Joint Appraisal Update Report
October 2016

Country	Djibouti
Reporting period	*January – December 2015*
Fiscal period	*January – December*
If the country reporting period deviates from the fiscal period, please provide a short explanation	*N/A*
Comprehensive Multi Year Plan (cMYP) duration	*2011-2015; 2016-2020 cMYP is being finalized*
National Health Strategic Plan (NHSP) duration	*Plan de Développement Sanitaire: 2013-2017*

1. SUMMARY OF RENEWAL REQUESTS

Programme (NVS)	Recommendation	Period	Target	Indicative amount paid by Country	Indicative amount paid by Gavi
PCV	*Extension*	*2017*	*82,600 doses*	*US$ 31,500*	*US$ 282,000*
IPV	*Extension*	*2017*	*TBC*	*US$ 0*	*US$ TBD*
Penta (change in presentation from 2 doses to 10 doses)	*Extension*	*2017*	*132,000 doses*	*US$ 18,500*	*US$ 141,500*
Rota	*Extension*	*2017*	*30,000 doses*	*US$ 7,500*	*US$ 60,000*
HSS	*Renewal*	*2017*	*N/A*	*N/A*	*N/A (US$ 680,000 already approved)*

Indicate interest to introduce new vaccines with Gavi support	Programme	Expected application year	Expected introduction year
	MR	*2017 (TBC)*	*2018*
	HPV	*2018 (TBC)*	*2019*

2. COUNTRY CONTEXT

Key changes and events since the last Joint Appraisal (conducted in September 2015):

- Polio (under 5) and measles (9 months and 15 years) campaigns – spring and fall 2015
- Start of HSS grant implementation – Q4 2015
- Fulfilment of 2015 co-financing obligations – December 2015
- EPI review – March 2016
- Presidential elections – April 2016
- Introduction of IPV vaccine and tOPV-bOPV switch - April 2016
- Appointment of the new Minister of Health – May 2016
- cMYP 2016-2020 development – May-June 2016; programmatic and costing parts finalized, document undergoing validation by the MoH
- Appointment of the new EPI Manager – September 2016

Urgent pending issues:

- HSS Year 1 reporting and Year 2 renewal to be submitted in the Gavi Country Portal
- cMYP 2016-2020 to be reviewed and validated by the Government
- 2016 Co-financing amounts to be transferred to UNICEF Supply Division
- CCEOP application to be revised in view of its submission in January 2017
- Urgent procurement of cold chain equipment and finalizing arrangements to ensure reparations and maintenance of existing cold chain

- Reprogramming or reallocation of unspent IPV and Rota vaccine introduction grants.

Key country data (2016):

- 2015 GNI – estimated to be US$ 1,025 or less (reported on 1 July 2016). Last World Bank GNI estimates date from 2005 (US$ 1,030). No definitive GNI figure has been provided for Djibouti since 2005.
- Transition status – initial self-financing (starting 2017). The country was in preparatory transition through 2016.
- Eligibility status: eligible to apply for all types of Gavi support (new vaccines, HSS upon expiration of current HSS grant, CCEOP).
- Challenges with respect to coverage and equity – lower coverage and limited access to routine immunization in the regions, challenges with reaching nomade and migrant populations.
- Continued procurement of Gavi and routine vaccines through UNICEF Supply Division.
- Routine vaccines are fully paid for by UNICEF.

Key recommendations for 2017 based on JA Update discussions and review of country performance:

1. Address urgent pending issues related to Gavi support to Djibouti (validation of the cMYP, preparation and validation of HSS Year 2 workplan and budget and disbursement request, acceleration or reprogramming of remaining IPV introduction activities);
2. Urgently address the issue of declining vaccine coverage;
3. Improve cold chain capacity at all levels through replacement of non-functional equipment, establishment of functional maintenance arrangements, and harmonized efforts with other health programs, projects and partners and CCEOP application;
4. Improve immunisation services outside of Djibouti ville to ensure adequate access to and quality of services at the peripheral levels, including cross-border regions and among nomadic populations;
5. Improve data quality, collection, reporting and analysis at all levels;
6. Continue strengthening political and financial commitment of the government of Djibouti to immunization efforts;
7. Continue strengthening the managerial and operational capacity of the EPI Program and enhance collaboration and exchange of information among various actors in the field of immunization, including government agencies and services and development partners;
8. Enhance and expand vaccine management, disease surveillance and supportive supervision.
9. Finalize implementation of recommendations from 2014 EVM assessment, 2015 Joint Appraisal and 2016 EPI Review.

3. GRANT PERFORMANCE AND CHALLENGES

3.1. New and underused vaccine (NVS) support

3.1.1. Grant performance, lessons and challenges

Programmatic performance:

Based on the reported coverage data, Djibouti's EPI program shows a relatively strong performance in the WHO EMRO/UNICEF MENARO region, with reported vaccine coverage superior to that of most other Gavi-supported EMRO countries with the exception of Sudan. Yet, the country's immunisation performance lags behind its neighboring countries (Eritrea and Ethiopia), and coverage for the majority of traditional and new vaccines falls short of the established targets (see Tables 1 and 2). Administrative coverage data for 2015 shows a decline in coverage for most vaccines. Official JRF data, however, indicates an increase in coverage for Gavi-supported vaccines (penta 3 and PCV3). This discrepancy has been attributed to data quality issues.

Even though the official JRF data indicates that vaccine coverage increased for many of the vaccines in the national immunisation calendar compared to 2014, only a few of them reached 90% coverage (BCG, hepatitis B birth dose, DTP1 and PCV1). Coverage of vaccines received at birth has declined by several percentage points compared to 2014. The key reasons behind suboptimal vaccine coverage and its gradual decline, according to the EPI Program, are inadequate cold chain, serious data quality issues, problems with the quality of vaccination services, and challenges in reaching target populations in the peripheral areas.

In 2015, DTP3 coverage in 5 out of 6 districts in the country was between 50% and 79%, and only Djibouti ville reported DTP3 coverage above 90%. Situation with measles coverage also remains challenging - none of the

districts reached above 90% coverage with MCV vaccine, and 5 of the 6 districts had coverage below 80%. Unequal coverage and access to measles vaccine and lack of active measles surveillance remain an important risk factor for measles outbreaks. Until 2016, the country did not have reporting systems in place to track administration of MCV2, and only MCV1 coverage has been reported (the coverage of this vaccine went down from 78% in 2014 to 70% in 2015). MCV2 coverage appearing in the official JRF estimates is a result of The new reporting tools developed and distributed in 2016 should allow for reporting of the last dose of MCV vaccine starting in 2016.

The reported dropout and wastage rates remained above UNICEF and WHO-suggested targets (WHO-UNICEF estimates show 9 percentage points drop-out for DTP1-DTP3 and PCV1-PCV3, up from 7 in 2014). These rates remain a rough estimate, as the country does not have strong data collection and vaccine stock management systems. Open and closed vial wastage is suspected to be higher than that reported due to the significant cold chain issues across the country and low level of staff knowledge on effective vaccine management.

Table 1. Reported Vaccination Coverage and drop-out rates, Administrative Data, 2014-2015

Vaccine/coverage	2015 (%)	2014 (%)
DTP3 (pentavalent 3)	78	84
PCV3	78	84
MCV1	70	78
Rota Last	82	-
Drop-out rates between Penta1 and Penta3	9	7
Drop-out rates between PCV1 and PCV3	9	7
Drop-out rates between RV1 and RV last	5	-

Source: Country administrative coverage data, reported to JRF

Table 2. Reported Vaccination Coverage, Official JRF estimates, 2010-2015.

Vaccine/coverage	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
BCG	92	99	86	87	89	90
HepB (birth dose)	92	94	86	87	-	-
DTP1 (pentavalent 1)	90	93	87	85	89	90
DTP3 (pentavalent 3)	84	78	82	81	87	88
Polio3	84	78	82	81	87	88
MCV2	82	82	82	82	-	-
PCV3	82	78	82	-	-	-

Source: WHO-UNICEF estimates

During 2015, the country experienced a measles outbreak (with 140 suspected cases and 61 cases tested, of which 47 have been confirmed), with the majority of cases in children older than 15. In order to respond to the outbreak, two campaigns were organized in 2015, administering polio vaccine (for children under 5) and measles vaccine (for children aged 9 months and 15 years). In 2016, no measles cases have yet been reported to the WHO.

No polio cases have been registered in the country since 1999. National reporting of the acute flaccid paralysis surveillance started the same year (only one case reported in 2014 with late notification, and 3 cases reported in 2015[1]). Given porous borders, cross border movement, the circulation of the virus in the neighboring countries and the low immunity in the remote areas, the risk of importation of wild poliovirus remains high. Despite this, the AFP surveillance is weak and needs urgent improvement.

Table 3. Reported Confirmed Cases of Vaccine-preventable Diseases

	2015	2014	2013	2012	2011	2010	2000	1990
Diphtheria	-	-	0	0	0	0	0	0
Japanese Encephalitis	-	-	-	-	-	0	-	-
Measles	47	-	28	709	49	7	183	104
Mumps	-	-	-	-	-	-	-	-
Pertussis	-	-	-	-	-	0	48	25
Polio	-	0	0	0	0	0	0	7
Rubella	-	-	0	0	15	-	-	-
Tetanus (neonatal)	-	-	-	0	-	0	0	0
Tetanus (total)	-	-	-	-	-	0	0	2
Yellow Fever	-	-	-	-	-	0	-	-

Source: WHO

[1] http://www.who.int/wer/2016/wer9115.pdf?ua=1

The country did not report any stock-outs in 2016 for any of the vaccines included in the national immunization calendar. However, the EPI Program confirmed that routine immunization services in the districts were limited and irregular due to significant cold chain issues outside of the capital city. Vaccination in the districts is almost entirely ensured by mobile outreach.

Vaccination of migrants falls within EPI Program's responsibilities and vaccines are offered free of charge to these populations (both through campaigns and routine immunisation).

Status of implementation of previous HLRP recommendations:

Key recommended actions in 2015 Joint Appraisal were the following:

1. Strengthen political and financial commitment of the government of Djibouti to immunization efforts
2. Strengthen the managerial and operational capacity of the EPI Program and enhance collaboration and exchange of information among various actors in the field of immunization, including government agencies and services and development partners;
3. Improve data quality, collection and analysis at all levels; improve cold chain capacity at all levels through harmonized efforts with other health programs, projects and partners;
4. Improve cold chain capacity at all levels through harmonized efforts with other health programs, projects and partners;
5. Enhance and expand vaccine management, disease surveillance and supportive supervision;
6. Invest in decentralization of health services to ensure adequate access to and quality of services at the peripheral levels, including cross-border regions and among nomadic populations

Djibouti started addressing some of these recommendations. Immunisation and nutrition are the key priorities of the newly appointed Minister of Health. Political leadership and strong engagement of the new Minister in the immunisation efforts have been clearly seen since his appointment, with the Minister closely following implementation of EPI activities and personally resolving identified bottlenecks (delays in validation of the cMYP, validation of the HSS Year 2 budget, restructuring of the EPI program, decentralisation of immunisation activities, etc.) The political and financial commitment of the Government to immunisation efforts has been demonstrated through the Minister's close involvement in restructuring EPI program (new coordinator was appointed in September 2016) and decision to move the program into a new location (larger and better equipped), with the construction plans being developed by the MoH. Financial investments in immunisation are also expected to grow, with the MoH allocating a larger share of expenditures to the infrastructure improvement and increase in financing of administrative budget lines.

Under the leadership of the new EPI coordinator, collaboration between the EPI program and other MoH directorates involved in immunisation activities (SNIS, DEPCI, DMPL) is expected to be improved and strengthened.

Significant work has been undertaken since late 2015 to review and update data collection and reporting tools. New tools have been developed by the SNIS in close collaboration with the EPI Program, DEPCI, WHO and UNICEF. These tools include information on all new vaccines (including rota and IPV) and are clearer and more straightforward both for completion by health staff and interpreting at central level. The new tools have been distributed to health centers across the territory. Training of staff on the new tools is being finalized.

Implementation of the last three recommendations (4-6) is lagging behind, with HSS grant expected to finance the majority of relevant activities following the validation of Year 2 budget and workplan. Significant issues remain in the areas of cold chain, vaccine management, disease surveillance and supportive supervision. Access to and quality of services at the peripheral levels have also not seen material progress since 2015.

To fully address recommendations from 2015 Joint Appraisal and other reviews, such as March 2016 EPI Review and 2014 EVM Improvement Plan, Djibouti's EPI Program can benefit from technical support from Gavi Alliance partners, the majority of which is foreseen to be provided through the Gavi PEF TCA.

New introductions:

Latest introduction of IPV vaccine (on 16 April 2016) was successful, with vaccine introduced across the entire country. Vaccine was introduced with a significant delay (initially introduction was planned for September 2015) due to issues with IPV supply availability. The country has sufficient vaccine stock for 2016, but there is a possibility that resupply shipments will not be made to Djibouti before Q4 of 2017. As a result, interruption in IPV

administration in Djibouti is possible. The country is advised to reduce open vial wastage as much as possible to spare doses and minimize the duration of a possible stock-out in 2017.

In April 2016, Djibouti successfully carried out the switch from PCV10 to PCV13. Medical staff have been well prepared through trainings provided by the WHO. No difficulties during switch process have been reported.

Immunisation financing:

Djibouti's immunization program relies heavily on external donor support, with Gavi, UNICEF and WHO being the key contributors. External assistance finances 44% of public expenditures and 24% of the total health spending (cMYP 2016). In terms of immunization financing from the government resources, Djibouti's government budget currently includes only Gavi co-financing contribution in addition to support for EPI personnel and some of the operational costs. In 2015, government co-financing for Gavi-supported vaccine amounted to US$ 51,000.

Djibouti is not paying for its traditional vaccines from state resources. There are being funded by UNICEF.

Following the change in the government and nomination of the new Minister of Health in May 2016, Djibouti's MoH has committed to significantly increase investments in the health sector overall and immunisation in particular, prioritising in the short term improvement of infrastructure and cold chain equipment, and in the longer term – human resources capacity. The new Minister of Health has also taken measures to significantly reduce the portion of administrative expenditures (such as fuel, per diems, salaries and coffee breaks) from donor-funded grants, including Gavi HSS grant. The savings realized from these reforms have been proposed to be used for procurement of additional urgent cold chain.

In terms of co-financing obligations, Djibouti faced difficulties in 2013 and 2014, and was in default in both years. The 2014 co-financing commitments were fulfilled after the 31 December deadline in late February 2015. The co-financing obligations for 2015 were completed in late December 2015 (within the agreed timelines). 2016 co-financing obligations have not yet been fulfilled, but the Ministerial order for the release of funds has already been signed, and the payment will be fully completed by the end of 2016.

According to the information reported to JRF, the amount of government funds spent on routine immunisation in 2015 was US$ 1.8 m (cMYP indicates US$ 1.1m of secured funding), and the total secured funds for 2016 (according to the cMYP) is US$ 1.1m. The cMYP projections show gradual increase of government funding as of 2017 to US$ 1.46 m in 2017, US$ 1.71 m in 2018, US$ 1.77 m in 2019, and US$ 1.87 m in 2020. The total secured government funding for immunisation in 2016-2020 is projected at US$ 17,811,268, as shown below, reflecting the government's commitment to ensure stable vaccine funding.

Table 4. Resource needs – secured funding and gaps (USD)

Resource needs : secured funds and gaps*	2016	2017	2018	2019	2020	2016 - 2020
Total : resource needs	$2,787,047	$3,220,838	$ 4,483,242	$4,580,831	$4,683,122	$19,755,080
Total : resource needs (system only)	2,565,151	2,992,077	4,253,181	4,427,261	4,524,894	18,762,563
Per capita	$ 2.58	$ 2.93	$ 4.05	$ 4.10	$ 4.08	$ 3.57
Per target child vaccinated with DTP	$ 102.92	$ 112.75	$ 150.71	$ 147.68	$ 143.73	$ 132.93
Total secured funding	$ 2,664,033	$ 2,945,544	$ 4,216,078	$ 3,949,975	$ 4,035,638	$17,811,268
Government	$ 1,096,884	$ 1,461,773	$ 1,711,528	$ 1,777,908	$ 1,867,201	$ 7,915,294
WHO	$ 295,397	$ 154,259	$ 170,598	$ 44,957	$ 24,292	$ 689,503
UNICEF	$ 618,554	$ 311,921	$ 331,004	$ 276,853	$ 134,218	$ 1,672,550
Gavi NUV	$ 653,198	$ 635,683	$ 1,696,852	$1,693,356	$ 1,926,897	$ 6,605,986
Gavi HSS	$	$ 381,908	$ 306,096	$ 156,901	$ 83,030	$ 927,935
Gavi CCEOP	$	$	$	$	$	$
Gavi PEF	$	$				$
World Bank	$	$	$	$	$	$
USAID	$	$	$	$	$	$
Funding gap (with secured funding only)	**$123,014**	**$275,294**	**$267,164**	**$630,856**	**$647,484**	**$1,943,812**
% of total needs	4%	9%	6%	14%	14%	10%

Source: cMYP 2016-2020

Table 5. Expenditure on vaccines and routine immunization (USD)

	2015	2014	2013	2012	2011	2010
Amount of government funds spent on vaccines	51,000	50,000	51,000	0	0	1,610,331
Total expenditure (from all sources) on vaccines used in routine immunization	700,000	350,000	1,624,519	631,772	297,962	374,727
Percentage of total expenditure on vaccines financed by government funds	7%	14%	3%	0%	0%	26%
Amount of government funds are spent on routine immunization (USD)	1,802,329	1,725,735	1,656,919	1,426,598	694,910	805,165
Total expenditure (from all sources) on routine immunization	3,310,317	2,705,139	1,624,519	2,373,728	1,849,431	1,610,331
Percentage of total expenditure on routine immunization financed by government funds	54%	64%	98%	60%	38%	50%

Source: JRF 2015

Cold chain

Significant weaknesses at the cold chain level have been identified in Djibouti in recent years, both through various external assessments (EVM Assessment, Joint Appraisal) and through routine monitoring of immunisation activities. These weaknesses included lack of continuous temperature monitoring, significant portion of non-functioning cold chain equipment, poor capacity and management of storage facilities and inappropriate use of equipment. Lack of functional cold chain in the periphery has been cited as one of the key reasons for low vaccine coverage outside of the country's capital city, as almost no routine vaccination takes place in the rural areas (vaccination services are being provided through mobile outreach).

In order to address the urgent challenges linked to cold chain, Djibouti took a decision to apply for additional Gavi support through the CCEOP platform. In preparation for the application, the inventory of the cold chain capacity and operational status was conducted with support from UNICEF in June-July 2016. The inventory found that over 50% of the existing cold chain equipment was not functional and needed to be replaced (in a country where temperatures are well above 45°C all year round).

The inventory also showed a significant number of vials with VVM stages 3 and 4, existence of vials with no labels, and vials of re-used lyophilised measles vaccine.

Djibouti originally planned to apply for CCEOP in September 2016, but the application was delayed due to the need to identify the source and amount of co-financing for the platform. It has not been decided that the 20% co-financing share will be funded from the existing HSS grant. The new provisional date for application is January. In the meantime, Djibouti has requested to use HSS savings from Year 1 (US$ 200k) to procure urgent cold chain equipment for the regional health centers. Gavi has approved this request, and the procurement process is underway.

Status of strengthening surveillance systems (for AEFI and disease surveillance)

There is no established function of safety surveillance of vaccines in Djibouti. An AEFI register has been developed and is being used during campaigns. Some cases are being reported by the health centers, but the maintenance of registers is not regular and consistent. IPV VIG has provisions for the AEFI training (with respect to trainings and communication), but these activities have not been carried out. There is also a plan to create a committee for investigation and analysis of AEFI cases, but so far there has not been any progress towards this.

Djibouti's EPI Program has limited human and technical capacity for evidence-based decision-making. The limited data currently obtained via existing reporting and surveillance systems is not fit for this purpose due to lack of reliability and difficulties in exploiting the current data management systems. This is mainly due to lack of operational electronic health management systems and sub-optimal computer and data management literacy of health staff.

Supervision activities are carried out by the EPI Program in the capital, with irregular visits of centers, review of storage conditions, verification of data collection and completion of forms, and follow-up on previously identified issues. Supervisory visits in the regions have not taken place since 2014 due to logistical challenges (lack of vehicles, etc.). In remote zones, supervision does not take place and EPI has very limited information on the situation there. There is a real need for decentralization of EPI activities and nomination of dedicated focal points in the regions to conduct supervision and oversee vaccine management.

EPI program conducts AFP surveillance, but samples must be sent to Nairobi due to the absence of lab capacity in Djibouti. The lab capacity for measles exists, but many suspected cases are not being tested, despite annual

outbreaks both in Djibouti city and in border areas. This is partially due to lack of EPI focal points in border areas and lack of incentives for health workers to conduct supervision and monitoring, even though other health programs reportedly receive incentive payments.

Djibouti has an injection safety plan. Health facilities are equipped with adequate quantities of AD syringes and safety boxes. Vaccinators are trained and/or retrained on injection safety on a regular basis. All health posts in the health regions are equipped with an incinerator. In Djibouti city, there is a sanitation unit in charge of collecting and destroying sharps and syringes.

There is no specific pharmacovigilance program in the country. The lack of AEFI surveillance monitoring is a concern, notably with the introduction of rotavirus and IPV vaccines and the switch to bOPV.

Data quality:

Djibouti faces significant challenges in terms of health data, including data on immunisation. The country does not have a reliable source for denominator calculation – some regions use 2009 census data, while some rely on estimates received from central level. This results in inconsistent coverage calculations across districts. In addition, until 2016 the country was using outdates data collection and reporting tools, which did not include newly introduced vaccines (e.g. rotavirus) and bulked coverage reporting for multiple vaccines in a single line. This resulted in an impossibility at the central level to distinguish coverage data for different vaccines.

In addition, EPI Program confirmed that many health workers, especially in the regions, did not have proper training or time to fill out vaccination registers after each vaccination sessions. Many mobiles teams also did not carry vaccine registers with them during the outreach sessions, resulting in coverage being underreported.

Lack of supportive supervision and regular staff training, especially in the periphery, resulted in poor quality of the data being reported to the central level. Another major issue leading to challenges with data reporting and analysis was parallel reporting systems, with data from the regions being reported to the SNIS (*Système National d'Information Sanitaire*), and data from Djibouti Ville collected by the EPI program. Lack off collaboration and harmonization of data from various sources added to the inadequate quality of reported data. Delays in submitting reports from the district level and incompleteness of these reports is another major data quality issue that needs to be addressed as soon as possible.

In 2016, EPI Program together with the SNIS undertook a major exercise of reviewing and updating data collection and reporting tools to make them simpler, more straightforward and complete by including the newly introduced vaccines (IPV and rota) and providing a separate reporting line for each vaccine in the immunization calendar. Previously, reporting on multiple vaccine doses was grouped in one line – for example, PCV, penta and rotavirus administration to a child were all reported as a single number, thus the coverage for all three vaccines was reported as the same number, even if the child received a dose of only one vaccine out of three. This problem is expected to be addressed with the new improved reporting tools, which by now have been distributed across the country and training of staff on their use was completed in September. The positive impact of these new tools is expected to be demonstrated starting in 2017.

Funding for the Data Quality Assessment (DQA) has been allocated by Gavi to WHO in 2016 through PEF TCA, but this activity has not yet begun. Carrying out the DQA as soon as possible would allow the country to identify the bottlenecks for progressing on improving data quality and ensure that the Ministry of Health can receive timely and accurate data from all health centers with shortest possible delays, allowing the Ministry to act upon identified weaknesses as soon as possible.

Key implementation bottlenecks and corrective actions

The Joint Appraisal reconfirmed challenges and implementation bottlenecks identified in the EPI review carried out in March 2016. The key issues raised by both assessments and acknowledged by the EPI Program, the ICC and Gavi Alliance partners in Djibouti are the following:

- Decrease in vaccination coverage for all routine vaccines
- Major weaknesses with respect to the cold chain, especially at the peripheral level (in terms of availability of functioning equipment, temperature control, storage space, lack of preventive and curative maintenance of the cold chain equipment)
- Continuous challenges with respect to data collection, reporting and analysis, especially at the district level; persistent concerns over the quality of collected and reported data; lack of data quality assessments
- Inadequate access to vaccination services in rural areas, mobile outreach not functioning at an optimal level

- Continuous need to strengthen EPI program capacity, notably with respect to qualified human resources, improved disease surveillance, stronger information systems, regular supervision, and implementation of the communication strategy for routine immunization
- Lack of adequate disease surveillance and supportive supervision (EPI program does not have an annual supervision plan; supervision activities are carried out only occasionally during vaccination campaigns)
- Increased drop-out between the first and last doses of routine vaccines (penta, PCV)
- Inadequate stock management (non-respect of the "first in, first out » rule, vaccine reaching expiry dates, significant number of vials with VVM stages 3 and 4, lack of electronic stock management systems)
- Lack of guidelines and normative documents for the EPI program related to effective vaccine and cold chain management.
- Lack of adequate mircoplanning for EPI activities
- Continued gaps in cold chain: need for additional cold chain capacity at national and regional levels; lack of electronic system of vaccine management;
- Lack of adequate technical and managerial capacity among medical staff, especially at the regional level
- Significant delays in implementing recommendations of various assessments and evaluations (2014 EVM Assessment, 2015 Joint Appraisal, 2016 EPI Review)
- Low level of decentralisation of immunisation efforts, with activities and efforts concentrated on Djibouti city
- Weak NITAG, whose capacity needs to be strengthened
- Heavy dependence of the EPI program on the external technical and financial support
- Lack of pharmacovigilance and medical regulation functions at the country level
- Lack of an updated mobile outreach and immunisation communication strategies

3.1.2. NVS future plans and priorities

A discussion on the key future priorities for Djibouti took place during the Joint Appraisal visit with the Minister of Health, the ICC, EPI Program, Gavi Alliance partners and MoH departments involved in implementation of immunisation-related activities (HSS PMU, DEPCI, DMPL, SNIS). The key short- and medium-terms priorities as identified by the country are as follows:

- Increase vaccine coverage across the country's territory (e.g. through conducting multi-vaccine SIAs)
- Strengthen cold chain management and maintenance and ensure availability of functioning cold chain across the country
- Improve the quality of data collection, reporting and analysis
- Strengthen mobile outreach in order to reach remote populations
- Establish/strengthen disease surveillance (for measles, polio, rotavirus diseases, tetanos)
- Finalize and implement the communication strategy for access and equity
- Improve the quality of routine vaccination services
- Develop mobile strategies to reach the remaining 20% of the population that remain unreached with vaccines
- Develop microplans for health districts and facilities in order to identify zones and centers of the lowest vaccine coverage and design activities to address it
- Securing sufficient government funding for immunization program
- Promoting vaccine demand

New introductions and switches:

Djibouti has expressed interest in applying for a combined MR vaccine and HPV vaccine before 2020. An optimistic scenario from the country's side was applying for MR in 2017 and for HPV – in 2018. However, the persistent challenges with routine vaccination with existing vaccines and the government's difficulty to assume financing of vaccines already introduced in the national calendar make introduction of additional vaccines challenging both from a programmatic and financial point of view.

The discussions on potential introduction of additional vaccines should continue with the country stakeholders and Gavi Alliance partners, in order to assess the feasibility and potential requirements for such introductions.

Achievement of set targets:

Djibouti's targets with respect to its immunization programme have been rather ambitious, considering the recent performance of the EPI program and observed drop in coverage. In the 2016-2020 cMYP, the country revised its immunisation targets to make them more realistic and achievable. Gavi performance framework has been revised accordingly.

The updated country targets are as follows:

Indicator	2016	2017	2018	2019
Penta3 coverage (national)	88%	86%	88%	90%
PCV3 coverage (national)	88%	86%	88%	90%
IPV coverage (national)		86%	88%	
MCV1 coverage (national)	86%	90%	94%	
Rota Last (national)	90%	87%	89%	91%
Drop-out rate between Penta1 and Penta 3	4%	4%	2%	2%
Drop-out rate between PCV1 and PCV3	4%	4%	2%	2%
Drop-out rate between PV1 and RV last dose	2%	3%	1%	1%
Percentage of districts or equivalent administrative	35%	50%	65%	
Percentage of districts or equivalent administrative	83%	100%	100%	

Even though the revised targets are less ambitions than the original, their achievement will be challenging for the country in the absence of urgent measures to improve access and quality of vaccination services in the regions, cold chain situation across the country, and the quality and completeness of reporting.

Risks to future implementation and mitigating actions

In the absence of rapid action to address existing challenges and identified weaknesses, notably with respect to falling immunisation coverage, poor data quality, critical cold chain condition, inadequate quality of vaccine management and insufficient access to vaccination in the rural areas, Djibouti's EPI Program will continue to experience drops in vaccination rates, potentially leading to disease outbreaks and increased disease burden.

In addition, lack of progress on established HSS grant objectives and immunisation targets may lead to reduction or termination of Gavi support to the HSS program, as the funding for the HSS grant is tied to the improvement of immunisation indicators and overall performance of the EPI program.

Urgent action needs to be taken in the coming months to address the existing challenges and improve immunisation results. EPI Program, with support from WHO and UNICEF, suggested conducting intensive multi-vaccine immunisation activities before the end of 2016 to improve coverage in the short run, while putting required measures in place to strengthen routine immunisation in the medium-to-long run.

If the country succeeds in increasing the absolute number of immunized children and improving vaccine coverage both on the central and district level, it may be eligible for performance-based incentive funding in addition to the approved HSS grant. The review of potential eligibility for receiving additional performance-based funds will be done in 2017 following the assessment of the 2016 country immunisation indicators.

Future need for technical support:

Following the analysis of existing challenges, successes, and country priorities, stakeholders participating in the Joint Appraisal Update suggested a number of areas and activities for which partner technical support may be beneficial.

- Support for procurement of cold chain equipment and cold chain maintenance
- Support for finalization of the CCEOP application
- Support for implementation of EVM and EPI Review recommendations
- Capacity building of EPI Program in areas of communication, supervision, forecasting, disease surveillance, program management and other technical areas
- Finalization and implementation of the communication strategy
- Establishment and implementation of effective disease surveillance
- Improvement of supportive supervision and vaccine monitoring activities;

- Improvement of vaccine injection safety
- Development and implementation of the AEFI action plan
- Conducting additional intensified multi-vaccine immunisation campaigns
- Support with development and implementation of effective strategies to reach every district and the remaining unvaccinated children
- Improving vaccine and stock management
- Improving supporting supervision
- Implementation of the cMYP and annual updates to the cMYP
- Conducting data quality survey to identify bottlenecks and potential remedial actions; develop and implement data quality improvement plan

3.2. Health systems strengthening (HSS) support

Djibouti received approval for its first Gavi HSS grant in August 2015, over a year after the proposal was reviewed by the IRC in February 2014. The delay in approval was due to the need to conduct an FMA (carried out in the summer of 2014) and the long time the country took to address IRC clarifications.

The HSS grant is managed and supervised by the DEPCI (*Direction des Etudes, de la Planification et de la Coopération internationale*). Financial and procurement aspects of the grant are under the responsibility of the Project Implementation Unit of the Ministry of Health, which is responsible for the management of grant funds.

The first disbursement (US$ 680,000) covering the first year of implementation (July 2015 – June 2016) was made in August 2015. However, implementation of activities did not begin until December 2015 due to delays in reviewing grant workplan to ensure identification and fast tracking of priority activities (notably those linked to the IPV introduction, initially planned for January 2016), and to complete the required steps for setting the basis for future implementation, e.g. selecting community outreach strategies, finalizing procurement plan, implementing cold chain improvements, etc.

In the first semester of 2016, implementation remained slow, mostly due to significant political changes in the country (with presidential elections taking place in April and a new Minister of Health being appointed in May 2016), and the EPI and HSS PIU's involvement in preparations for IPV introduction and tOPV-bOPV switch that took place in April.

The key activity that took place during the 1st semester of 2016 was the revision and dissemination of data collection and reporting tools. These tools include information on the new vaccines that were introduced in the country's immunization schedule (IPV and rotavirus) and have separate reporting lines for individual vaccines.

Other executed activities under the Year 1 budget include procurement of 5 vehicles for the DEPCI, SNIS, EPI program and regional level, procurement of cold chain equipment, and reparation of a cold room for EPI program.

During the Joint Appraisal, Year 2 workplan and budget have been reviewed and analysed to ensure that implementation of the HSS activities accelerates and targets the most priority activities with the highest potential impact for the EPI program. Savings from Year 1 have been proposed to be reallocated to procurement of urgent cold chain equipment (solar fridges for the regional health centers and electric fridges for Djibouti ville).

The final version of the workplan and budget includes a significant portion of cold chain equipment, cold rooms, and vehicles (refrigerated truck, waste disposal vehicle, vehicles for mobile teams), the funding for which will be transferred directly to UNICEF Supply Division.

The funding for HSS grant was initially approved for two years (July 2015 – June 2017). For Year 3 of implementation, a formal approval of the HLRP will need to be requested in 2017 following the 2017 Joint Appraisal. The renewal of HSS grant in Year 3 will depend on the grant's performance and its ability to demonstrate results against the approved objectives and targets.

3.3. Transition planning

N/A – Djibouti is currently in the preparatory self-financing phase, but will move down to the initial self-financing phase as of 2017 due to the July 2015 World Bank data which estimates that Djibouti's per capita GNI is below US$ 1,025. The country is not expected to reach the accelerated transition phase, leading to full transition of Gavi support, in the coming years.

3.4. Financial management of all cash grants

The FMA has been conducted in 2014, and a number of recommendations have been made for improvement of the financial management capacity of the Program Management Unit of the Ministry of Health, which will be in charge of financial execution and management of the grant. A number of FMA recommendations, notably with respect to procurement, remain to be implemented.

NVS cash support:

In 2015, Djibouti received a cash grant for IPV vaccine introduction in the amount of US$ 100,000. Previous NVS cash grant was received by the country in 2013 for rotavirus vaccine introduction (US$ 100,000). The country also had cash balances from the PCV VIG and ISS support, disbursed prior to 2013.

In the past, the NSV funds have been managed by the *Direction des Ressources et Humaines et Financières* of the Ministry of Health. Starting 2015, all cash grants from Gavi are being managed by the Project Management Unit of the MoH, with a dedicated Finance expert for Gavi funding.

As of 1 January 2015, cash balance available in country from previously disbursed grants were as follows:

- PCV VIG: DJI 28,116 (US$ 150)
- Rotavirus VIG: DJI 4,859,825 (US$ 25,981) 3641050 spent
- ISS support: DJI 2,257,201 (US$ 12,067) 2,169,921 spent

From this amount, DJI 5,810,971 US$ 32,570 was expended in 2015, and the remaining funds (DJI 1,334,171, or US$ 7,478) were transferred to the HSS bank account on 28 February 2016. The spending of remaining cash balances in 2015 was done in line with the reallocation requests submitted by the HSS PMU and EPI Program to Gavi and covered primarily for reparation of cold chain equipment and vehicles used by the EPI program.

From the US$ 100,000 IPV grant received in 2015, US$ 41,742 were used in 2015 for the following activities:

	March – December 2015			
	Budget	Execution	Diff $	Diff %
Received				
Received from Gavi	100,000	41,742	-58,258	-58%
Interest earned			0	0%
Other revenues			0	0%
Total received	100,000	41,742	-58,258	-58%
Expenditures				
Program management and coordination	10,000	11,923	-1,923	-19%
Preparation and planification	2,000	0	2,000	100%
Social mobilisation and advocacy	10,385	3,341	7,044	68%
Other trainings and meetings	11,802	8,734	3,068	26%
Document printing	20,000	10,847	9,153	46%
HR and incentives	4,000	0	4,000	100%
Cold chain equipment	3,672	0	3,672	100%
Transport for implementation and supervision	6,384	0	6,384	100%
Materials for vaccination sessions	4,000	1,896	2,104	53%
Waste management	5,000	5,000	0	0%
Surveillance and monitoring	2,000	0	2,000	100%
Evaluation	0	0	0	0%
Technical Assistance	13,757	0	13,757	100%
Data management	7,000	0	7,000	100%
Other (specify)	0	0	0	0%

Total expenditures	100,000	41,742	58,258	58%

In 2016, additional activities have been conducted using IPV VIG in view of its introduction in April, notably printing and dissemination of documents and medical staff training. As of September 2016, a total of US$ 58,350 remains unspent, and the EPI Program has been requested to provide a proposal for reallocating these funds to urgent EPI needs.

The NVS grants have never been audited due to their amounts being below the established thresholds.

HSS cash support:

In August 2015, Djibouti received the first tranche of the HSS grant in the amount of US$ 680,000. Implementation had only started in December 2015, and by 31 December 2015 only 53,501 were spent, as confirmed by the external audit. This expenditure was primarily on staff costs and cold chain rehabilitation.

As of the end of the 1st year of implementation (30 June 2016), a total of US$ 318,969 were executed.

Table 5: Year 1 (July 2015 – June 2016) expenditure of Gavi HSS funds

	Annual Budget	Execution	Variance in USD	Variance %
Received				
Received from Gavi	710,390	680,000	-30,390	-4%
Interest earned	0	0	0	100%
Other revenues	0	0	0	0%
Total received	710,390	680,000	-30,390	-4%
Expenditure				
1 Service delivery	224,331	164,603	59,728	27%
2 Staff and HR costs	240,900	86,898	154,002	64%
3 Procurement and supply chain management	69,659	21,426	48,233	69%
4 Health Information Systems	87,000	11,186	75,814	87%
5 Community workers and other local actors	38,000	5,847	32,153	85%
6 Legal, political and regulatory work	40,000	0	40,000	100%
7 Health financing	0	0	0	0%
8 Program management	10,500	28,071	-17,571	-167%
9 Other	0	0	0	0%
10 Program support costs	0	0	0	0%
Total	710,390	318,031	392,359	55%
Surplus/(Déficit) de la période	0	361,969	-422,749	0%

2015 External audit was unqualified and did not identify any issues.

4. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

The table below presents a list of high-level findings from 2015 Joint Appraisal.

Prioritised strategic actions from previous joint appraisal / HLRP process	Current status
1. Strengthen political and financial commitment of the government of Djibouti to immunization efforts;	**In progress.** Immunization is one of the key priorities (together with nutrition) for the new Minister of Health, appointed in May 2016. A strong commitment of the new government to immunisation efforts has been demonstrated through nomination of the new EPI manager in September 2016, decision to construct new premises for the EPI program, close supervision of the EPI efforts by the new Minister, renewed commitment to upgrading cold chain and investing in overall infrastructure upgrade, and

	allocation of a dedicated budget line in the state health budget to EPI program (covering co-financing requirements).
2. Strengthen the managerial and operational capacity of the EPI Program and enhance collaboration and exchange of information among various actors in the field of immunization, including government agencies and services and development partners;	**In progress.** New coordinator of the EPI program was nominated in September 2016, and has started working on the action plan for EPI program functioning and improvement of its performance. Information exchange between the EPI program and HSS PMU has been improved, and other directorates (SNIS, DEPCI, DMPL) are regularly contributing to the exchanges and discussions on program priorities and needs.
3. Improve data quality, collection and analysis at all levels;	**In progress.** In 2016, EPI Program together with the SNIS undertook a major exercise of reviewing and updating data collection and reporting tools to make them simpler, more straightforward and complete by including the newly introduced vaccines (IPV and rota) and providing a separate reporting line for each vaccine in the immunization calendar. Previously, reporting on multiple vaccine doses was grouped in one line – for example, PCV, penta and rotavirus administration to a child were all reported as a single number, thus the coverage for all three vaccines was reported as the same number, even if the child received a dose of only one vaccine out of three. This problem is expected to be addressed with the new improved reporting tools, which by now have been distributed across the country and training of staff on their use was completed in September. The positive impact of these new tools is expected to be demonstrated starting in 2017. **However, the country continues to face significant data quality challenges, and further work, notably with respect to data quality assessment and data quality improvement, needs to be undertaken as soon as possible.**
4. Improve cold chain capacity at all levels through harmonized efforts with other health programs, projects and partners;	**In progress.** In 2015-2016, HSS funds and cash balances remaining from other Gavi grants (such as rotavirus VIG and ISS) were used to repair cold rooms and cold chain equipment and procure new electric fridges and cold boxes. Following the inventory of cold chain capacity conducted by UNICEF in June 2016, significant additional needs in terms of replacement and maintenance of cold chain have been identified. EPI program has requested that HSS savings from year 1 be used to procure urgent cold chain equipment for the districts. Cost estimate is currently being developed by UNICEF. The country is also preparing a CCEOP application to be submitted in January 2016. The CCEOP request will address additional cold chain needs forecasted for the coming years. In addition, the Ministry of Health is investing in establishing a cold chain maintenance unit that will be responsible for preventative and curative maintenance of cold chain and other MoH equipment. This unit is expected to become operational in early 2017.
5. Enhance and expand vaccine management, disease surveillance and supportive supervision;	**Not started.** A limited budget is foreseen for these activities in the HSS Year 2 budget, but efforts need to be enhanced to achieve results and strengthen these areas.

6. Invest in decentralization of health services to ensure adequate access to and quality of services at the peripheral levels, including cross-border regions and among nomadic populations.	**Not started.** EPI program is developing a strategy for ensuring adequate access to and quality of services at the peripheral levels, but this strategy and a clear roadmap to reaching this objective have not yet been elaborated. Urgent measures would be necessary to ensure that access to vaccination is expanded to the peripheral level and among nomadic and other hard-to-reach populations.

5. PRIORITISED COUNTRY NEEDS

Prioritised needs and strategic actions	**Associated timeline for completing the actions**	**Does this require technical assistance?*** *(yes/no)* If yes, indicate type of assistance needed
Increase vaccine coverage across the country's territory (e.g. through conducting multi-vaccine SIAs)	**2016**	**Yes – WHO/UNICEF TCA**
Strengthen cold chain management and maintenance and ensure availability of functioning cold chain across the country	**2016- 2017**	**Yes –UNICEF TCA**
Improve the quality of data collection, reporting and analysis	**2016- 2017**	**Yes – WHO TCA**
Strengthen mobile outreach in order to reach remote populations	**2016- 2017**	**Yes – WHO/UNICEF TCA**
Establish/strengthen disease surveillance (for measles, polio, rotavirus diseases, tetanos)	**2016- 2017**	**Yes – WHO TCA**
Finalize and implement the communication strategy for access and equity	**2016- 2017**	**Yes – UNICEF TCA**
Improve the quality of routine vaccination services	**2016- 2017**	**Yes – WHO/UNICEF TCA**
Develop mobile strategies to reach the remaining 20% of the population that remain unreached with vaccines	**2016- 2017**	**Yes – WHO/UNICEF TCA**
Develop microplans for health districts and facilities in order to identify zones and centers of the lowest vaccine coverage and design activities to address it	**2016- 2017**	**Yes – WHO TCA**
Securing sufficient government funding for immunization program	**2016- 2017**	**Yes – WHO/UNICEF TCA**
Promoting vaccine demand	**2016- 2017**	**Yes – WHO/UNICEF TCA**
Implement recommendations of the EVM assessment and data quality improvement plan	**2016- 2017**	**Yes – WHO/UNICEF TCA**

6. ENDORSEMENT BY ICC AND ADDITIONAL COMMENTS

Brief description of how the joint appraisal was endorsed by the relevant national coordination mechanism	The Joint Appraisal Findings have been discussed with the Minister of Health and the ICC on the last day of the Joint Appraisal. The results and observations from the Joint Appraisal were confirmed and endorsed both by the ICC and the Minister. Relevant comments and inputs have been integrated into the final version of the Joint Appraisal report.
Issues raised during debrief of joint appraisal findings to national coordination mechanism	ICC emphasized the strong leadership of the new Minister of Health and his strong involvement and commitment to the improvement of the EPI performance and overall vaccine coverage in the country. The ICC also stressed the need to accelerate HSS implementation, especially with respect to the procurement of urgent cold chain, and requested UNICEF support in accelerating the process.
Any additional comments from: • **Ministry of Health** • **Gavi Alliance partners** • **Gavi Senior Country Manager**	N/A

7. ANNEXES

Annex A. Description of joint appraisal process

In 2016, Djibouti conducted a Joint Appraisal Update following a full Joint appraisal conducted in September 2015. The Joint Appraisal update was carried out through a country visit on 10-13 October, with participation of representatives from the WHO EMRO and UNICEF MENARO Regional Offices.

In the context of the Joint Appraisal Update, Gavi Senior Country Manager together with colleagues from regional and country offices of WHO and UNICEF held meetings with the Minister of Health, EPI Program, Directorate of International Planning and Cooperation, HSS Implementation Unit, Secretary General of Health, National Information Management System, and UNICEF and WHO Country offices. The observations, findings and recommendations of the Joint Appraisal have been shared with the Minister of Health and the ICC at the end of the visit, and endorsed by both the ICC and the Minister of Health.

Information received during group discussions, as well as additional data and documentation shared by the country(EVM improvement plan implementation, EPI review, 2015 JRF date, etc) were used to complete the JA Update report, which is being shared with country stakeholders and Gavi Alliance partners for feedback and endorsement.

Annex B: Technical Assistance implementation by Gavi Alliance partners

UNICEF:

- C4D strategy development – in progress
- Preparatory work for the CCEOP application

- Support with procurement of vehicles and cold chain equipment
- Recruitment of a national officer to assist the EPI program in developing capacities
- ……..

WHO:

- 2016-2020 cMYP development
- Support for IPV introduction
- EPI review
- ……..