. It should be noted that in detail, the rate of use of GAVI funds was below expectations for the following factors:

- Freezing of the MINSAP account thus preventing any disbursement in 2016.

Table 9: Activities carried out as part of the HSS1 reprogramming

Acquisition	Quantities	Total costs in US$
Act. 1.3.1. Strengthening capacities at the central level		
Supervision vehicle (4x4)	1	**25,371.84**
Delivery vehicle	1	**25,371.84**
Desktop computer + accessories	2	**1944.44**
Laptop computer	1	**3500.00**
Printers	2	**1666.00**
Purchase of cold room at the central level	1	**23,031.77**
DOMETIC refrigerators	5	**51,832.60**
CECOME building renovation	1	**67,000.00**
Act 1.3.2. Strengthening of capacities of 4 health regions (Gabú, Biombo, Cacheu, BAS)		
Supervision vehicles for Cacheu and Biombo (4x4)	1	**25,371.84**
Desktop computers + accessories	4	**7777.76**
Printers	4	**6664.00**
Motorcycles for health areas (Tombali, Boloma, Quinara)	7	**25,870.00**
Fuel	168L	**236.00**
Total		**265,639.00**

- **Compliance with financial reporting and progress in addressing audit requirements**

According to the Programme Capacity Assessment report, **none of the financing audits received from Gavi were conducted from 2011 to 2016**. According to the same report, it should be noted that:

- **No bank reconciliation statement for the EPI account opened at the Bank of West Africa (BAO);**
- **Significant cash handling;**
- **Problem of securing the funds available with the EPI administrator;**
- **Lack of financial record** (expenses incurred, remaining balance) of the one hundred thousand US dollars (US$ 100,000).

- **Major problems arising from cash grant audits or monitoring reviews**

The Programme Capacity Assessment report [22] produced a number of findings, including:

At the level of the General Directorate of Administration of the Health System (DGASS)

- Non-compliance by the Ministry of Health with several provisions of the framework agreement
- Calculation errors;
- Delay in reporting;
- Potential discrepancies between the amounts reported and the corresponding supporting documents;
- Full and unlikely equality between the expense amount and the budget amount;
- Significant amount of the advances received from the WHO (all fund donors mixed together) not substantiated during the evaluation period (19/03/2017);
- Lack of bank account specific to the receipt of the Gavi funds: the funds received from the WHO for the benefit of the DGASS are transferred into two (2) bank accounts.

At the EPI level

- Lack of external audit of Gavi funding
- Lack of financial record for the advance US$ 100,000 received by the EPI in June 2015 for the introduction of 2015 IPV
- Full and unlikely equality between the expense amounts and the budget amounts
- Lack of tendering procedures for suppliers for the purchase of goods and services.

Financial management systems, including any modifications from previous arrangements

Different technical and financial partners use different mechanisms to implement their programmes. These mechanisms use three main channels: direct implementation, payments to NGOs/international organisations, or direct national budget support. For the health sector, the main channel was the DGASS, through the PNDS-MC (within the Ministry of Health); this channel is used by The Global Fund and the World Bank. Following the program capacity Assessment (ECP) in 2017, CG-PNDS has a higher financial management capacity than the DGASS, the Financial Directorate of the MINSAP, comprising trained staff, internal audits and Control of procedures. These are absent from the MINSAP's financial administration.

An administrative assistant in the financial administration of the MINSAP reports directly to the Director General and not to the CFO and other accountants. In addition to Excel, there is an accounting computer system for tracking cash flows from the health sector, including GAVI funds. Furthermore, there have been no internal or external MINSAP audits since 2011. However, there was an inspection by the Ministry of Economy and Finance (MEF) by the general inspectors of the MEF in 2017.

At the EPI level, an administrator is responsible for all financial matters. However, according to the ECP in 2017, the lack of accounting manuals, the lack of monitoring and control, the lack of an accounting system and the lack of accounting software are among the main obstacles to financial management. It should be noted that the

[22] 2017 Programme Capacity Assessment Report

regional health directorates are facing the same problems.
With regard to the financial management of Gavi funds, these have been disbursed to the WHO, which is responsible for their management. Disbursements are made to the DGASS, the EPI and the regional departments for implementation of the activities. However, the DGASS and EPI, which are the main beneficiaries of the WHO funds, have significant shortcomings in their accounting

For all these reasons, the ECP recommended that, as a transitional measure, the funding of all Gavi cash grants to Guinea-Bissau be disbursed to UNICEF under a tripartite agreement between MINSAP, UNICEF and GAVI. [23]

7.4 Sustainability and (if applicable) transition planning

- **Fulfilment of co-financing commitment**

Current funding for the programme is highly dependent on the outside. However, it should be noted that there is a budget for 3 years (2018-2020) for the amount of 5,663,701,584 FCFA for the purchase of vaccines. The state's contribution is estimated at 272,926,584 FCFA or 5%. The remainder (5,390,775,000 FCFA) will be covered by the technical and financial partners. Advocacy efforts should continue in order to provide systematic assurance of appropriate funding for vaccines and immunisation activities in the future.

Part D: Objectives of requested Gavi support[24]

Building on the country immunisation system analysis and context (Part B) and performance to date (Part C), this Part D presents a request for future Gavi support.

8. Planning for future support: coordination, transparency and coherence

8.1 What steps were taken to achieve complementarity and coherence of Gavi's support with support from the government and stakeholders? How were the various forums (ICC, HSCC, ITAG) involved in the development of the PSR?

Huge efforts have been made to formulate an inclusive application that achieves complementarity with existing projects:

- In 2018, a mapping of partners showing partners ' resources and their use in the health sector was carried out. This revealed that, in addition to GAVI, only UNICEF and the WHO support immunisation, with a total of 326,000 euros per year in 2018 and 2019.
- In order to pool the resources of the various partners and avoid duplication, an RSS working group has been set up under the leadership of the Ministry of Health and with the WHO secretariat. Unfortunately this group does not meet regularly and should be reinvigorated with GAVI's support under this PSR.
- As part of the strengthening of the health system, the country has received funding from the World Bank and the Global Fund to strengthen the system of health information and disease surveillance. It is in this context that a real-time monitoring project is underway. Thus 200 additional tablets were purchased.
- In the framework of biomedical waste management, the installation of the incinerators supported by the BM is foreseen;
- The WHO has provided technical support to the strengthening of the health system by recruiting a technical adviser specializing in the strengthening of health systems; Including support for the development of strategic documents, guides, national protocols and capacity-building of national staff in the various thematic areas, dispatch of staff from the Ministry of Health to regional meetings and international for an update and exchange of experiences.
- For the next five years (2018-2022), the World Bank's support will consist of:
  - Institutional strengthening of the Ministry of Health (2,860,000 USD) at the national, regional and local levels to improve management and increase transparency and accountability of the health system. It contains an element of analysis and political dialogue aimed at facilitating the implementation of major sectoral reforms;
  - Human resources Development 3,230,000 USD: Support for improved human resources management and strategic investments to improve training capacity, support

[23] 2018 PCA/GMR Grant Management Requirements

[24] The duration of Gavi funding should be discussed in consultation with the Gavi Secretariat to align as far as possible with a country's strategic period. Regarding measles/rubella, the duration of the planned/expected introductions or campaigns should be for 5 years regardless of the duration of the national strategy.

decentralized training, improve competencies of existing professionals and implement mechanisms to strengthen the minimum standards of training and practice in initial and continuing training;
- Performance-based funding for the provision of a package of essential maternal and child health and community health services in health structures at all levels and among community health workers. This component will combine investments that improve health structures and incentives that Increase the performance, transparency and responsibility of professionals throughout the service chain.
- Community health and social mobilization 8,820,000 USD: aims to improve the demand for essential health services in maternal and child health by facilitating change in behaviour, dissemination of information and monitoring of Service providers through community interventions. Activities include recruitment, training and incentives for community health workers.

- The European Union (EUR 3 million) 2018-2020: It has three components:

✓ capacity-building in the planning, management and coordination of health services, with emphasis on the reform of the central oversight system with multi-level planning cycles, financial monitoring and development of Strategic plans;
✓ Strengthening the planning and management of human resources for health at the central and regional levels, including management courses for regional directors and nurses;
✓ Improve the quality of human resources by strengthening pedagogical management at the National Health School level (ENS), quality assessment and advanced teacher training, and support for medical specialization in the fields Surgery, anesthesiology and OB-GYN.

All the basic documents used for this PSR were validated by the CCIA prior to the National Dialogue, which took place from 04 to 07 June 2018. This dialogue involved various civil society organisations (CSOs), NGOs, international partners, all regional health departments and MINSAP programmes. It was therefore a truly inclusive process, ensuring coherence and participation of all stakeholders.

8.2 To be eligible for new Gavi vaccine or financial support, countries need to demonstrate basic functionality of **their coordination forum (ICC, HSCC or equivalent body)**. Requirements are described at http://www.gavi.org/support/coordination/

To what extent do the **coordination forums meet** Gavi's requirements? What steps have been taken to address any gaps?

Despite its creation on 12 September 2000 by Decree of the Prime Minister, there is a lack of functionality of the ICAC. In order to strengthen the functioning of this coordination structure, GAVI provided technical Assistance in 2017 to support the reformulation of its mandate.

In 2013, HSCC was established as a health system management, leadership and coordination body. However, despite its reactivation in 2015 and well-defined terms of reference, this body still does not function, due to a lack of responsibility for meetings and dissemination of information. The technical Advisory Group on Immunization (NITAG)/Nitag has not yet been established. In the first half of 2019, with the support of an international technical assistant, all ITAG creation documents will be prepared and these will begin to be implemented in the second half of 2019.

8.3 How does **Gavi** support fit within the context of national health and immunisation strategies?

Summarise how Gavi's support fits within and complements the overall context of the national health and immunisation strategies, and efforts to achieve Universal Health Coverage priorities. Explicitly address how Gavi support will complement, both financially and programmatically, the achievement of these objectives. Discuss the extent to which the health financing strategy and policy incorporates vaccine and immunisation recurrent delivery costs and needs.

All the activities proposed for Gavi support are provided for in the 2018-2022 National Health Plan (PNDS III) and in the 2018-2022 cMYP. The detailed justification in Section 11 illustrates how the activities are aligned with these strategies. In summary, the support will enable the implementation of strategies in the following areas:

Strengthening governance in the health sector, including the EPI (foreseen in PNDS III and CMYP)

1. Coordination of health interventions in general, and in particular immunisation with the participation of all stakeholders.
2. Supportive supervision and evaluation of EPI activities.
3. Better planning and management in the MINSAP and EPI.

Strengthening of the operational capacity for immunisation (provided for in the PNDS III and cMYP)
1. Improve the quality of immunisation services.
2. Increase demand for immunisation services.

Strengthening the capacity of the cold chain supply chain and optimising effective vaccine management (provided for in the cMYP)
1. Storage capacity for vaccines and consumables.
2. Effective vaccine management in the EPI.

Improvement of quality and use of data (provided for in the PNDS III and cMYP)
1. Systematic collection of reliable, coherent and timely data.
2. Creation of a committee to validate the data.
3. Increase use of data for planning and management.

9. Planned vaccine introductions for the duration of the national immunisation strategy (e.g. cMYP)

Strategic considerations supporting the requests for new vaccines (routine or campaigns)

This section presents information on future vaccine introductions and/or campaigns under consideration for Gavi support (including support for which the country may not yet be eligible). This does not represent a commitment from the country to introduce the vaccines listed below. High-level information, critical to advance planning and preparation, should be outlined here.

Approximately 18 months ahead of the actual introduction in the routine programme or the campaign, additional vaccine-specific information will be required to obtain Gavi approval. This Vaccine Support Request will include: evidence to confirm eligibility, operational plan, budget, and essential information to support grant implementation (e.g. procurement and co-financing terms, target population data).

9.1 Describe the **justifications** for requesting these new immunisation programme(s), including disease burden. If already included in detail in the Introduction Plan or Plan of Action, please cite the section only.

Meningococcal conjugate vaccine (MenAfriVac)

Guinea-Bissau is a country at risk of meningitis because it borders countries belonging to the “African meningitis belt”. Thus from 2016 to 2018, a total of 83 suspected cases of meningitis were reported by health facilities. The laboratory results, although fragmentary, show a prevalence of Haemophilus influenzae followed by Streptococcus pneumoniae. No cases of Neisseria meningitidis have been identified.

Table 10: Suspected, investigated and confirmed cases of meningitis in children under 5 years of age, 2016-2018

Year	Number of cases			Germs isolated
	Suspected	Investigated	Positive	
2016	18	18	1	Haemophilus influenzae
			1	Streptococcus pneumoniae
2017	58	58	2	Haemophilus influenzae
			1	Streptococcus pneumoniae
2018	7	7	0	
Total	83	83	5	

Source: National Public Health Laboratory

On this basis, as of 2016, the country organised a nationwide preventive immunisation campaign against this disease targeting subjects aged 1 to 29 years, from 13 to 26 May of the same year. The expected coverage of 95% could not be reached. Administrative coverage of 90% was recorded. The 14-day campaign involved 938 vaccinators; 709 volunteers; 696 social mobilisers; 162 proximity supervisors; 18 national supervisors; 22 regional coordinators. According to the EPI report,-2016), the main difficulty encountered was the low participation of the age group between 15 and 29 years with coverage of 83.4% (456,375/547,323) in all health regions except the SAB which recorded 99.97% (148,487/148,537). 60 cases of minor AEFIs and 5 serious cases have been reported and investigated.

In the current CMYP-EPI 2018-2022, the introduction of the new meningococcal conjugate vaccine (MenAfriVac) in routine vaccination is planned for 2019, however, taking into account the delay in the implementation of these activities, this date will probably be postponed to 2020 and the target will be children aged 15 to 18 months. A catch-up campaign targeting children from 1 to 3 years of age will precede this introduction.

Human Papilloma Virus (HPV) vaccine

The Human Papilloma Virus (HPV) is transmitted primarily through sexual contact and at the very beginning of teenage sexual activity. Two types of HPV (16 and 18) cause 70% of cancers and precancerous lesions of the cervix. According to available data, cervical cancer occurs in Africa among women with low socio-economic status between 30 and 49 years of age. In 2012, approximately 270,000 women died of cervical cancer; more than 85% of these deaths occurred in low or average-income countries.

Cervical cancer is one of the most significant causes of mortality in Guinea-Bissau. It is also one of the top killer diseases of women every year. According to the World Health Organization, it is therefore the second most common cancer in the country (6% of cases), after breast cancer (32% of cases). Between 2009 and 2015, 11,422 women were examined and 292 were treated by the medical team of the Spanish NGO “Mujer y Madre” [Woman and Mother] with the support of the United Nations Population Fund (UNFPA) and the Ministry of Health.[25] 30 doctors and nurses were trained in cytology and 8 laboratory technicians were trained in cytodiagnostics. For 2015 alone, this campaign detected 10 cases out of a total of 206 suspected/diagnosed cases. According to Globocan, the incidence of cervical cancer is 149/100,000 people per year ≥ 15 years of age: **(Source**: **http://globocan.iarc.fr/Default.aspx**46**).** The analysis of the samples is done in situ while in-depth examinations are only carried out in Spain, due to the lack of specialised laboratories in Guinea- Bissau.

The introduction of the human papillomavirus (HPV) vaccine is planned for 2021, with the target group being girls aged 9 to 14 and the recommendation to vaccinate cohorts of several ages when the HPV vaccine is introduced for the first time to increase the impact on the population. 2 doses spaced 6 months apart and then for the age range 9 to 13 years old with 2 doses spaced 6 months apart.

Parties involved

- Government's commitment through the Ministry of Health and Finance, education, the Institute of Women and Children.
- Close collaborations between EPI directorates and reproductive health, UNFPA

For the implementation of immunisation activities

- Establish close collaborations between the regional health and education directorates.
- School immunisation strategies are an opportunity to work with the Ministry of Education to integrate public health messages into schools.
- For the vaccination of non-school girls to collaborate with opinion leaders and traditional leaders, local NGOs, CHW.
- A permanent communication between the stakeholders before, during and after the introduction of the vaccine.
- Raising awareness and collaboration between doctors ' and nurses ' associations, national leaders, parliamentarians and other stakeholders to ensure immunization

[25] Activity report: Cervical cancer treatment and prevention campaigns in Guinea-Bissau/2015 UNFPA

coverage against high HPV and awareness of the need for Strengthen cervical cancer screening

Management of rumours and Crises

- Development of a crisis communication plan in order to be able to respond quickly and effectively to adverse events (AEFI), anti-vaccine movements and any claims that may have a negative impact on the acceptance of HPV vaccine by the public.
- is collaborating with credible opinion leaders and traditional leaders to dispel misconceptions and rumours;

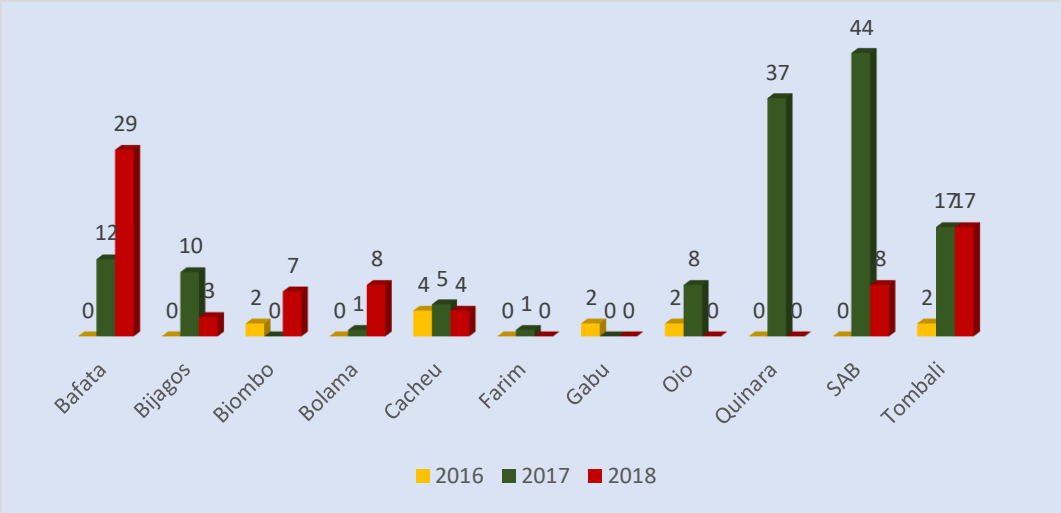
Second dose of the measles vaccine (VAR2)

Measles is an infectious disease that is a public health problem in Guinea-Bissau. As part of the implementation of accelerated measles control strategies, a measles immunisation catch-up campaign was conducted nationally from 15 to 29 May 2006. This campaign targeted all children from 6 months to 14 years of age, and its goal was to lower the incidence and mortality associated with measles by significantly reducing the number of people at risk of developing this disease. The number of children targeted was 694,297 versus 588,533 children vaccinated, i.e. 85%. The evaluation of quality and post-campaign coverage conducted, revealed that 93% of targeted children were vaccinated.

Three other campaigns targeting children aged 9-59 months were conducted in 2009, 2012 and 2015.

It should be noted that epidemiological monitoring receives financial support from the WHO that covers supervision, transportation of samples from the regions to the national public health laboratory and the subregional laboratory of the Institut Pasteur de Dakar.
Despite the poor performance of this monitoring, the country has not reported any measles outbreaks since 2016. **Figure 4:**

Figure 5: Distribution of suspected measles cases, 2016, 2017 and 2018 (weeks 1–13, 2018)



It should be noted that many deficiencies are found at the laboratory level. Thus, in 2016 most of the samples collected were not tested due to a countrywide stock shortage of reagents. In 2017, 155 suspected measles cases were reported, including 88 in children aged 1 to 4 years of age (source: INASA). Most of these cases (84%) occurred in the BAS region. Only 5 cases could be confirmed.

Out of a total of 135 cases reported with samples, 62 were in the age group of 1-5 years of age, or 46%.

Since week 2 of 2018, seven of the eleven health regions have reported and investigated 76 suspected measles cases, but the tests carried out on the collected samples have been

negative for measles. Unfortunately the National Public Health Laboratory (LNSP) is facing a stock shortage of rubella test reagent.

The country intends to introduce into the immunisation calendar, the second dose of anti-measles vaccine (VAR2) in 2020 that targets children aged 15 to 18 months with the objective of improving immunization coverage.

9.2 Please discuss the financing-related implications of the new vaccine programmes requested, particularly how the government intends to fund the additional co-financing obligations. Please mention if any defaults of payment occurred in the last three years and, if so, describe any mitigation measures that have been implemented to avoid future defaults.

The resources necessary to carry out the actions envisaged in the plan for the 2018-2022 period amount to twenty-two million nine hundred and sixty-one thousand four hundred and thirty-seven dollars (US$ 22,961,437). Future resource requirements are dominated by the provision of routine vaccines, the cost of which is estimated to be ten million three hundred and thirty-five thousand nine hundred and forty-five dollars (US$ 10,335,945), or 45% of resource requirements. The burden of programme management is 15%, giving a total of three million three hundred ninety-one thousand seven hundred and five dollars, or US$ 3,391,705. The cost of new vaccines over five years will be approximately US$ 5.2 million.

Achievement of the immunisation coverage objectives set out in the 2018-2022 cMYP depends on the availability of the financial, human and material resources that accompany the implementation of the EPI activities. In addition to the effective and timely release of financial contributions, the availability of resources requires the mobilisation of additional resources to reduce the funding shortfall. To this end, the financial viability of the EPI will revolve around three main strategies: self-sufficiency, reliability of resources and adequate use of available resources.

Guinea-Bissau is still strongly dependent on external resources, as approximately 85% of health sector expenditure is paid by partners. The MINSAP is unlikely to achieve financial self-sufficiency in the years to come, even though it has increased the amount of funding for immunisation over the past few years. An analysis of the budget space beyond the 2018-2020 period cannot be reliably achieved due to political and administrative instability as well as the economic volatility of the cashew market, which represents the most important to the government. Implementation of these strategies will enable the development of mechanisms to reduce current funding shortfalls and increase state financial contributions from local, national and traditional development partners.

9.3 Please give details of the **lessons learned** from previous campaigns and routine introductions, specifically for: storage capacity, additional freezing capacity, staff training, cold chain, logistics, coverage, wastage rate, coverage and drop-out rates, and suggest action points to address them in future introductions or campaigns.

• Penta (2008), Yellow fever (2008), PCV13 (2015), Rota (2015)

• Prior to the previous introduction, introduction plans were drafted, validated by the ICC and Gavi and shared by all stakeholders. This process ensured the commitment of stakeholders to follow the plans.

Storage Capacity: The storage capacity available in positive at the central level has been strengthened for the introduction of new vaccines

Training of staff: Cascade training of health workers. That is, training was given firstly to technicians of the central level, then those of the regional level, and finally the operational level. This made it possible to enhance vaccinators' knowledge of vaccines.

Cold chain/Logistics: During the campaign, immunisation points were resupplied not only by cold chain technicians, but also by supervisors who transport spare vaccines and immunisation equipment in their vehicles.

Biomedical waste management: An inventory of operational incinerators was carried out in the regions. Defective incinerators were repaired before the Supplementary Immunisation Activities (SIA).

Official ceremony to introduce new vaccines in 2015: wide public outreach with major mobilisation, commitment and motivation of technicians to provide this service.

9.4 Explain how the new vaccine support will be used to **improve coverage and equity** of routine immunisation, by detailing how the proposed activities and budget will also contribute to overcoming the key barriers cited in your coverage and equity analysis.

In the context of the introduction of new vaccines, the activities below will be conducted to improve coverage and equity. These are:

1. Collection of information for good micro-planning
2. Provision of guidance to health area managers on monitoring
3. Planning and implementation of outreach strategy activities
4. Planning and implementation of mobile strategy activities
5. Strengthening of supportive supervision of providers on immunisation
6. Strengthening of monitoring of field visits in outreach strategies
7. Adoption of successful strategies for integrating child survival activities
8. Sustainability of the equity analysis exercise at the regional level
9. Systematisation of micro-planning of activities
10. Implementation of activities planned in conjunction with the community
11. Vaccinations every day in health centres and visits at least once a month to children of disadvantaged populations.

9.5 Summarise **programmatic challenges** that need to be addressed to successfully implement the requested vaccines support, and describe plans for addressing those. Examples of key barriers to consider include:

- **Health workforce**: availability and distribution;
- **Supply chain** readiness;
- **Generation of demand**/demand for immunisation services, immunisation schedules etc.;
- **Leadership, management and coordination**: leveraging the outcomes of the Programme Capacity Assessment and/or other evaluations, please describe the key bottlenecks associated with management of the immunisation programmes. This includes the performance of national/regional EPI teams (e.g. challenges related to structure, staffing and capacities), management and supervision of immunisation services, or broader sectoral governance issues;
- **Other critical aspects** based on country plans or reports (e.g. the cMYP, EPI review, post-introduction evaluation tool, EVM) or key findings from available independent evaluation reports.

Health workforce:

There is an emergency to cover the needs of qualified human resources deficiencies. Six (6) are: Responsible for planning, monitoring & Evaluation, logistics officer, Communication Manager, data Management supervisor, EPI accounting Agent and Administrative Assistant/Executive Secretary. A plea will be made to Gavi for the payment of the salaries of these staffs for a period of 24 months after which, the MINSAP undertakes to recruit them to the public service.

The Technical Assistance (TA) of the WHO and UNICEF will contribute significantly to the transfer of skills.

Supply chain readiness

10. Description of requested support for each new immunisation programme

- Evaluation of storage capacity of the cold chain and guarantee its operation in all healthcare facilities
- Vaccine management
- Availability of chain units
- Means of transportation of supply

Generation of demand

- Implementation of the Integrated Communication Plan
- Involvement of CHW and CSOs

Leadership, management and coordination

The following main points for improvement are noted:
- Personnel do not have task description sheets (terms of reference)
- Insufficient leadership of the EPI Director: shortcomings noted in the coordination of the PCA mission

9.6 Describe **potential synergies** across planned introductions or campaigns (e.g. if two introductions are planned in the same year, there should be synergies in terms of training and social mobilisation events). If relevant, comment on capacity and appropriate systems to introduce multiple vaccines in a year. Also describe how the country will mitigate any programmatic and financial risks associated with multiple introductions.

The experience gained from previous introductions of vaccines (yellow fever, Penta, PCV14 and Rota, IPV) will be used for new introductions. Data and documentation on new vaccines are available; the best practices and lessons learned from other countries that have introduced these new vaccines are, among other things, elements that will guide the process of introducing new vaccines into the routine EPI in Guinea-Bissau. These introductory processes will also be supported by strengthening monitoring of the diseases targeted by the EPI, Partnership Framework Agreements (PFAs) and Adverse Events Following Immunisation (AEFIs) and the laboratory's ability to confirm.

More specific planning needs particular to each immunisation programme listed in Table 1.2 are described here. Full details on activities needed to prepare for vaccine introduction and/or immunisation campaigns (addressing the programmatic challenges and bottlenecks outlined above) should be reflected in the country's annual work plan. It is not necessary to mention provider or budget requirements in the description of Technical Assistance (TA) requirements, as these will be discussed and agreed upon at a later stage.

Additionally, a vaccine-specific request will be required 12-18 months before the actual introduction in the programme or the start of the campaign.

Exclude vaccines that have already been approved by Gavi, even if they have not yet been introduced.

HPV routine *(introduction date, e.g. **March 2021**)*	Describe the broad strategy for introduction (including target population, potential multi-age cohort immunisation in year 1, potential regional roll-out etc.).
	The introduction will take place at the national level; in the first year, two national campaigns will be organised among the cohort of girls aged 9 to 14 years. The campaign will take place in May and November 2021. From 2022, the target population will consist of girls aged 9 to 13 years.
	Describe the steps to finalise the introduction strategy and to engage key stakeholders.
	The involvement of the Reproductive Health Directorate (RHD) in screening, palliative treatment and preventive treatment; The Ministry of Education will support the identification of girls' age groups in coordination with the Institute of Women and Children (IMC) and the Ministry of Social Communication. According to global and regional strategic guidelines and taking into account national priorities in view of the extent of the disease and the benefits associated with the introduction of the vaccine concerned, the EPI Directorate will develop and submit a concept note to the ICC and/or the ITAG for advice and approval by the Cabinet. The experience gained from supporting the introduction of PCV13 and the other previously mentioned antigens may be useful for the introduction of HPV.
	What **Technical Assistance will be needed to support** this introduction and when?
	Need Technical Assistance in 2021 to develop an introduction plan.
MenA *(introduction date, e.g. **Dec. 2020**)* *(routine, mini catch-up and preventive campaigns)*	Describe the **broad strategy for introduction** (including **target population** for each type of support below)
	e.g. routine[26]: *e.g. mini-catch up campaign for unimmunised cohorts[27]:* *e.g. mass preventive campaigns* A catch-up campaign targeting children aged 1-3 years i.e. those born after the last SIA of 2016. This campaign will precede the introduction of MenA in the routine EPI that will take place in the last quarter of 2019. It will be a single dose that will concern children between the ages of 15 and 18 months. Following the global and regional strategic guidelines and taking into account the magnitude of the disease and the benefits associated with the introduction of the vaccine concerned, the EPI Directorate will develop and submit a conceptual note to the CCIA and/or the NITAG for advice and approval by the Cabinet. The experience gained from supporting the introduction of PCV13

[26] For routine immunisation, please indicate if there is an opportunity for introduction alongside other vaccines given on the same platform i.e. MCV1, MCV2 and yellow fever

[27] For certain countries, a routine introduction for MenA signals that a mini catch-up campaign is needed (see WHO position papers and guidelines).

	and the other previously mentioned antigens may be useful for the introduction of MenA.
	What **technical assistance** will be needed to support this introduction or campaign, and when?
	Technical Assistance for the preparation of the introduction plan in 2019
Measles/Rubella *(routine[s] and campaign[s] with introduction date e.g. **Dec. 2020)***	To encourage a broad and longer term approach to measles/rubella control/elimination, the multi-year national plan attached to this PSR should include an analysis and description of the activities outlined below[28]: • ***Immunisation coverage trends and drop-out rates for routine MCV1 and MCV2*** (national and sub-national); coverage results from M or MR immunisation campaigns, including post-campaign coverage surveys; **lessons learned** from implementation of routine immunisation and campaigns, and efforts to cover hard-to-reach areas and other populations (e.g. women of child-bearing age, health workers). • **Surveillance** (case-based surveillance and sentinel surveillance) of performance for at least 5 years, at national and sub-national levels, and any plans for improvement through the use of HSIS funds (if not already covered in above sections). • **Epidemiological trends and patterns** (distribution by age, geography etc.) for measles, rubella and congenital rubella syndrome (CRS) including outbreaks; population susceptibility and measles outbreak risk profile. • **Priority activities** for 1) routine (MCV1 and MCV2) immunisation strengthening, including efforts to improve coverage among hard-to-reach populations and/or routine measles and rubella vaccines and any campaigns (catch-up or follow-up) in the next 5 years; 2) strengthening of measles, rubella and congenital rubella syndrome surveillance and lab confirmation (including through the use of HSIS funds): 3) outbreak preparedness plans.
	Provide a **technical justification** for each type of support requested for measles/rubella in the next 5 years.
	e.g. follow-up campaign: A follow-up campaign targeting children aged 9-59 months will be conducted in early 2020. Following the global and regional strategic guidelines and taking into account national priorities and in view of the magnitude of the disease, the EPI Directorate will develop and submit a conceptual note to the CCIA and/or the NITAG for advice and approval by the Cabinet. The experience gained from supporting the introduction of MenA. *e.g. routine:* The introduction of VAR2 in the routine EPI will take place in the last quarter of 2020 after the follow-up campaign. It will be a single dose that will concern children between the ages of 15 and 18 months, i.e. the same target as MenA.
	Describe the **target population** for each type of support in the next 5 years.
	e.g. follow-up campaign: Target = children of 9-59 months *e.g. routine: target = children aged 15-18 months*
	With reference to any particular bottlenecks/challenges noted above, what **TA will be needed** to support this introduction or campaign, and when?

[28] If the comprehensive multi-year plan for immunisation (cMYP) does not include this information, it may be submitted as an addendum to the plan.

	...Technical Assistance for the preparation of the introduction plan in 2020
Yellow fever *(routine immunisation and campaign[s])*	**Describe the broad strategy for introduction (including target population for each type of support below)**
	e.g. routine [29] *e.g. mass preventive campaigns* *Indicate the at-risk population and the country criteria for establishing priorities and whether or not they have been validated.*
	With reference to any particular bottlenecks/challenges noted above, what **TA will be needed** to support this introduction or campaign, and when?
	…

[29] The country is requested to consider the introduction of vaccines administered at the same time on the same platform i.e. MenA and MCV1 and build on strengthening coverage.

11. Programmatic: description of priority HSIS Gavi investments

grant-related information

Based on the above, target date for submission of operational work plan and budget for Gavi's contribution	Prefilled by Gavi Secretariat (SCM/PO) following discussions with country
Target date for first-year funds arriving in country	Prefilled by Gavi Secretariat (SCM/PO) following discussions with country
Next PSR portfolio review (final year of immunisation strategy)	Prefilled by Gavi Secretariat (SCM/PO) following discussions with country

This section describes the 3 to 5 objectives and priority activities that have been identified for Gavi financial support. The description indicates how each objective intends to address the issues and bottlenecks identified in Part C and contribute to sustainable improvements in coverage and equity. It is recommended to take into account specific objectives related to the under-immunised populations identified in Part B, and to explore investments in critical areas such as vaccine supply chain, demand promotion and community engagement, leadership, management and coordination and data quality/availability/use.

11.2 Objectives and priority activities for Gavi financial support

Please see the Programming Guidance for targeting interventions in each of Gavi's strategic focus areas: i) leadership, management and coordination, ii) supply chain, iii) data and iv) demand promotion: Programming Guidance Documents.

For each objective:

- Provide an **estimated timeframe** for completing the objective.
- Describe how the objective(s) target(s) specific **populations/geographic areas** as identified in Part B. If applicable, briefly outline which populations and/or geographic areas have been prioritised for support, how they have been selected, what has been done so far for those populations/geographic areas and what is being proposed for future Gavi support.
- Describe how the proposed objectives and activities tackle the **immunisation challenges and bottlenecks** identified in Part C (including on topics such as supply chain, generation of demand/community mobilisation, leadership, management and coordination, and data quality/availability/use) and further the achievement of the objectives of the multi-year national strategic plans.

To apply for CCEOP support, please include CCEOP as one of the activities under a supply chain objective.

- For each objective, indicate approximately **5 activities** which will contribute to achieving the objective; explain how those activities will address specific coverage and equity challenges, and how implementation of the activities will be prioritised (e.g. over time, any geographic or population focus/targeting etc.).
- **Sustainability considerations**:

- **Financing**: Justify requests for Gavi to support major recurrent costs (e.g. human resources) regardless of the country's transition stage. Countries in the preparatory or accelerated transition phase are restricted from using Gavi funds for recurrent costs. In addition, describe the steps being taken to ensure the necessary financial resources are available domestically to fully fund the recurrent and non-recurrent investments needed to sustain the results achieved once Gavi support is phased out.
- **Integration**: Describe the extent to which the activities envisaged will be implemented through routine systems and processes. In the event of external investments, please justify and describe steps being taken to integrate them into routine systems and processes.
- **Institutional capacities**: This refers to whether the country has the staff, facilities, capacities and systems to sustain its immunisation programme without being overly dependent on external partners and service providers. To what extent are Gavi investments contributing to strengthening these national institutional capacities? In addition to the four strategic focus areas covered in the Programming Guidance Documents, attention should be paid as well, particularly in countries in or about to enter the accelerated transition phase, to non-service delivery dimensions of institutional capacity in areas such as: procurement, technical capacity to advise the government on new vaccine introductions, and vaccine regulation and safety.

For countries in the accelerated transition stage, please dedicate one objective to those activities specific to appropriate transition planning.

- **Provide tailored indicators** that will be included in your grant performance framework to monitor each objective. These tailored indicators should provide an evaluation of achievement of intermediate results and activity implementation. Further information on supply chain indicators is included in the programming guidance documents and/or below.
- List **up to 3 priority technical assistance needs** anticipated per objective for the upcoming year. Please indicate if this TA will be funded through the HSIS support or whether this will require investment from Gavi through the Partners Engagement Framework (PEF).
- For each objective, provide an **indicative total budget in US$** for the duration of Gavi's support.

Objective 1:	Strengthen the management and coordination of the Expanded Programme on Immunisation at all levels, make it more effective and efficient in order to improve immunisation coverage and equity.
Timeframe:	2018–2022
Priority population/geographic area or constraint(s) to	The 11 health regions will receive support from Gavi.

coverage and/or equity to be addressed by the objective:	
Immunisation system bottleneck(s) to be targeted:	▪ Weakness in the Coordination, planning, ▪ Monitoring/Evaluation of health operations and insufficient financial management; ▪ Poor mobilisation of domestic financial resources for immunisation and operational costs of health districts and healthcare facilities; ▪ Insufficient human resources in terms of quantity and quality to implement the programme; ▪ Low absorption of allocated resources and poor performance of planned activities; ▪ Lack of immunisation legislation and regulations.
Priority activities (approximately 5):	**1. Strengthen leadership, logistics, planning, monitoring and evaluation capacities of the programme** • Install and equip a strategic planning and management office at the DGASS level and at the EPI level, including technical assistance; • Recruit and pay the salary of staff members (3 people) responsible for supporting the DGASS; • Recruiting 6 staffs to strengthen EPI capabilities • Equip the staff room with appropriate equipment (computer, printer, Internet etc.); • Organize a training workshop for the EPI team and the program management support office - leadership, governance, results-based planning process-budget process standards at the central, regional and AS levels, including hospitals • Create and distribute the management and financial procedures manual within the MINSAP to improve the transparent management of resources; • Create a mechanism to facilitate the release and transparent management of the funds allocated; • Create an immunisation law that will be approved by the National People's Assembly (NPA) and disclosed to regional directors, health workers and the population. **2. Reactivate HSCC and ICC through the permanent secretariats** • Recruitment of staff to the role of permanent secretariats; • Equip a meeting room and staff room with appropriate equipment (computer, printer, Internet, tables etc.); • Quarterly meetings of the HSCC and the ICC, with the participation of the partners; • Support the installation and operation of the HSCC in the 4 priority regions and, if possible, in all regions; • Set up the Immunisation Technical Advisory Group (ITAG) and organise half-yearly meetings; • Institutional support for DGPPS/DGASS/EPI. **3. Conduct integrated training and regular monitoring to improve management and service delivery skills with a focus on immunisation** • Develop an integrated supportive supervision manual; • Conduct half-yearly formative oversights from the central level to regions and quarterly regions to health areas

	• Support the preparation of annual operational plans in all regions, focusing on the four health regions; • Support the development of the EPI annual Operational Action Plan (OAP); • Develop and implement annual micro-plans at different levels; • Train HA health workers to manage results-based planning in the eight targeted regions. **4. Carry out joint annual mid-term and final appraisals to monitor the process of implementing interventions.** • Request TA for the preparation of the cMYP monitoring and evaluation plan; • Develop and implement the 2018-2022 cMYP monitoring and evaluation plan; • Hold annual programme evaluation meetings; • Conduct a mid-term evaluation of the 2018-2022 cMYP; • Carry out the external review of the programme. **5. Improve service provision, management, coordination and accountability capacities at all levels** • Participate in the revision of health training programmes and school curricula; • Provide the EPI with better access to the Internet; • Participate in international meetings on immunisation; • Develop mechanisms for motivating and retaining health workers in their positions; • Install and equip a strategic planning and management office at the DGASS level and at the EPI level, including technical assistance; • Create and distribute the management and financial procedures manual within the MINSAP to improve the transparent management of resources; • Ensure regular monitoring of operations accounting and management.
Rationale:	The functionality of consultation frameworks such as the HSCC and ICC remains insufficient due to their low technical capacity and low financial support. In the context of the development of Operational Action Plans, the analysis of the situation does not take adequate account of: • Shortcomings related to equity and population and geographical disparities; • Bottlenecks and barriers related to the environment, supply, demand and quality of services; • Programme performance and actual implementation capacities. The above observation could be explained by inadequate technical skills of human resources working in healthcare in the planning, monitoring and evaluation of interventions. With regard to financing of the health sector, the country is strongly dependent on external financing because of the low level of financing of the national budget, and underexploitation of the financial potential of the private sector and other innovative financing such as taxes on airline tickets, alcohol, tobacco, mobile phones. With regard to human resources, the 2017 analysis report of human resources working in healthcare showed, among other things, that such resources are poorly distributed and are not performing well.

	Rural healthcare facilities are particularly affected by a widespread shortage of qualified healthcare professionals. This could be explained by the low use of human resources produced by training schools and the lack of incentives and retention mechanisms for health workers. To address the situations described above, it would be important to: ➢ Improve planning and coordination: creation of a strategic planning and management office at the DGASS (3 people) and the EPI/DGPPS (6 person); ➢ Support the functionality of the coordinating bodies of the health system at all levels through the organisation of regular meetings and regular reviews with the setting up of accountability frameworks; ➢ Support the setting up of the ITAG. As innovative incentives, the gradual implementation of the "results-based financing" (RBF) approach in the four Category-1 regions, and its extension to the other regions after two years of experimentation and evaluation will undoubtedly contribute to the motivation and retention of staff in order to have high-quality immunisation services. Indeed, these experiences aim to improve the poor performance of the health system by increasing and reshaping incentives for caregivers through a results-based funding system. Nowadays it is considered accepted that RBF improves health services and is a good way to achieve Sustainable Development Goals (SDGs). In general, it can be observed that the quantity and quality of healthcare and health services increase with the implementation of RBF. Verification of the performance of providers is a vital part of the implementation of a RBF programme. The system consists of four types of verification: - Verification of the quantity of services provided (verification of quantity). This verification determines whether the services are reported in the provider's records, and gives rise to monthly payment for services; - Evaluation of the technical quality of the services provided (evaluation of the technical quality). This evaluation determines whether the facilities are capable of providing services that meet the MINSAP's standards and determines part of the quarterly quality bonus or penalty that the healthcare facilities may receive; - Evaluation of the extent to which patients have truly received the services and their satisfaction (Community Survey): This audit has a twofold objective. Firstly, it determines whether the patients reported actually exist and whether they confirm that they have been treated in the healthcare facility. As a result, this evaluation is a tool for detecting fraud (identification of any "phantom patients"). On the other hand, it determines the level of patient satisfaction with the care they received, and is therefore a tool for evaluating the perceived quality of care. Along with the technical quality evaluation, the community survey is the second part of the quality bonus or penalty that facilities can receive; - Counter-verification of the information provided by these three mechanisms (cross-checking), carried out by an independent organization. This cross-checking evaluates the quality of the data produced by the RBF system, but also ensures follow-up of the implementation of this system.
Sustainability considerations:	- Legislation on immunisation; - Progressive covering of immunisation funding by the State;

	- Training of the various stakeholders at all levels; - The TA that will transfer the skills. Furthermore, the State has also committed itself to recruiting and transferring 400-800 workers; this will make it possible to address the current lack of human resources working in healthcare and therefore help support the supply of and demand for immunisation services. The regular organisation of annual joint appraisals will make it possible to learn from mistakes made and coordinate the actions of all stakeholders in the health system. The support expected from Gavi will be used to help bridge the gap in funding to strengthen the health system and support immunisation in order to increase immunisation coverage in an equitable way.	
Indicators to monitor progress toward this objective included in the Grant Performance Framework:	**Indicators**: -Rate of implementation of activities planned in the integrated Operational Action Plans (OAPs) of the health regions; -% of health regions that have held an HSCC; -% of RHDs having conducted integrated supportive supervision; -% of regions receiving 2 supportive supervisions per year and % of HAs receiving 4 supervisions per year; -% of regions with 4 regional HSCC meetings per year; - Number of annual meetings at the central level: HSCC, ICC and Economic Commission for Africa (ECA); -Annual reports prepared by the strategic planning and management office; -% of the budget allocated to health and % of the MINSAP budget allocated to the EPI.	
TA needs for the coming year, and a description of how this is complementary to planned TA through the PEF	**TECHNICAL ASSISTANCE NEEDS** National and international technical assistance is required for: - define mechanisms for transparent resource management and create manuals for financial management procedures. This will complement technical assistance provided by the World Bank to improve management of public finances at the central level of the EPI through ongoing training; - the reactivation of the HSCC: preparation of the terms of reference of the permanent secretariat, recruitment of people with an adequate profile, initial training until the first meeting. This will facilitate the work of all partners involved in the health sector. - train a MINSAP/EPI team that will be responsible for coordinating supportive supervision; - prepare the CMYP monitoring and evaluation plan and the preparation of the CCIA in the first 2 years	
Indicative HSS budget:	**Years 1 to 2**	***US$ 367,924***
	Years 3 to 5	***US$ 391,363***

Objective 2:	Increase immunisation coverage for children immunised with VAR from 77.1% in 2017 to at least 95% and Penta 3 from 77.9% to at least 95% in 2022, in an equitable manner across the 8 health regions.
Timeframe:	***2018*** to ***2022***
Priority population/geographic area or constraint(s) to coverage and/or equity to be addressed by the objective:	The 8 priority Category-1 and 2 regions. • Category 1 with 4 regions: (SAB ; Oio ; Tombali and Gabu.) • Category 2 with 4 regions (Bolama; Cacheu ; Bijagos and Farim).
Immunisation system bottleneck(s) to be targeted:	- Insufficient human resources in terms of quantity and quality; - Low geo-health coverage of immunisation services particularly in rural areas; - Difficult geographical access, particularly in the Oio, Tombali, Gabú, Cacheu, Bijagós and Bolama regions; - Lack of financial resources for service delivery and more specifically for reaching unimmunised children and hard-to-reach areas; - Failure to manage the target population; - Parents and guardians of children are not well informed about the different vaccines available or about the number of doses that the child must receive to be fully immunised; - Lack of information and involvement of community groups and leaders in the promotion of immunisation activities; - Lack of appropriate information, education and communication (IEC) materials; - Lack of funding for communication strategies; - Lack of integration of high-impact activities on children's health.
Priority activities (approximately 5):	**1. Strengthening the capacity of health workers in the management of immunisation, Reach Every Community and IMCI (Integrated Management of Childhood Illness) approach, including community IMCI** ✓ Advocate with the government for the equitable distribution of technicians; ✓ Conduct training of health workers on immunization standards and procedures, (MLM course expanded to PCIMNE, PF, SONU, Nutrition, PFE, Susan Marie, ACE/ACC, Micro Planning) taking into account the capacity building needs of providers ✓ Train 37 trainers at the central and regional level (15 + 22) on the ACD/ACC/ACE approach ✓ Train 232 health technicians (two per health field) on the implementation of the Reach Every District/Reach Every Community approach; ✓ Enhance the knowledge of health workers at the regional level on micro-planning. **2. Strengthening routine immunisation activities through fixed, outreach and mobile strategies in all facilities providing immunisation services.** • Develop and implement annual microplans at different levels; • Organise immunisation sessions through outreach and mobile strategies at immunisation points once per axis and per month; • Implement urban strategy in the BAS health region; • Ensure transport for immunisation in the field and supportive supervision in all targeted health regions; • Organise institutional and community training and follow-up for the implementation of Reach Every Community/Reach Every Child;

	• Organise immunisation acceleration days in health zones with a high number of unimmunised children adapting additional accelerations to before and after the rainy season in hard-to-reach areas; • Ensure the participation of religious and community leaders in regional coordination meetings at the regional level (HSCC). **3. Strengthening the supportive supervision of health workers and health and community workers in the implementation of Reach Every Community/Reach Every Child.** • Develop an integrated supervision grid that takes into account the main Reach Every Community/Reach Every Child approach principles; • Equip HA with means of transportation for formative supervision • organize semi-annual supervision visits from the central level to the regions and quarterly from the regional level to the HA • Organise supervision report feedback sessions. **4. Organise acceleration days in health zones where the number of unimmunised children is high.** ✓ Organise accelerated immunisation activities: week for recovery of children in poorly performing HAs. **5. Introduction of new vaccines in the systemic EPI and monitoring of AEFIs and vaccine-preventable diseases.** ➢ Develop and implement microplans for various Supplementary Immunisation Activities (SIAs) • Reintroduction of IPV – 2018 • Meningococcal A – 2020 • HPV – 2021 • VAR2 – 2020 Monitoring of AEFIs for new vaccines to be introduced.
Rationale:	Immunisation coverage remains low in Guinea-Bissau due to low geo-health coverage and the lack of effective implementation of immunisation interventions (routine and SIA). In fact, immunisation at fixed sites takes place only at the level of the country's 118 public HAs. According to PNDS III 2018-2022, only 34% of the population lives within a 5 km radius of a health centre and benefits from the fixed strategy, 59% of the population should benefit from the advanced strategy and 7% from the Mobile strategy. It should be noted that several localities are accessible and this situation is more accentuated during the rainy season. Another important feature of access conditions is the presence of island areas. For example, in the Tombali region there are 23 inhabited islands. The BAS is mainly an urban/suburban population with all the characteristics of demographic and health and social vulnerability. This health region is performing poorly due to the non-inclusion of equity aspects in the planning and monitoring of the implementation of immunisation interventions. This is compounded by the poor performance of monitoring of vaccine-preventable diseases and AEFIs due to insufficient qualified human resources and poor coordination of interventions at all levels. The increase in immunisation coverage, with an emphasis on equity, will make it possible not only to improve the immune status of the population, but also to introduce new vaccines with the aim of reducing the morbidity-mortality of children and mothers. This will be made possible through the strengthening of existing immunisation strategies (fixed and outreach and mobile from the region's administrative centre) and the implementation of innovative approaches. The selection of priority regions was based on the criteria below with weighting in addition to the results of the equity analysis were used for the selection of priority regions. These are: **1- Immunisation coverage (Penta 3 over the last 4 years: 2014; 2015; 2016 and 2017)**

a- Immunisation coverage 0-50%: 5

b- Immunisation coverage 51-79%: 3

c- Immunisation coverage 80-90%: 1

d- Immunisation coverage 91% and above: 0

2- Children not immunised over the past 4 years: 2014; 2015; 2016 and 2017)

a- Not immunised/3 years greater than or equal to a 10% cohort: 5

b- Not immunised/3 years lower than 10%: 0

3- Use of services over the last 4 years: 2014; 2015; 2016 and 2017)

a- Poor access (Penta 1 < 80%) and misuse (drop-out > 10%): 5

b- Poor access and good use: 3

c- Good access and misuse: 3

d- Good access and good use: 0

4- Drop-out rate over the last 4 years: 2014; 2015; 2016 and 2017)

a- Less than 10%: 0

b- Greater than or equal to 10%: 5

5- Presence of partner in support of immunisation

a- Absence of partners in all health areas: 5

b- Absence of partners in at least 50% of health areas: 3

c- Absence of partners in less than 10% of health areas: 1

The 11 health regions have been classified into three categories:

- **Category 1** with 4 regions: (SAB ; Oio ; Tombali and Gabu.)
- **Category 2** with 4 regions (Bolama; Cacheu; Bijagos and Farim).
- **Category 3** are with 3 regions (Biombo; Quinara and Bafata).

Of the 11 health regions, 8 attract the attention of the authorities because of their low performance. Category 1 with 4 regions: (BAS, Oio, Tombali and Gabú) and four Category-2 regions (Bolama, Cacheu, Bijagós and Farim). These 8 regions account for a total of 70 HAs/HCs. The new HSS and immunisation support grant for the 2019-2023 period will focus on 8 low and medium-performance health regions.

Table 11: Categorisation of regions + basic and complementary packages by RHD category

Category	ROW	REGION	BASIC PACKAGE	COMPLEMENTARY PACKAGE
1	1	BAS	Coordination Vaccines/CC/Logistics Data management Demand generation	Supervision once/quarter Mobile/outreach strategy Equity analysis
	2	GABÚ		
	3	OIO		
	4	TOMBALI		
2	5	BOLAMA		Supervision once/6 months Mobile/outreach strategy based on equity analysis
	6	CACHEU		
	7	BIJAGÓS		
	8	FARIM		
3	9	BIOMBO		Supervision once/6 months
	10	QUINARA		
	11	BAFATÁ		

According to the latest estimates 2018 of the National Statistical Institute, the total population of Guinea-Bissau would be 1,875,700 inhabitants. that of the 8 regions of Category 1 & 2 is 148,575 inhabitants, or 76% of the total population with a target of children 0-11 months equal to 69,401 children**.**

Table 12: Total population, target population for vaccination and proportion in 2018

	Pop. Total 2018	0-59 mois (17%)	0-11 mois (3,7%)
Region Tombali	118,916	20,216	4,400
Region Gabu	260,098	44,217	9,624
Region Oio	207,596	35,291	7,681
Region.Bissau	516,315	87,774	19,104
Total Cat 1	1,102,925	187,498	40,809
Region Farim	58,060	9,870	2,148
Region Cacheu	229,553	39,024	8,493
Region Bijagos	26,527	4,510	981
Region Bolama	11,510	1,957	426
Total Cat 2	325,650	55,360	12,049
TOTAL Cat 1&2	1,428,575	242,858	52,858
Total GUINE-BISSAU	1,875,700	318,869	69,401
% Cat 1& Cat 2	76%	76%	76%

Source: National Statistical Institute 2018-Guinea-Bissau

Strategies to be developed to achieve them more effectively

- Implementing the ACD Approach
- Micro specific planning village by village

	• Involvement of community and religious leaders • CHW plus recycles in the identification and research of children • Development and implementation of an interpersonal Communication Plan specific to these areas • Decentralized monitoring every 6 months Villages located between 5 and 15 km from the HCs will be covered at least once a month by the HC's immunisation team using motorcycles. Villages located beyond 15 km from the HCs will be visited at least once a month by the district mobile team using 4x4 vehicles. The organisation of Accelerated Vaccine Introduction activities (AVI) and the implementation of new management tools at immunisation sites will contribute to a gradual increase in health coverage. All these strategies will be supported by the strengthening of operational planning that should take into account certain specificities, by strengthening the capacity of health workers on the effective management of vaccines, vaccination practice. Community health workers will be trained in accordance with the CSA Training Manual, formative supervision and regular monthly/quarterly meetings, with a focus on improving quality/data management. Similarly, the ACD/CAC/ACE approach will help to implement a set of interventions with a strong impact on children's health by taking advantage of the same opportunities and complementarity of resources and the resolution of a set of health problems. For example, in addition to the vitamin A supplementation and deworming using Mebendazole usually integrated into immunisation campaigns, it will also be an ideal opportunity to integrate immunisation into Long-Lasting Insecticidal Net (LLIN) distribution activities of the national malaria control programme. The introduction of the meningococcal A vaccine, the second dose of the measles vaccine and the HPV vaccine will contribute to the reduction of infant mortality related to vaccine-preventable diseases. On this matter, each introduction will be the subject of an operational plan that will take into account the guidelines developed. In accordance with the WHO guidelines, the country should conduct a catch-up campaign targeting children of 1-3 years in the run-up to **the introduction of MenA in the routine EPI**, planned for 2020 and targeting children aged 15-18 months. **The introduction of the human papilloma virus (HPV) vaccine** is planned for 2021 and will continue in 2022. The target is girls aged 9-14 years in 2 rounds while from 2022, the target will be girls aged 9-13 years, also in 2 rounds. These introductory processes will also be supported by strengthening monitoring of the diseases targeted by the EPI, Partnership Framework Agreements (PFAs) and Adverse Events Following Immunisation (AEFIs) and the laboratory's ability to confirm.
Sustainability considerations:	All the strategies developed above will be supported by the strengthening of management at the level of health regions and HAs and through the effective implementation of the Reach Every District/Reach Every Community/Reach Every Child approach. Operational planning of this approach should take into account specificities related to: i) gender, ii) geographic and hard-to-access areas, iii) demography, iv) sociocultural aspects (religious sects, reluctant communities etc.). The relaunch of integrated supportive supervision, the allocation of 815 health workers and their training, the regular holding of monthly meetings, the improvement of data management quality, and the holding of HSCCs will have significant added value to increase the level of immunisation coverage.
Indicators to monitor progress toward this objective included in the Grant Performance Framework:	• Penta 3 immunisation coverage rates by region; • Measles immunisation coverage rates by region; • Proportion of regions reaching Penta 3 immunisation coverage ≥ 85%; • Penta 1-Penta 3 drop-out rates; • VAR2 rates; • HPV rates; • MenA rates.

TA needs for the coming year, and a description of how this is complementary to planned TA through the PEF	**Technical assistance (international and national) needs for:** • MLM training; • Implementation of the Reach Every Community/Reach Every Child approach; • Support for micro-planning (guide development); • Support for the development of an integrated supervision guide taking into account the principles of the Reach Every District/Reach Every Child approach; • Support for the introduction of new vaccines.	
Indicative HSS budget:	**Years 1 to 2**	***US$ 418464***
	Years 3 to 5	***US$ 789,757***

Template for Supply Chain (Applicable even if countries are not applying for CCEOP) **Objective 3:**	Increase the effective vaccine management score at all levels from 57.3% in 2014 to 80% by the end of 2022.
Timeframe:	2018 to 2022
Priority population/geographic area or constraint(s) to coverage and/or equity to be addressed by the objective:	National scale.
Immunisation system bottleneck(s) to be targeted:	▪ Inadequate distribution and cold chain in terms of quality and quantity; ▪ Inadequate staff in terms of quality and quantity for vaccine management at the central, regional and HA levels; ▪ Inadequate effective vaccine management; ▪ Inadequate waste management; ▪ Inadequate appropriate infrastructure for the EPI programme; ▪ Lack of organisation of the logistics service; ▪ Insufficient rolling stock and poor management of available vehicles; ▪ No/Low storage capacity of vaccines in certain regions and HAs.

Prioritised activities on each of the five supply chain fundamentals:
Describe planned or ongoing activities related to supply chain fundamentals. Responses in this section should be linked to the latest EVM Improvement Plan.

1. Continuous Improvement	**1) Improve the effective management of vaccines** • Set up nationally, the Mininus San project (PUSH System) with a quarterly distribution of central level to storage sites (regional deposits), and monthly storage sites to PPS • Complete the needs of sanitary structures in isothermal coolers/vaccine doors • Conduct an external evaluation of effective vaccine management in 2019 • Waste management • Make a temperature mapping for each of the cold chambers • Equip cold rooms with a remote temperature control system (type multi log or Beyond Wireless) • Rehabilitate vaccine depots in priority areas
2. Management/Leadership	**2) Carry out maintenance on the means of transport and infrastructure of the EPI** • Strengthen the capacity of EPI officials through specific training on the GEV at all levels • Develop and implement SOPS on effective vaccine management • Advocate with partners for the funding and implementation of the maintenance plan during the GAVI grant period. • Train 2 technicians from the central level and 11 from the regional level on the maintenance of the equipment of the cold chain

3. Data for Management	**3) Strengthening the EPI with continuous electronic temperature monitoring devices** • Set up computerized vaccine management (SMT type) at 11 storage sites • Develop a dashboard to monitor the performance of the equipment of the cold chain through the analysis of temperatures • To monitor the performance of the equipment of the cold chain through the analysis of temperatures-activity conducted monthly by the BRM and compilation of the central level
4. Cold Chain Equipment *(including CCEOP and Maintenance — see below for additional questions)* • How will the country ensure that aspects of maintaining the cold chain are addressed (e.g. preventive and corrective maintenance, functionality monitoring, technicians, financing for maintenance, spare part procurement etc.)? • What is the frequency of preventative and corrective maintenance that the country commits to (supported by partners)? • How will the country monitor the completion of preventive and corrective maintenance? • Indicate the sources of funding for planned maintenance activities • How will the country dispose of obsolete and irreparable equipment replaced by new equipment?	**4) Cold chain equipment, transport and waste management** • Install the 30m3 positive cold chamber at the central depot • Finalize the deployment of the 10 SDS TCW 40 refrigerators at designated sites in the distribution plan • Acquire 114 cold chain equipment PQS for PPS and last-level storage sites • Ensure that all refrigerators with vaccines are equipped with a continuous temperature control system (type LogTag or Fridgetag) • Acquire a second 100-KVA generator to ensure continuous electrical power at the central level; • Acquire one 10 ton truck for supplying the regions, three 4x4 vehicles for supervisions, and two 4x4 vehicles for the health regions of OIO and FARIM for mobile strategies, and a motor boat for vaccination activities in the island area • Implement the maintenance plan with the reproduction of training modules, purchase of tool kits • Develop the national Waste management policy and its implementation plan • Acquire 20 insulated crates for the supply of DRS/CS Acquire 12 specific isothermal coolers for 10 mobile teams **How will the country ensure that aspects of maintaining the cold chain are addressed (e.g. preventive and corrective maintenance, functionality monitoring, technicians, financing for maintenance, spare part procurement etc.)?** Preventive Maintenance is the regular maintenance of equipment that reduces the risk of low performance of the equipment. The country has developed a maintenance plan in 2017, in which the following activities are detailed: -The central level through DSIES via the Technical Committee established by ministerial decree and composed of the DPEV, the DSIES will play the role of coordinator in support of the 03 regional Maintenance offices (BRM): (01) to Bafatá (East axis), (01) to Oio (North axis) and (01) Quinara (South axis). -The BRM operate at the level of hospitals, DRS and health zones and private structures located within their area of responsibility. -For the monitoring of maintenance activities, the Committee meets at least every six (6) months **What is the frequency of preventative and corrective maintenance that the country commits to (supported by partners)?** The frequency of preventive and curative maintenance to which the country is engaged is quarterly. The maintenance technicians will ensure every 03 months the systematic monitoring of the operation of refrigeration equipment in their respective areas of responsibility through the monitoring of temperatures.

How will the country monitor the completion of preventive and corrective maintenance?

- At the regional level, the regional health team will be responsible for monitoring maintenance activities during the monthly coordination meetings. The BRM will participate in this activity.
- At the peripheral level, the person responsible for the EPI will have to send monthly information about the functionality of the cold chain hardware of its CS.
- This information will be grouped together in a summary report prepared by the EPI focal Point, at the regional level, which shall be analysed at coordination meetings and will share its comments with all users. If the analysis of the reports reveals concerns related to the operation of the equipment, corrective actions accordingly.

Indicate the sources of funding for planned maintenance activities

Taking into account the financial difficulties facing the country, the first step is that Gavi is requested to support this component and at the same time a plea will be made to the other partners for further action.

How will the country dispose of obsolete and irreparable equipment replaced by new equipment?

With regard to the treatment of discarded equipment, the country will remove obsolete and irreparable equipment and replace it with new equipment as indicated in the maintenance plan, as follows:

- Equipment that can be recovered for re-use (refrigerators, vaccine-holders etc.) must be scrapped in accordance with the Directorate of the Epidemiological Monitoring and Immunisation Department guidelines of the Ministry of Economy and Finance (No. 1108/MEF/CAB/DGML/DM/SM 0910/2003 — refurbishment of used equipment and administrative equipment) and non-recoverable equipment will be destroyed in accordance with recommended standards and environmental standards.
- Components to be recycled are: metal parts, plastics, oils, fluids (CFCs, HCFCs, HFCs, SO2, expansion agents), foam and mercury.

This destruction must comply with the standards and procedures for the destruction of environmentally hazardous substances established by the country. If there are no such standards and procedures, those recommended by the WHO for the dismantling of each component will be adopted.

5) Preventive maintenance is regular maintenance of equipment in order to reduce the risk of failure to maintain optimum performance of the equipment

The central level through the Directorate of Immunization and Surveillance Service epidemiological will play the role of coordinator and will act at all levels of the sanitary pyramid in support of the regional Maintenance Offices (BRM) (03). (01) to Bafatá (East axis), (01) to Oio (North axis) and (01) Quinara (South axis). These BRMs operate at the hospital level, DRS and health zones and private structures located within their area of responsibility.

As the frequency of preventive and corrective maintenance to which the country is committed is at the central level, coordination will be ensured by a technical committee established by ministerial decree and composed of the EPI Directorate and the DSIES. This committee may be extended to any resource person deemed useful. For the monitoring of maintenance

	activities, the Committee meets at least every six (6) months and whenever necessary. At the regional level, the regional health team will be responsible for monitoring maintenance activities during the monthly coordination meetings. The BRM will participate in this activity. At the peripheral level, the person responsible for the EPI will have to send monthly information about the functionality of the cold chain hardware of its CS. This information will be grouped together in a summary report prepared by the EPI focal Point, at the regional level, which shall be analysed at coordination meetings and will share its comments with all users. If the analysis of the reports reveals concerns related to the operation of the equipment, corrective actions accordingly. As for maintenance technicians, they will ensure every 03 months the systematic monitoring of the operation of refrigeration equipment in their respective areas of responsibility. The state will make a plea to the partners including GAVI for the financing and implementation of the maintenance plan during the grant period to GAVI.
5. System design (all countries should answer) *If the country is applying for CCEOP, also indicate how system design considerations impacted the choice of CCE for which the CCEOP support is requested.*	**System Design:** The inventory of cold chain equipment was carried out in May 2017 followed by the elaboration of an equipment maintenance Plan. The update of this inventory in May 2018 highlighted that out of 174 pieces of equipment, only 110 operate correctly; 17 require repair, 36 are damaged and 11 are not installed. Of these, 99 comply with PIS standards and 66 only comply with PQS (Performance, Quality and Safety) standards. One (01) positive cold chamber (+ 2-+ 8 °c) is to be installed. **- Renovation** All CC facilities with adequate storage capacity, but which are more than 10 years old, and all CC facilities with inadequate storage capacity or not pre-qualified. **-Extension** All facilities without cold chain equipment. - **Expansion** All facilities requiring additional storage capacity. For the country, this criterion applies to the last distribution level and to the central level The entire country does not have access to an electrical network outside the SAB area. As a result, the Extended Programme of immunization is confronted with difficulties mainly related to multiple power failures. This explains the choice of cold equipment with solar energy With regard to management of biomedical waste due to the lack of functional incinerators at the regional level and the lack of incineration and waste collection and transportation mechanisms, it is worth noting that there is a World Bank project which provides for the acquisition and installation of incinerators. In order to address the poor performance of the supply chain, and in view of the introduction of new vaccines in the next 5 years (MenA and HPV), proposals to strengthen the supply chain Vaccine logistics are made below: ▪ Training health workers on effective vaccine management; ▪ Strengthen vaccine storage capacity at all levels; ▪ Strengthening the chain for the distribution of vaccines and other inputs through the implementation of the “Mininus San” project in all regions;

	▪ Ensure regular maintenance of cold chain equipment and other equipment at all levels; ▪ The development of a waste management plan for health districts will facilitate the correct disposal of potentially infectious waste. A portion of the HSS funds (US$ 167,917 or 20% of the total cost of the equipment subject to the CCEOP) will allow the acquisition of transportation equipment such as ice boxes, freeze indicators and the implementation of maintenance, renovation and EVM improvement plans.
Rationale (e.g. per EVM and other supporting documents, Audit, PCA findings, EPI review etc.)	The recent EVM evaluation carried out in 2014 showed that the score is significantly below the 80% recommended by the WHO[30]; this is on account of inadequate volume of the cold chain and weakness of the distribution chain. In addition, there is inadequate temperature monitoring. An inventory of cold chain equipment was carried out in 2017 followed by the development of an equipment maintenance plan. The update of this inventory in May 2018 highlighted that out of 174 pieces of equipment, only 110 operate correctly; 17 require repair, 36 are damaged and 11 are not installed. Of these, 99 comply with PIS standards and 66 only comply with PQS (Performance, Quality and Safety) standards. Two positive cold rooms (+2 - +8°C) are not yet installed. Currently, the entire country does not have access to an electrical network outside the SAB area. As a result, the Extended Programme of immunization is confronted with difficulties mainly related to multiple power failures. It has a generator that ensures continuity in case of a power cut and it can last for several hours. With regard to management of biomedical waste due to the lack of functional incinerators at the regional level and the lack of incineration and waste collection and transportation mechanisms, it is worth noting that there is a World Bank project which provides for the acquisition and installation of incinerators. In order to address this poor performance and with a view to introducing new vaccines in the next 5 years (MenA and HPV), the following solutions are proposed: ▪ training health workers on Effective Vaccine Management; ▪ Strengthening vaccine storage capacity at all levels; ▪ Regular maintenance of cold chain equipment and other equipment at all levels. ▪ The development of a waste management plan for health Centres/health regions will facilitate the correct disposal of infectious-risk waste; The installation of incinerators has been taken over by the World Bank. • Strengthening the chain for the distribution of vaccines and other inputs through the implementation of the “Mininus San” project; This pilot project, which began in 2017, targeted 3 health regions (Bafata, Cacheu and Gabu) was funding by MINSAP, WHO and UNICEF. The lack of financial resources did not allow the evaluation, but the monitoring reports on the implementation of the pilot project exist (Dec. 17, Jan 18 and Feb. 18). However, from the analysis of these reports, the need to strengthen the management of vaccine stocks, so as to better manage the risks associated with stockpiling vaccines, is evident. • An evaluation of this project during the first quarter in 2019 supported by an international TA will allow us to draw all our lessons. However, the development of the CCEOP has taken into account this project and its scaling through the implementation of activities such as: ➢ ensure the quarterly distribution of vaccines from the central level to regional warehouses via the Push system, thus allowing adequate supply throughout the year;

[30] 2014 EVM Report

- ensure a monthly distribution of vaccines from the regional level to the health zones via the Push system
- train EPI focal points, health officials and members of the EVM technical committee, at all levels of the supply chain, and implement a supportive supervision programme to ensure proper functioning of the EPI;
- proceed with the acquisition and installation of refrigerators throughout the country to meet the needs of storage and replacement of old refrigerators/those without adequate storage capacity. Develop a plan to monitor vaccine wastage;
- ensure the training of cold chain maintenance technicians
- ensure, through an insurance agency and at a reasonable cost, all programme property: vaccines and consumables, CC equipment and other buildings at all levels;
- A portion of the HSS funds (US$ 167,917 or 20% of the total cost of the equipment subject to the CCEOP) will allow the acquisition of transportation equipment such as ice boxes, freeze indicators and the implementation of maintenance, renovation and EVM improvement plans. The arrangements will be made by the MINSAP to facilitate the removal of equipment as soon as they enter the country
- Regular maintenance of cold chain equipment and other equipment at all levels; In view of the difficulties in mobilizing funds through the country, it was proposed to Gavi to take charge of the segment.
- The assessment of the GEV on available funding from Gavi will not be common 2018 and will be in the first quarter of 2019 and will be accompanied by an improvement Plan

The inventory of rolling logistics has highlighted different needs:

Vehicles/Boat :

Pour le central level:

- A need for 3 vehicles for supervision and monitoring of activities has been identified
- A need for a truck for required supplies
- For the island area, a need for an outboard boat identifies

DRS level:

- 2 supervision Vehicles for 2 DRS (OIO & Farim).

Motorcycles

From 2014 to date, UNICEF has provided DRS of 130 motorcycles and NGOs of 117 motorcycles to a total of 247 motorcycles for the implementation of immunisation and supervision activities.

According to the updated inventory, motorcycle requirements for priority regions are 23 motorcycles for the implementation of advanced strategies and supervision in the health areas of Category 1 & 2 regions, taking into account possible replacements in 3 to 4 years. In the meantime, an emphasis will be placed on the maintenance taken into account in the budget drawn up:

- ✓ The purchase of 22 spares kits for 2 kits per region
- ✓ Preparation and breakdown of logbook for the tracking of rolling stock

In the field of Logistic Management Information system, it must be said that Guinea-Bissau uses a combination of paper version and Excel format forms at the regional and health Centre level. At the central level DVDMT and the SMT are used for the collection, analysis and transmission of data and Excel format is used for the inventory of CC equipment. It is therefore necessary to improve the logistics Management Information System (SIGL) and the country, together with its partners, is working to adopt an interoperable and complementary electronic logistic Management

	Information System (ESIGL) to DHIS2, which is already in use in Guinea-Bissau. As the country has not yet adopted a complete ESIGL system, the ViVa platform is a less costly and readily available system for managing vaccine supply because it offers EPI teams an easy way to identify On-storage and under-storage situations and redistribute stocks to meet needs and reduce losses accordingly. With regard to the management of Bio-medical waste, a World Bank project will install the 2 incinerators in the eastern and southern regions of the country and acquire and install 3 others in the northern, eastern and southern regions of the country
Indicators to monitor progress toward this objective included in the Grant Performance Framework:	*See programming guide* **Replacement/rehabilitation of ECF in the equipped sites:** percentage of existing sites (equipped or not) with existing equipment not PQS (not working) and PQS equipment (obsolete and non-functional) which must be replaced by ILRs, SOD or long-term cooler equipment (includes sites with large equipment); **Expansion of ECF in the equipped sites:** percentage of existing sites needing to be equipped with additional equipment in order to cope with the introduction of new vaccines *and/or* serve a growing population; **Extension of ECF to new sites and existing sites without equipment:** percentage of new service delivery points (takes into account sites that offer a vaccination service or not and those without active equipment [Refrigerator) to equip with the equipment of the platform; **Maintenance of cold chain equipment:** Country-defined indicator to reflect proper maintenance of equipment; For example the percentage of establishments equipped with an operational cold chain as demonstrated by the remote control ; • **Off-freeze/non-freeze Ratio:** Proportion of cooler/off-gel vaccine holder vs. cooler/non-freeze vaccine holder in the country • **Submission of an annual inventory of cold chain equipment:** Develop a quarterly update mechanism (based on BRM reports – Maintenance team) - At the regional level, the regional health team will be responsible for monitoring maintenance activities during the monthly coordination meetings. The BRM will participate in this activity. - At the peripheral level, the person responsible for the EPI will have to send monthly information about the functionality of the cold chain hardware of its CS. •% of sanitary structures without stock shortage of vaccines (indicate the number of structures planned to be controlled for the base knowing that the country has 132 PPS) • % of healthcare facilities and regional warehouses equipped with refrigerators, cool boxes and modern vaccine carriers in accordance with WHO (PQS) standards under the CCEOP framework; •% of regions with one or more cold chain equipment replaced in the framework of the platform • % of renovated regional warehouses; •% regional and CS warehouses with continuous temperature monitoring system Log tag and Freeze tag • % of SPPs that have cold chain equipment that operates properly throughout the year (validated by supervision visits); • % of recommendations of the EVM evaluation that have been implemented; • % of HAs that have at least one healthcare staff member who is trained in EPI logistics tools.

TA needs for the coming year, and a description of how this is complementary to planned TA through the PEF	**Technical assistance needs**: Recruit international technical assistance for: • Evaluation of the Mininus San project • Support the implementation of the EVM Improvement Plan; • Conduct a study to monitor vaccine temperature at the storage and distribution chain level; • Develop a national policy for the management of bio-medical waste.	
Indicative budget with CCEOP and HSS support (see table 2.2):	**Years 1 to 2**	***US$ 890,800***
	Years 3 to 5	***US $1,151,823***
Objective 4:	**By 2022,[31] [32]90% of mothers and guardians of children under one year of age, including special populations, are aware of the importance of immunisation and attend immunisation services.**	
Timeframe:	*2018* to *2022*	
Priority population/geographic area or constraint(s) to coverage and/or equity to be addressed by the objective:	The set of interventions designed to promote increased demand for immunisation services will cover all health regions. The target populations are: - Parents and guardians of children aged 1 year or younger, families, religious and community leaders, healers; - Community health workers (CHWs) and health technician and NGO supervisors.	
Immunisation system bottleneck(s) to be targeted:	• Low confidence in immunisation services; • Low involvement of community representatives and civil society advocates in the planning, implementation, monitoring and empowerment of the health sector at all levels (local, regional and central); • Limited coverage and functionality of community platforms and facilities; • Poor sustainability of social mobilisation actions for routine immunisation and during media campaigns; • Insufficient qualified human resources for immunisation communication; • Absence of legislation for vaccination, • Lack of funding for the immunisation communication plan; • Lack of supervision, monitoring and evaluation of communication actions.	
Priority activities (approximately 5):	**1. Inform and influence institutions, civil society, individuals, families and opinion leaders to adopt behaviours to promote routine immunisation** • Develop advocacy at the highest level to make routine immunisation a national priority; • Implement the strategic communication plan for routine immunisation; • Strengthen the capacity of health workers and implementing partners: NGOs, media, healers, community-based organisations (CBOs), CHWs; • Train members of women's groups on awareness-raising and mobilisation for immunisation; • Produce and update communication media for immunisation (messages, leaflets, posters, banners, serial cartoons, DVDs, national immunisation schedule, EPI feedback newsletters, billboards, roll-up banners); • Train 06 EPI communication Unit and MINSAP technicians in communication strategies for immunisation • Create a focal communication point in 11 health regions, 118 HAs; • Create 55 community platforms on social mobilisation for immunisation, 2 members per platform (2 x 5x11). **2. Strengthen the participation of institutions, communities and social networks in influencing behaviours conducive to the immunisation of children under one year of age** • Carry out mapping of social and community institutions and the networks involved in immunisation communication;	

[31] [31] KAP Survey, UNICEF 2018

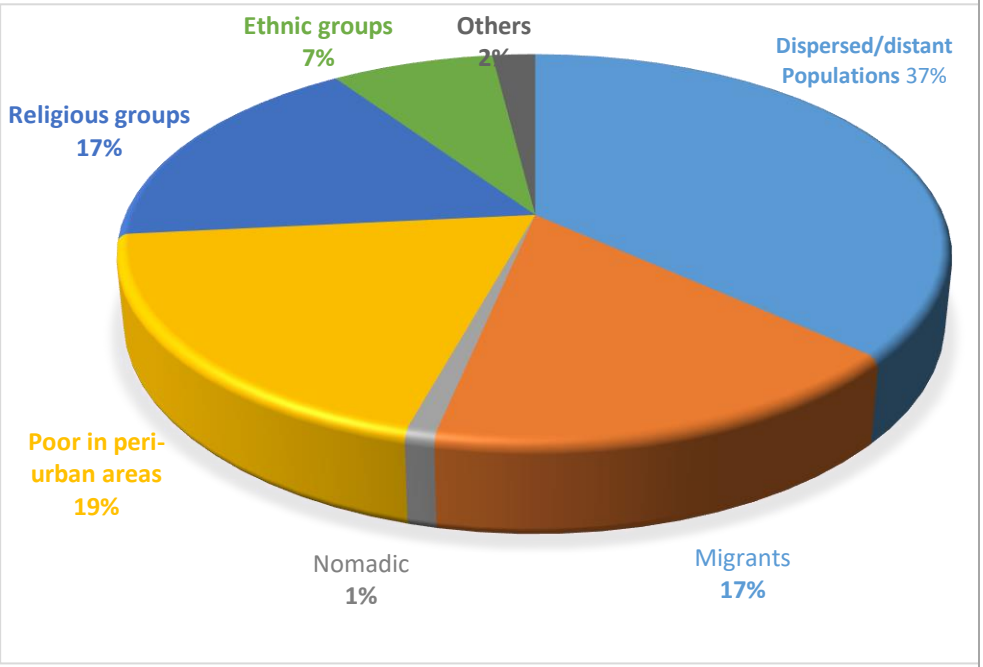
[32] 2018-2022 cMYP

	• Establish an integrated communication framework with other public institutions (justice, education and media); • Establish sectoral social mobilisation committees for immunisation; • Establish strategic partnerships with various civil society organisation networks, mobile phone networks (MTN and ORANGE), media (radios), CHW, healers (PROMETRA) and women's associations to promote immunisation; • Organise 46 awareness-raising meetings (11 regions and 114 health areas) and religious faiths, healers (traditional medicine) to participate in immunisation (2x/year); • Support CBO and Female Immunisation Champion platforms to organise community mobilisation and awareness-raising activities in the 11 health regions and 118 HAs once a year. **3. Develop sustainable Integrated Communication Plan actions to change behaviours and attitudes to increase demand for immunisation services** • Strengthen the skills of CHW and NGO facilitators with PIC in the EPI content, including essential family practices (EFP); • Train health professionals to appropriate maternal immunisation content in prenatal and postnatal consultations and outreach strategies; • Train EPI communication officers in the planning and management of immunisation communication; • Train 91 journalists and radio hosts (community, private and public) (2 people for 33 radios); • Produce radio spots in 10 national languages (Creole, Balanta, Bijagós, Fula, Felupe, Manjak, Manding, Mankanya, Nalu, Papel); • Produce TV spots in 10 national languages (Creole, Balanta, Bijagós, Fula, Felupe, Manjak, Manding, Mankanya, Nalu, Papel); • Produce and disseminate a documentary film on the benefits of immunisation and diseases targeting the EPI among the general public; • Develop and disseminate specific messages for the introduction of new vaccines (10 national languages, including Creole) on radio stations (community, private and public); • Regularly disseminate messages (spots, sketches and programmes) on routine immunisation on radio stations (community, private and public); • Use theatre, actors and traditional artists to promote routine immunisation services and campaigns. **4. Involve national and local leaders in the implementation of integrated communication activities for routine immunisation** • Advocate with members of health management committees for their participation in routine immunisation campaigns and activities; • Organise annual advocacy meetings (by level) with the paediatric association, immunised mothers, the media, mobile telephony and the private sector for their involvement in immunisation; • Organise sessions involving leaders, celebrities, goodwill ambassadors, the First Lady, athletes, artists, civic leaders, preachers etc. to commit to the promotion of immunisation. **5. Strengthen coordination, monitoring and evaluation of the implementation of immunisation communication strategies** • Organise a national workshop on the development of a multimedia plan and revise immunisation communication modules; • Strengthen coordination, planning and monitoring capacities of the communication strategy; • Identify and strengthen the capacity of a focal point for immunisation communication in each health region (11 regions); • Identify and create immunisation mothers' committees at all levels (local, regional and central); • Establish a contract with 33 community radios, 5 private radios and 1 national radio for the dissemination of messages in favour of routine immunisation;

	• Establish a contract with 2 television channels (TGB and RTPA) for the dissemination of messages in favour of systematic immunisation; • Regularly share information on good immunisation practices with all EPI partners; • Hold subcommittee coordination meetings on social mobilisation for immunisation to evaluate the effectiveness of the communication strategies adopted; • Regularly organise a KAP study on immunisation (2020, 2022); • Regularly carry out (2x/year) activities to monitor and evaluate immunisation communication actions; • Produce and regularly disseminate reports on immunisation communication activities.
Rationale:	The percentage of children who are fully immunised before 12 months[33] is the specific indicator of the performance of an expanded immunisation programme. According to the 2017 immunisation coverage survey, 16.5% of children aged 12-23 months (more than 10,000 children) are not fully immunised. The reasons for non-vaccination of these children are mainly the lack of confidence; Fear of side effects (vaccines making a healthy child sick), ignorance. The situation described above could be explained by: ▪ The low involvement of community actors in mobilising populations in support of immunisation; ▪ Insufficient coordination of communication activities; ▪ The low demand for immunisation services is also due to persistent rumours, and some erroneous beliefs. The behavioural study also recognises the importance of improving continuity of demand for services by improving delivery/delivery of health services, by planning and applying appropriate communication techniques. For health professionals it is important to understand the needs and perceptions of communities in order to provide appropriate information on the prevention of vaccine-preventable diseases. The immunisation and epidemiological monitoring service (SIVE) has developed a national communication strategy for routine immunisation with the participation of all parties involved, with the support of the following partners: the WHO, UNICEF and Gavi. In the context of the national Dialogue for Immunisation, which brought together experts from the Ministry of Health, civil society and health partners, including WHO, UNICEF and GAVI was recognized that communication and social mobilization is one of the fundamental pillars for routine immunisation and campaigns to support the implementation of the communication strategy are essential to the success of the EPI. Therefore, the new GAVI grant for immunization and strengthening the health System (SSR) will overcome these difficulties a special emphasis will be placed on the special populations which are essentially populations in remote and disadvantaged areas in the planning and implementation of immunisation activities. These populations were identified through an equity-in-immunization analysis conducted in the 11 health regions of the country in two phases: in 4 regions in 2017 and 7 other regions in 2018. Moreover, the report of the external review of EPI 2017 revealed that the main socio-cultural reasons associated with the non-vaccination of children are: ignorance, belief and inaccessibility of landlocked areas. The most vulnerable groups in relation to access to immunisation are landlocked villages in the difficult geographic areas of access (especially in islands, mountains, rivers, swamp regions). The equity analysis conducted in 2017 concerned the 4 health regions of Gabu, Cacheu, Tombali and SAB. A total of 269,482 persons were counted in the so-called special communities of these 4 regions (see Figures 5.6 and 7 below).

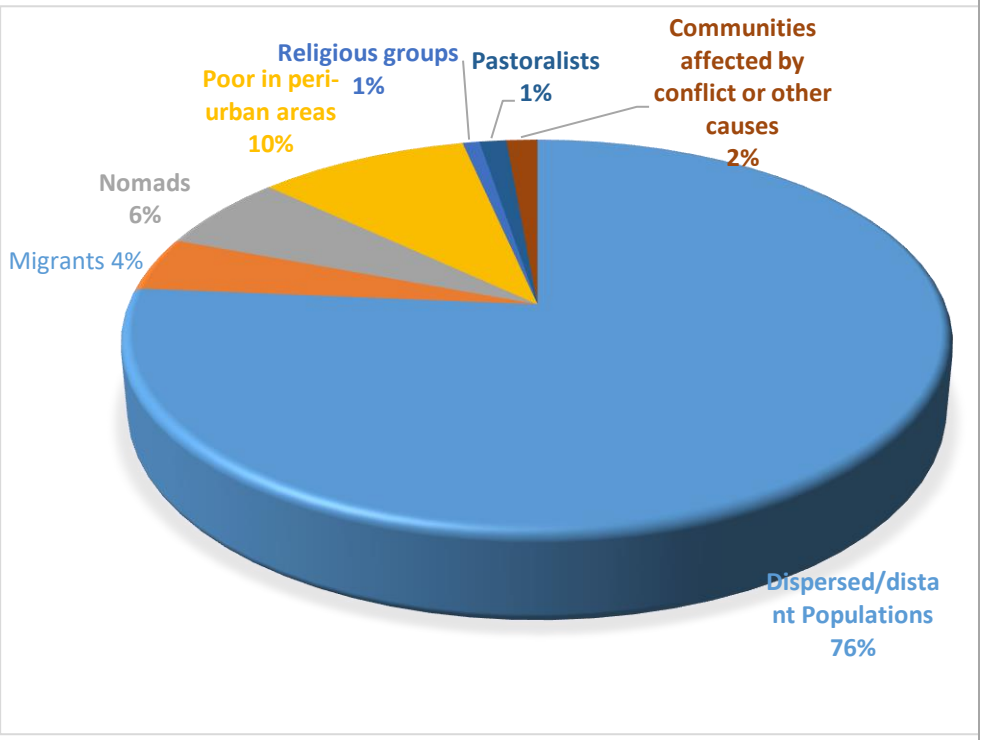
[33] 2017 Immunisation Coverage Survey Report

Figure 6: Special Population or difficult access (SAB, Gabu, Tombali and Cacheu) – survey 2017



The second phase of the equity analysis in immunization conducted in August-September 2018 concerned the other 7 health regions (Bolama, Bijagos, Quinara, Biombo, Oio and Farim

Figure 7: Special Population or difficult access (Oio, Farim, Biombo, Bafata, Bolama, Bijagos and Quinara) – survey 2018



According to the same report, of the 37157 persons identified as having difficult access to immunization services in the 7 socio-health regions, 28371 (76.4%) are persons living in remote and remote areas of the health Centre, Mainly in the region of Oio with 16009, Quinara with 4867 and Defata 4730. The poor who live

in peri-urban areas, especially in the Oio region with 3,528 people, are the second largest group of hard-to-reach communities. Nomadic communities, comprised mainly of pastoralists living in the Oio and Bafata regions, account for 2640 people. It should be noted that the difficult access populations in the Oio region are that they inhabit small areas surrounded by rice fields and that they are only accessible on foot during the rainy season.

A summary of the special populations in Guinea-Bissau is presented in Figure 7 below

Figure 8: Special Populations or difficult access in Guinea-Bissau (equity analysis 2017 and 2018)

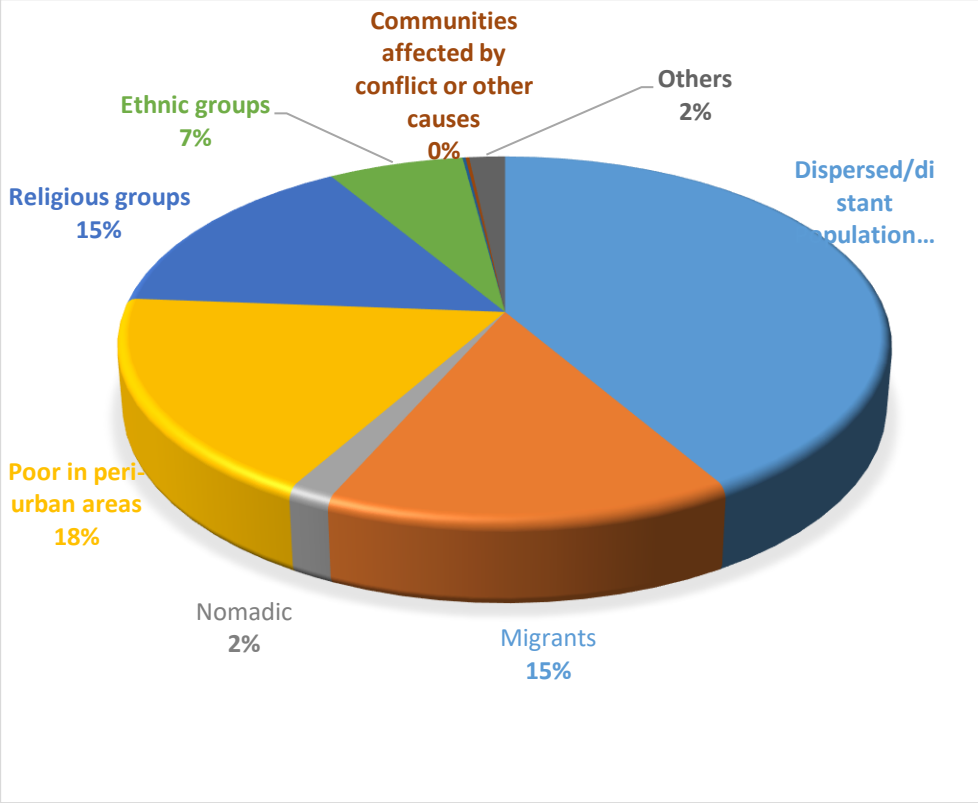


Table 13 : Summary of special populations in Guinea-Bissau

Groups/Communities	Fairness Analysis-2017	Fairness Analysis-2018	Total
Dispersed/Remote Populations	99003	28371	127374
Migrants	44636	1633	46269
Nomadic	2682	2305	4987
Poor in peri-urban areas	51506	3528	55034
Religious Groups	46255	285	46540
Ethnic Groups	20115		20115
Other	5307		5307
Total	**269504**	**36122**	**305626**

	The main targets for the promotion of demand are the following: • Parents and guardians of children aged 0-23 months, families, community and religious leaders, healers; • Community health workers (CHW) and NGO supervisors and health technicians. The innovative strategies to implement are: • Setting up and supporting the functioning of the sectoral social mobilization committees • Train 5 community platforms per region each year for immunisation mobilization due to 2 members per platform • Support platforms to organize community outreach and advocacy activities • To carry out community forums each semester with representatives of the authorities, women, youth to discuss the results of each CS and bottlenecks • Coordination, Supervision and monitoring To date, CSOs do not receive specific financial support. As part of the implementation of the ACD approach, the CHW and CSOs will be involved in the micro-planning and implementation of the activities. An international TA is requested to support the strengthening of civil society's capacity for routine immunization, including networking.
Sustainability considerations:	To ensure the sustainability of communication strategies for routine immunisation and campaigns, the following is necessary: • Adoption of legislation in favour of immunisation and contribution to the funding of the communication plan for routine immunisation and government campaigns; • Support and assistance for ongoing communication campaigns for immunisation by NGOs, community organisations, community leaders, private companies, the media and public figures; • Conduct a KAP survey in 2022 to assess the implementation and impact of the communication and social mobilization strategy for routine and campaign immunization • Development of training plans and modules for CHW on CIP competencies and the use of functional communication media. • Development of plans and mechanisms for monitoring and evaluating community performance in relation to routine vaccination and functional campaigns
Indicators to monitor progress toward this objective included in the Grant Performance Framework:	**Process indicators**: ➢ Number of partner structures implementing a communication strategy for routine immunisation and functional campaigns and participating in better coordination, monitoring and evaluation; ➢ Number of KAP studies on immunisation carried out; ➢ Number of immunisation communication activity reports produced and disseminated; ➢ Number of subcommittee coordination meetings on social mobilisation; ➢ Number of community action plans developed and implemented through community platforms. **Result indicators** ➢ % of beneficiaries who use health services in the country; ➢ % of mothers and fathers who can say where, when and how many times it is necessary to take the child for immunisation; ➢ Number of operational community platforms in favour of immunisation; ➢ Percentage of parents/guardians of children of the target population who accept and request immunisation.
TA needs for the coming year, and a description of how this is complementary to	**Technical assistance needs**: National and international technical assistance is required for: • Ensure the implementation of the communication strategy for immunisation and the documentation of best practices. • Support the EPI leadership in implementing its PIC

planned TA through the PEF	• Conduct a survey CAP en 2022	
Indicative HSS budget:	**Years 1 to 2**	***US$ 227,571***
	Years 3 to 5	***US$ 226,588***

Objective 5:	Reduce the gap between administrative data and immunisation coverage survey data for fully immunised children by 15% (80%-65%) [34]in 2017 to 5% in 2022 in all regions.
Timeframe:	*2018 to 2022*
Priority population/geographic area or constraint(s) to coverage and/or equity to be addressed by the objective:	This objective covers the 11 health regions.
Immunisation system bottleneck(s) to be targeted:	- Lack of survey on data quality; - Internet connection problem at the level of the departmental office of health, slowing down data entry and reporting on Demographic Health Surveys (DHSI2); - A number of EPI indicators are not yet integrated into the DHIS2; - Immunisation data in the lucrative private sector are not reported; - Tools not revised or harmonised; - Shortage of EPI management tools; - Insufficient computer tools; - Insufficient qualified human resources; - Non-management of the denominator; - Irregular data analysis; - Lack of feedback at all levels.
Priority activities (approximately 5):	**1) Support activities involving the collection, analysis, transmission, dissemination, archiving and self-evaluation of data quality (DQS) and quality control of health data at all levels of the healthcare pyramid and the District Vaccine Data Management Tool (DVD-MT)** • Organise training, integrated supervision, decentralised monitoring and evaluation activities; • Revise EPI data management tools (take into account new introductions); • Train EPI health workers on the use of revised data management tools; • Participate in regional coordination meetings; • Hire a TA to develop data auditing tools and procedures (SOPs) for validating data and monitor their implementation; • Organise a training workshop for the regional and HA level on immunisation data analysis; • Systematically analyse data from the epidemiological monitoring/immunisation report and produce and disseminate information products; • Equip all 11 focal points with data management tools and computer hardware;

[34] 2017 Immunisation Coverage Survey Report

	• Train 22 data managers of the 11 health regions using the DVD-MT and DHIS2 and other revised management tools; • Organise quarterly focal point workshops for the harmonisation of immunisation and monitoring data. **2) Strengthen/support monitoring of vaccine-preventable diseases** • Acquire sample collection kits and laboratory reagents and ensure means of transport for confirmation; • Strengthen active research, appropriate investigation and monitoring of vaccine-preventable diseases, including community-based Surveillance (SBC); • Integrate validation of data on monitoring of vaccine-preventable diseases into quarterly monitoring meetings; • Establish sentinel sites for monitoring vaccine-preventable diseases in the 4 priority regions; • Train the EPI central team and the 11 regional focal points on monitoring in the field of field epidemiology taught by INASA. **3) Plan and implement the calendar of quarterly data monitoring meetings with the 11 PVA data Managers/focal Points and epidemiological surveillance;** • Organise the quarterly meetings of the national monitoring/Evaluation team of the EPI; **4) Provide half-yearly supportive supervision from the central level to the country's 11 health regions** • Ensure the quality of the data (it must be correct, complete, coherent, consistent and timely) and ensure proper retention of the EPI reports in the supportive supervision session; • Organise a half-yearly evaluation of EPI activities. **5) Studies, operational research and surveys;** • Conduct a data quality survey; • Develop and implement the data quality improvement plan; Conduct a data quality survey; • Train the regional health team and Health Area Manager in the field of LQAS and DQS surveys; • Carry out post-campaign coverage surveys.
Rationale:	High-quality data produced in real time is essential for programme planning and decision-making. Currently, the quality of the data provided by the peripheral level does not make it possible to meet this requirement. The poor quality of immunisation data obtained according to the 2017 vaccination coverage survey would be due to the failure to respect the interval required for the administration of each antigen. For example, the Polio0 vaccine should be administered between birth and 14 days old, but its administration is still longer than 1 year, like other antigens. The antigens to be administered in the 6th, 10th, 14th and 9th month are administered prior to the period specified in the national immunisation guidelines and after their first birthday. There is therefore a data quality problem on the one hand, and the technical quality of the immunisation service providers is called into question on the other hand. All health regions administered the Anti-Measles Vaccine before 9 months and continued administration after the end of their first anniversary, as well as the Community Survey on effective antigen coverage. To date, efforts are being made to ensure that data management, including tools, take into consideration the introduction of new vaccines. In order to improve data management at all levels, it is necessary to:

	▪ Equip facilities with data management tools to harmonise data processing; ▪ Train staff to use the data collection and analysis tool using the IT tool ▪ Set up and monitor the use of integrated data management software (DHIS2, DVD-MT etc.) to facilitate the collection, analysis, interpretation, quality control and dissemination of data according to national guidelines; ▪ Provide integrated supportive supervision taking into account immunisation to strengthen the skills of data management staff; ▪ Support decentralised half-yearly monitoring to make it possible to verify the availability and quality of the data produced; ▪ Carry out surveys/studies will provide a better understanding of the causes of bottlenecks impeding the use of health services including immunisation by beneficiaries, and to make it possible to better define high-impact strategic interventions that contribute to reducing the morbidity and mortality of children and mothers. Support for the effective implementation of the above-mentioned activities will undoubtedly contribute to the achievement of the objective set, owing to their technical feasibility and the financial support provided by several partners.
Sustainability considerations:	In order to ensure that interventions to improve the management of EPI data are sustainable, the following actions need to be established: • Adoption of legislation for immunization and contribution to the funding of cMYP 2018-2022 of the EPI by the government through the national budget; • Support and assistance for ongoing actions by health sector development partners (skilled immunisation staff integrated with institutions that produce and use data such as INE, INASA, Bandim Health Project, CARITAS, TIC companies “MTN” and “ORANGE”); • Conduct data quality studies to evaluate the implementation and impact of immunisation strategies; • Implementation of plans and mechanisms for monitoring and evaluating performance in the field of data management.
Indicators to monitor progress toward this objective included in the Grant Performance Framework:	• Rates of preparation and completion (completeness/timeliness) of monthly EPI reports; • Number of effective data audits; • Proportion of differences between administrative Penta 3 versus ICS Penta 3; • Number of data validation meetings held; • Proportion of health workers trained in data management • Non-polio PFA rate.
TA needs for the coming year, and a description of how this is complementary to planned TA through the PEF	**TECHNICAL ASSISTANCE NEEDS** National and international technical assistance is required for: • Development of data quality evaluation tools and monitoring of their implementation; • Carrying out of the data quality survey • Conduct of the post-vaccination survey . Data quality assurance at the operational level; . Quarterly data analysis according to equity; . Decentralisation of the DHIS-2; . Management of the Gavi portal; . Link between the DHIS-2.
Indicative HSS budget:	**Years 1 to 2** — ***US$ 339,570*** **Years 3 to 5** — ***US$ 143,187***

ANNEXES

LIST OF ABBREVIATIONS

ACD/ACE	Reach each District/community/child
NPA	National People's Assembly
HA	Health Area
CHW	Community Health Worker
KAP	Knowledge, Attitudes, Practices
ICC	Inter-agency Coordination Committee
HSCC	Healthcare Sector Coordination Committee
CC	Cold Chain
DQS	Data Quality Services
PAC	Communication Inter personal
PC	Prenatal Consultation
HC	Healthcare Centre
DGASS	Health System Administration Branch
DHIS2	District Health Information Software version 2
DVD-MT:	District Vaccine Data Management Tool
ENV	Unvaccinated children
ICS	Immunisation Coverage Survey
ERS	Regional Health Team
RBF	Results-Based Financing
Gavi	Global Alliance for Vaccines and Immunisation
GAS	Supply and Inventory management
EVM	Effective Vaccine Management
HPV	Human Papilloma Virus
INASA	National Institute of Public Health
INE	National Institute of Statistics
PSR	Programme Support Rationale
LQAS	Quality Insurance Survey
AEFI	Adverse Events Following Immunisation

MenA	Meningococcal conjugate A vaccine
MEF	Ministry of Economy and Finance
MINSAP	Ministry of Public Health
ODI	Overseas Development Institute
OGE	National Budget
OPV	Oral Polio Vaccine
OAP	Operational Action Plan
PCV13	Anti-pneumococcal vaccine 13
PiMi	Integrated Mother and Child Health Programme
PIC	Integrated communication plan
MPA	Minimum Package of Activities
PNDS	National Health Plan
PNDRHS	National Human Resources Development Plan
CCEOP	Cold Chain Equipment Optimisation Platform
cMYP	Comprehensive Multi-Year Plan
PSB	Santé de Bandim project
RAS	Health Area Manager
HR	Human Resources
HSS	Health System Strengthening
SAB	Self-locking syringe
BAS	Bissau Autonomous Sector
TIC	National Health Education and Information Service
UNICEF	United Nations Children's Fund
IPV	Inactivated Polio Vaccine

Table 14: Disadvantaged/difficult to access communities in the region of Tombali _

Groups/Communities	Number of people *	Characteristics of these groups/communities	Places where these groups/communities are located
Migrants	1548	Fishermen from Guinea Conakry Fulas from Guinea Conakry Emigrants of Guinea Conakry fishermen living in the campsites, Fulas of Conakry, Timine of Sara-Leoa Naneas from Conakry Ethnic fishermen from Guinea Conakry Fisherman from Guinea Conakry	Catabam Islands in Biana and Catabam Ntunda, Mampata Forea, Nghadoro, Afia Bunho, Sintcham Serifo Gamela Ilheu de Colbert Pepel, Calima Sintchur Toma, Guiledje, Bendugo e Saleo Cadico/Acampamento Catessy e canamine
Nomadic	600	Population of Guinea-Conakry border region during the cashew campaign season	Afia, Cuntabane, Candambel, Mampata Forea, Mampata-Circo, Sontcham Aliu
Dispersed/Remote Populations	12979	Guinean Population living in the Health Zones of the Komo Islands, Guinean peasants Difficult access areas for 30 km Population of Guinean farmers living scattered and separated in the Catio health zone (40 km) Nalus, Balantas (living in the difficult access to the centre), Balantas (population living on the island without means of transport) Fishermen Guinean Population residing on the island of Melo Balantas at more than 35 km from the HC	Uedequeia, Fatima, Catabam, Catungo, Camtom Unal, Ngaduro e Puelcana Botche Bissa, Flac Nghol, Catchaque e Cabulom Gamela, Cafara, Cascunda Tambacumba, Ilheu of Colbert Pepel Cadico/Acampamento Island of Melo Botchi Djati, Botchi Cul, Botchi Nbunghe, Tchintchi Dari, Botchi Sansa
Total	15127		

Table 15: Disadvantaged communities/difficult access in the Gabu region

Groups/Communities	Number of people *	Characteristics of these groups/communities	Places where these groups/communities are located
Poor in peri-urban and urban areas	20562	Population without roads and communication network 75% are sellers; Peasants.	Em quase Toda a área sanitária de Beli; Bairros da Cidade de Gabú; Cercado Pelos Rios Dandula, Dalabá E Tabadora; Sta Tabanca na. Mamudo e Bairro Nema.
Religious Groups	5002	They are individuals who wear the veil and hide children (negligible); Gabú) the majority are Muslim; an insignificant Islamic Group.	Tabanca de Borro, Lindi Hafia, Cobolo; nos arredores de quase todas tabancas; nos Bairros de Leibala, Nema 2 e Engenharia; Capebonde e Famiredje
Migrants	844	Peasants who move in rainy weather in search of fertile land;	Wali Nhanta Faran, Buba, Capedje, M. Bussura, Madina Djarga, Parmanguel; Quewedje, Colebe, Senta-Sare
Nomadic	2013	Insignificant Group of Dolls from Guinea Conakry are herders of cattle; Farmers practise subsistence farming; Peasants	Vivem nas Matas (lalas); Cancodi, Doniora, Sta. M. Barros E. Farina, Candamani, Cancodi Saed, Cumuda; Quewedje, Colebe, Famiradje; Sta. Cuia, do, Hanin Cantentem; Vivem em Sta. Canhe mas deslocam periodicamente para as zonas de Bafatá;

Dispersed/Remote Populations	59504	Farmers and peasants in the rainy season;) Population very far from the centre (vast majority)-subsistence agriculture; Population away from the health centre Tillage (Mpampam); Cutting of communication routes in the rainy season; Cattle herders; Tribe of Mandinga farmers, horticulturists; Proximity to the area of Gabú; Periodically move to the other bank of the Tchetche River.	Ore-Bode, Ore-mound, Dinga Bantaghe e Copa; Toda a área sanitária de Beli; Sta. Djote; Cancoli Binafa, Dinhor, Wassado, Ierosali, Cancube; Cabuca, Cubeba, Nhalem e Balaquebo; Codeça, Cubecunda, Afia Djalo, Sta. Ibil e Magar Bentem; Boe Caium; Afia e Madina Boe; Zonas do Rio Cabuca; Zonaes Humidas; Sta. Suquel, Madina Mamasaliu, Sta. Dadi, Aliu George, Cumbenque; Madina Mussandim, Salquenhe; Djoel, Madina Bocar, Cudum e Yero Fatima; Nhapo, Sta. Pate, Cupuda, Iero Fitzgerald, Samba Djalo, Sta Aladje Bubacar, Idael; Salman; Sancaba, Teghor, Madina Aladje, Baco Madina, Sintchur Cada, Sta. Dembur, Cocare, Cataba Alfa, Sta Sabu, Daifa Badjeba.
Total	87895		

Table16: Disadvantaged communities/difficult access in the region of OIO

Groups/Communities	Number of people *	Characteristics of these groups/communities	Places where these groups/communities are located
	Number of People *	Characteristics of these groups/communities	Lugares/localizações wave se encontram estes grupos/comunidades
Poor in peri-urban and urban areas	3528	People who do not have the financial means to obtain the vaccine	Belel-Oio, Mandjica, samba Culo, Madina Djendo, Ionfarim, Sintcham Iaia, Ponta Djabi, Bulazinho
Migrants	136	Travelers looking for a job	Npaba Mansaba, Ponta Nova e Cantchungozinho Candjadja, Fajonquito, Sansanbato, Canico, Cantaco, Bantassu, Nhani, Bissadjal e Tancrual.
Nomadic	110	Cattle breeder Shepherds living on the shores of lakes	Nas Lalas Bolanhas de Lamoi ,Bantandjam, Bironque e Manbonco Ndjoboia
Dispersed/Remote Populations	16009	Rivers and lakes Farmers The rainy season hinders the advanced strategy	Nsunte, Tama, Berra, Bissunaga e Naga de Baixo Brufa, Libar, Cuntuba, Bitcha, Iador e Farol Tchale, Nquida, Quisanguee Uengue Outra Banda de Agri-Bissau,bumal,e Maxina Cussentche,Binif,Falam,Olom,Suarecunda,Darssalam,Nhimbe, Nghanhe,Tchalana 3 e Polibaque Nghantcha,Caie,Nrua,Udi Nghasson,Bissa, Ponta Wna, Ponta Arut,Ponta Domingos sambu e Culicunda
	19783		

Table 17: Disadvantaged communities/difficult access in the region of SAB

Groups/Communities	Number of people *	Characteristics of these groups/communities	Places where these groups/communities are located
Poor in peri-urban and urban areas	29801	Peasants, coal sellers, fishermen; Peasant and fisherman Population Street vendors	Djolo, São Paulo e Plack 1; Porto de canoa, Bandim zona 1; Cuntum Madina; Cupol; Quelelé - Zona 10
Religious Groups	41184	Muslims and Catholics; Senegalese, Guinean and Nigerian communities of Conakry; Population of the ethnic group Nania; Ababos; Less than 5 km	Mesquita; Bandim1- zona 7; Zona de Madina; Hafia e Cruzamento de Guimetal; Zona 6
Migrants	42140	Traders; Migrants from Guinea-Conakry; peasants and vendors; Community of Guinea-Conakry; Fulas of Guinea Conakry Population of Conakry Guinean ethnic Fula; Commercial mothers; Population living in the barracks.	Zona de Cundoc; Arredores de PIME; Em toda área sanitária; Belém e Mindará; Zona de bolanha e Cuntum Madina; Mpantcha de Baixo e Lala Quema; Committee for Guimetal; Zona 9, 10 e 11;
Ethnic Groups	15147	Peasants and fishermen; Fulas, Mandingo, Manjacos, Calantas; Fulas of Guinea-Conakry; Population of the ethnic group Nania	Cunhut; Em toda área sanitária; Bandim 2- zona 2; Cuntum Madina; Hafia e Cruzamento de Guimetal; Zona 3
Nomadic	0	Neighbouring populations vaccinated and who subsequently do not continue in this HC (AS)	Míssira, Varela, Bandim e Cuntum;
Dispersed/Remote Populations	25278	Rural Population whose mothers are children; Papers, Fulas, Mandingo, Manjacos, Delantas; Population that has to cross the river	Ndame Teté e Ndame Lerut; Djolo, São Paulo e Plack 1; Ilhéu do Rei;
Communities/areas affected by conflict or other causes	0		

Other (please specify): Population with accessibility issues; Education	5307	Population with no level of education and literacy	Bissack; Achada, Varela, Presidência, Gã Coté e Chão de Papel
Total	158857		

Map of categorisation and selection of priority health regions in Guinea-Bissau under the HSS2/EPI/Gavi framework