

2019

Joint Appraisal Update Report, Uzbekistan

Ministry of Health of the Republic of
Uzbekistan

Gavi Alliance

7/4/2019

Note: Failure to submit the renewal requests as well as required reporting on the country portal four weeks prior to the Joint Appraisal meeting (except for the vaccine renewal request, which is to be submitted by 15 May) may impact the decision by GAVI to renew its support, including a possible postponement, and/or decision not to renew or disburse support.

Table of Contents

1. RENEWAL AND EXTENSION REQUESTS	1
2. GAVI GRANT PORTFOLIO	1
3. RECENT CHANGES IN COUNTRY CONTEXT AND POTENTIAL RISKS FOR NEXT YEAR	4
3.1. PERFORMANCE OF THE IMMUNISATION PROGRAMME.....	4
3.2. KEY FACTORS IN SUSTAINABLE COVERAGE AND EQUITY	7
3.3. IMMUNIZATION FUNDING	7
3 PERFORMANCE OF GAVI SUPPORT	8
3.1 PERFORMANCE OF GAVI HSS SUPPORT (IF COUNTRY IS RECEIVING GAVI HSS SUPPORT)	8
4.2 PERFORMANCE OF VACCINE SUPPORT	14
4.3 PERFORMANCE OF GAVI CCEOP SUPPORT.....	15
4.4 FINANCIAL MANAGEMENT PERFORMANCE.....	16
4.5 TRANSITION PLAN MONITORING	16
4.6 TECHNICAL ASSISTANCE (TA) (PROGRESS ON ONGOING TCA PLAN)	16
4 UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL	17
5. ACTION PLAN: SUMMARY OF FINDINGS, ACTIONS AND RESOURCE/SUPPORT NEEDS IDENTIFIED AND AGREED DURING THE JOINT APPRAISAL	21
1. JOINT APPRAISAL PROCESS, ENDORSEMENT BY THE NATIONAL COORDINATION FORUM (ICC, HSCC OR EQUIVALENT) AND ADDITIONAL COMMENTS.....	23
2. ANNEX: COMPLIANCE WITH GAVI REPORTING REQUIREMENTS	24

Country	Uzbekistan
Full JA or JA update ¹	<input checked="" type="checkbox"/> JA update <input type="checkbox"/> Full JA
Date and location of the Joint Appraisal Meeting	May 15-17, 2019, Tashkent
Participants / Affiliation ²	
Reporting period	2018
Fiscal period ³	2018
Comprehensive multi-year plan (cMYP) duration	2016-2020
GAVI transition / co-financing group	accelerated transition

1. RENEWAL AND EXTENSION REQUESTS

Renewal requests were submitted on the country portal

Vaccine (NVS) renewal request (by 15 May)	NO
Does the vaccine renewal request include a switch request?	NO
HSS renewal request	Yes <input checked="" type="checkbox"/>
CCEOP renewal request	No

2. GAVI GRANT PORTFOLIO

Existing vaccine support (to be pre-filled by Gavi Secretariat)

Introduction/ Campaign	Date	2017 Coverage (WUENIC) by dose	2018 Target		Approx. Value \$	Comment
			%	Children		
Penta	2009	99%	NA	NA	NA	No longer supported by Gavi
PCV	2015	99%	95	718,834	3,643,000	No longer supported by Gavi
Rotavirus	2014	99%	95	718,834	503,500	No longer supported by Gavi
IPV	2018	Introduced	70	522,952	1,493,500	IPV was approved in 2015 but introduction took place in April 2018 due to supply constraints

Existing financial support (to be pre-filled by Gavi Secretariat)

Grant	Channel	Period	First disbursement	Cumulative financing status @ Dec 2018				Compliance	
				Comm.\$	Appr.\$	Disb.\$	Util.	Fin.	Audit
HSS2	TOTAL	2016-2020	Oct 2016	18,858,480	16,392,526	7,380,000	56%	2018	na
	UNICEF	2016-2020	Oct 2016		11,841,785	6,402,757	51%	2018	na
	WHO	2016-2020	Mar 2017		2,173,706	977,243	93%	2018	na
Graduation grant	TOTAL	2018-2020	Apr 2018	606,030	606,030	606,030	11%	2018	This does not reflect the regional level

¹ Information on the difference between full JA and JA update can be found in the Guidelines on reporting and renewal of Gavi support, <https://www.gavi.org/support/process/apply/report-renew/>

² If taking too much space, the list of participants may also be provided as an annex

³ If the country reporting period deviates from the fiscal period, please provide a short explanation

Joint Appraisal Update

									accomplishment and utilization including UNICEF SD.
	UNICEF	2018-2020	Apr 2018	217,620	217,620	217,620	31%	2018	na
	WHO	2018-2020	Apr 2018	388,410	388,410	388,410	87%	2018	na
IPV VIG	WHO	2016-2019	Feb 2016	494,000	494,000	494,000	95%	2018	na
Comments									
Information in this section is as of 31 December 2018 and is based on certified financial statements submitted by implementing partners.									

Indicative interest to introduce new vaccines or request Health System Strengthening support from Gavi in the future⁴

Indicative interest to introduce new vaccines or request Health System Strengthening support from Gavi	Program	Expected application year	Expected introduction year
	Uzbekistan entering their last year of support in 2020 as transitioning country, and no longer eligible for HSS or other support.		

Grant Performance Framework – latest reporting, for period 2018 (to be pre-filled by Gavi Secretariat)

Intermediate results indicator	Target	Actual
Percentage of districts with adequate and functional cold chain capacity	20	0
Number of trained immunisation service providers	2000	3433
Percentage of supervised facilities with satisfactory performance	40	80
Number of facilities that received documented supportive supervision	100	125
Percentage of regions having IEC communication plans with material for implementation as per KAP recommendations	20	0
Increase in parents' knowledge about vaccination	NA	NA
Percent of activities from action plan conducted annually	25	36.4
Percentage of district cold chain stores with improved stock management	0	0
Percent of districts' cold chain facilities with installed hardware for vLMIS	20	0
Comments		

PEF Targeted Country Assistance: Core and Expanded Partners at 30 April 2019 (to be pre-filled by Gavi Secretariat)

	Year	Funding (US\$m)			Staff in-post	Milestones met	Comments
		Appr.	Disb.	Util.			
TOTAL CORE	2017	279,750	279,750	88,050	0 out of 0.5	18 out of 20	For WHO, does not include utilization at regional level

⁴ Providing this information does not constitute any obligation for either the country or Gavi, it merely serves for information purposes.

Countries are encouraged to highlight in subsequent sections, and particular in the Action Plan in Section 7, key activities and potentially required technical assistance for the preparation of investment cases, applications and vaccine introductions, as applicable.

Joint Appraisal Update

	2018	575,395	575,395	41,599	0 out of 0.5	33 out of 35	Need to update fund utilization once received from WHO
	2019	572,720	572,720	--	--	--	Financial and milestone reporting not yet available for 2019
UNICEF	2017	51,840	51,840	51,840	--	3 out of 3	
	2018	144,720	144,720	143,981	--	6 out of 7	
	2019	144,720	144,720	--	--	--	
WHO	2017	227,910	227,910	36,210	0 out of 0.5	15 out of 17	Does not include utilization at regional level. Reporting in finances do not include utilization from regional level – These funds utilized 100%. This is an on going issue with PEF reporting for the region.
	2018	430,675	430,675	22,251	0 out of 0.5	27 out of 28	Need to update fund utilization once received from WHO. Reporting in finances do not include utilization from regional level – this is an on going issue with PEF reporting for the region.
	2019	428,000	428,000	--	--	--	
TOTAL EXPAND	2017	22,620	18,661	--	--	0 out of 1	
	2018	52,780	44,910	44,910	--	1 out of 1	
One23	2017	22,620	18,661	--	--	0 out of 1	
	2018	52,780	44,910	44,910	--	1 out of 1	

Role of partnerships between public and private institutions (to be pre-filled by Gavi Secretariat)

Partnerships between public and private institutions, including joint initiatives	Status/ Comments
Not applicable	

3. RECENT CHANGES IN COUNTRY CONTEXT AND POTENTIAL RISKS FOR NEXT YEAR

Since 2017, Uzbekistan has initiated the process of fundamental reforms in all spheres, including healthcare. An action strategy outlined five priority development areas of the Republic of Uzbekistan for 2017-2021. The new wave of reforms is regulated by over 40 Cabinet of Ministers' and Presidential decrees and resolutions, out of which the following ones can be considered as the key drivers of the changes. The most recent one is called "Complex measures for radical enhancement of health care system of the Republic of Uzbekistan"

Although there is no assessment on the impact of reform on access and quality of health services, some directions might have both positive and negative impact.

In terms of financing, health reform includes single payer system and mandatory health insurance scheme. While reform directions may have positive impact on immunization services, there might be also risks. For example, centralizing health pooling and financing will certainly benefit the immunization program in particular and PHC in general. There are also new plans in terms of the governance of the health system, including roles and responsibilities of Ministry and various agencies including the agencies involved in immunization, vaccine management and surveillance. However much of the health reforms are managed and decided at the high political levels, this makes the environment unpredictable for planning for the immunization program.

In order to better understand how the reform can influence immunization program/services, there is an on going assessment to review the potential effects of healthcare reforms under the TCA. The report is expected to be finalized by end of September 2019. Based on the assessment results, MoH and international partners will receive a set of recommendations on the strategies and actions, that are required to address existing, as well as future possible gaps and other implications of healthcare reforms on immunization service delivery. In addition, the assessment report will help to initiate a policy level dialogue with the Government of Uzbekistan on possible amendments of the reform implementation process to ensure that the level of immunization service delivery is not affected negatively.

3.1. PERFORMANCE OF THE IMMUNISATION PROGRAMME

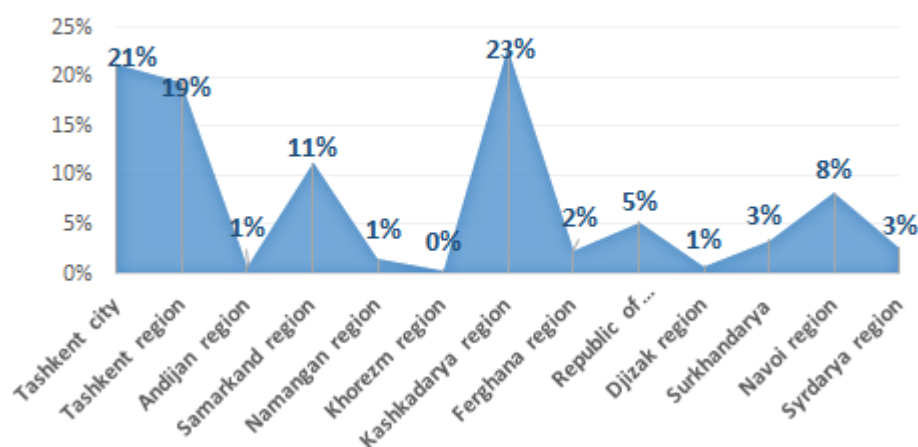
Starting from November 2001, the country has introduced a vaccine against viral hepatitis B, in 2007 – the MMR vaccine, in 2009 - the pentavalent vaccine, in July 2014 – the rotavirus vaccine, in November 2016 - the pneumococcal vaccine, and in May 2018 – the inactivated polio vaccine. Immunization coverage in 2018 throughout the country equalled 99.2-99.7%. Uzbekistan will be introducing HPV in October 2019 and activities for introduction are on track (more information on HPV is at 4.2. of this report). In 2018, the experienced problems with rota supply due to the global supply issues which resulted in stock outs in the country and interrupted the rota program.

There were no cases of measles in 2017 in the country, whereas in 2018 there were 320 suspected cases of measles in the country, 22 of which have been confirmed by laboratory tests, no lethal cases.

According to the WHO Regional reference laboratory, virus was imported to the Republic of Uzbekistan. The Ministry of Health of the Republic of Uzbekistan organized focused series of preventive and epidemiologic activities. The action plan was prepared for established centers in every Center of Sanitary and Epidemiologic Surveillance. As result, 22310 people were vaccinated with MMR vaccine.

The unfavorable situation with measles continues to unfold in 2019. The country has faced a significant number of imported measles cases from the neighboring countries, such as Kyrgyzstan, Kazakhstan and the Russian Federation. As of May 24, 2019, there has been 1483 suspected measles cases identified in the republic, 267 (59.2%) of which are laboratory confirmed.

PERCENT OF LABORATORY CONFIRMED MEASLES CASES, 2019



Out of them, 41% of children under 1 year, 31.6% - children from 1-6 years old, 6.7% - children from 7 – 14 years, 2.1% of children of 15-19 years old, 5.8% of young people from 20 to 30 years old, and 13.4% of adults from 30 years and more.

The MoH has asked UNICEF support in providing humanitarian assistance for measles vaccines, and 100,000 doses have been provided to vaccinate children under 1 year of age. Additionally, the MoH has requested the Prime Minister to allocate funds to purchase 700,000 doses of measles vaccine.

With the assistance provided by the WHO EURO, it was decided to update the data base, strengthen epidemiologic surveillance, improve its quality and sensitivity. WHO EURO also made a recommendation to vaccinate the children from 6 or 9 months with mandatory vaccination at the age of 12 months. Thus, sanitary epidemiologic services committed to assess outbreak situation for two periods (May-September, 2018, and January, 2019) and regional and district level support is strengthened by appointment of focal points to respond to measles. Despite the ongoing preventive and anti-epidemic measures to prevent import and spread of measles, the epidemiological situation in the country remains challenging. According to the analysis and forecast, as well as WHO recommendations, additional 700,000 doses of measles vaccine need to be purchased to vaccinate children aged 6 months to 1 year as well as non-vaccinated children under 14 years of age. According to UNICEF preliminary estimations, purchasing of additional vaccines would require 287,985 thousand U.S. dollars (one dose costing \$ 0.32). The vaccine is to be administered to children aged 6 months to 1 year, which makes up 350,000 children, and to more than 200,000 people who are exposed to the outbreak. Measures to prevent further spread of measles are ongoing and are being strictly controlled by the Ministry of Health.

The outbreak of measles poses questions on immunization coverage data. WUENIC estimates still indicate high performing program however there are questions on over data quality and timeliness of vaccination in Uzbekistan.

An outbreak of meningococcal meningitis occurred in Uzbekistan in 2018-19. The MoH faced challenges in making decision on use of meningococcal A vaccine to control the outbreak because the data from national meningitis surveillance were incomplete and insufficient. The assessment of bacterial meningitis surveillance will help to develop recommendations on its strengthening and will improve country capacity to detect and investigate outbreaks in future. High quality surveillance data will enable informed decision on meningococcal A vaccination to prevent / respond to outbreaks.

In total, there were 137 cases and 11 out of them were lethal. In all cases, serotype A was identified. At this moment, the outbreak is covered, however single cases among adolescents and students are still occurred. In order to close the outbreak, MOH conducted wide range of epidemiologic activities, vaccination, sanitation, quarantine and hospitalization.

Uzbekistan is a highly endemic country for hepatitis B and in the period before vaccination, the main mode of hepatitis B virus transmission was perinatal. Timelines of hepatitis B birth dose is an important indicator of effectiveness of hepatitis B vaccination programme and a critical factor influencing the impact of hepatitis B vaccine. Uzbekistan introduced universal newborn hepatitis B immunization in 2001 and has been demonstrated sustainable high coverage with the birth dose of vaccine among newborns and three doses of hepatitis B vaccine

among infants. However, current immunization reporting system counts as the birth dose any first dose of hepatitis B vaccine administered to child: within 24 hours after the birth, later in maternity hospital, or even later when child is taken to primary health care centre for the first time. Therefore, the NIP does not have information about timeliness of hep B birth dose.

The country also implements surveillance for viral hepatitis which provides important information about trends and risk factors. However, most of the acute hepatitis B cases especially in children are asymptomatic, which limits the use of surveillance data to estimate disease burden. Therefore, the Ministry of Health should conduct a seroprevalence survey of HBsAg to evaluate the impact of hepatitis B vaccine and validate the achievement of the regional hepatitis B control targets. The seroprevalence study will also provide additional evidence of immunization benefits to advocate for sustainable financing of immunization programme and creating demand for vaccination. The data can be used to estimate health care costs saved by the MoH from avoiding chronic hepatitis B, liver cirrhosis, and primary liver cancers and related deaths. The study will also demonstrate an impact of Gavi investments/support to Uzbekistan in hepatitis B vaccination.

In September 2018, an EPI review conducted under the transition plan. The main findings and recommendations are as follows:

- Program management capacity not adequate (in term of quantity and quality) to handle current and future immunization challenges, particularly at national level
- Impact of transitioning from Gavi support not well acknowledged by stakeholders
- Budget development process not yet institutionalized and common understanding between MOH and MOF still not reached
- Funding needs for NIP operational activities not well acknowledged by the Government (left limited to available donor support)
- Procurement of vaccines for non-EPI vaccines decentralized and not benefiting from economies of scales
- Staff workload heavy and unevenly distributed, not taking into-account density of population
- Difficulties in attracting and retaining healthcare professionals to work in NIP
- Due to ceiling cut of the Cold Chain Equipment Optimization Platform (CCEOP), there might be some gaps in modernizing the system.
- There is strategy in place for cold chain maintenance
- Temporary false contraindications and pre-immunization checking still too frequently implemented
- Use of large multi-dose vials causing problem and limitation in implementing timely immunization
- Current immunization coverage calculation using "eligible/planned population" but not reflecting "real timely immunization coverage", as per WHO recommendations
- Because of paper-based reporting system, huge manual effort necessary by healthcare staff (considering the optimization of staff in health sector reforms)
- Currently no data quality-control in place; No coverage survey implemented for years to verify administrative data; Lack of performances monitoring indicators (timeliness, completeness)
- The AEFI system didn't detect any serious AEFI for many years ((i.e. coincidental and/or vaccine-related AEFI cases, but not related to programmatic issues), challenging the sensitivity of the system
- Outbreak Preparedness Plan for VPD outbreak not fully operational (lack of funds, specific team, logistics availability)

Main recommendations

- Conduct regular advocacy activities to all stakeholders to sustain commitment to immunization
- Expand program management capacity at national level with required managerial skill set
- Establish links between ICC and similar and/or broader coordination mechanisms
- Ensure required financial resources are adequately communicated to budgetary processes (including Medium Term Expenditure Framework)
- Establish a budget and a line item for NIP operational activities (training, supervision, surveillance, monitoring, advocacy, communication)
- Consider centralization for procurement of vaccines for epidemiological indications (non-EPI vaccines)
- Ensure dissemination and compliance with the internationally approved list of contraindications to immunization at all healthcare levels
- Conduct a feasibility and efficiency study for purchasing vaccines in smaller doses vials (especially MMR)
- Investigate on how to change denominator and coverage calculation to better reflect real coverage of timely vaccination; Ensure denominator reflects real target population, in line with WHO recommendations

- Revise current immunization reporting forms, in line with WHO recommendations; Speed-up transition to a full electronic monitoring system; Ensure immunization interests are reflected in the health information management system (HIMS) development
- Enhance immunization data quality-control; Conduct data quality assessment or survey (DQA/DQS) and coverage survey (e.g. MICS) to compare administrative and household data
- Preparedness plans need to be operationalized and rehearsed for all institutions and health facilities
- Due to increasing immigration, additional efforts and funds required to strengthen VPD surveillance and outbreak response

It is planned that HSS additional funds, CCEOP, PBF funds and TCA will tackle the issues, particularly those that are critical for long term sustainability.

3.2.KEY FACTORS IN SUSTAINABLE COVERAGE AND EQUITY

The JA update does not include this section

3.3. IMMUNIZATION FUNDING⁵

The Government successfully mobilized the required amount of domestic funding to sustain uninterrupted supply of vaccines for the National Immunization Programme in 2018 and as well as for 2019. Country co-financing for new vaccines introduced and traditional vaccines (non-Gavi vaccines) has been covered from domestic resources, without dependence on other donor funding. Government expenditures for vaccines increased from USD 12,084,005 in 2017 to USD 16,348,244 in 2019. This is considered as a significant progress towards achievement of financial self-sufficiency for funding of vaccines in the national immunization schedule. WHO worked with the Government in documenting vaccine expenditures to provide input to the process of resource mobilization for vaccines particularly.

Expenditures / Years	2015	2016	2017	2018	2019*
Government expenditures	5,359,436	6,862,619	12,084,005	12,184,005	16,348,244
Gavi	12,059,800	9,033,406	6,456,987	4,686,779	5,189,500
Total	17,419,236	15,896,025	18,540,992	16,870,784	21,537,744

(*) Preliminary expenditure data for the year 2019

Financing of the vaccine procurement in 2018 (non-Gavi supported vaccine specified breakdown of the spending)

Vaccine (procured via UNICEF SD)	Manufacturer	Cost in USD
DTP 10	SII	167,200
OPV 20	GSK	560,520
MMR 10	SII	2,091,210
BCG 20	SII	154,056
HepB10	SII	152,980
Td10	SII	114,371
Penta 10	SII	2,014,920

WHO work also included projection of vaccine resource requirements for the next three years to provide guidance the resource allocation process:

⁵ For more information and guidelines on immunization financing, visit GAVI website at: <https://www.gavi.org/support/process/apply/additional-guidance/#financing>

Requirements / Years	2019	2020	2021	2022
Government expenditures	16,463,119	29,175,800	29,668,300	30,258,300
Gavi	7,872,000	1,973,500	1,355,500	554,000
Total	24,335,119	31,149,300	31,023,800	30,812,300

As part of the TCA support, UNICEF Supply Division worked on supporting the Government in building capacity in vaccine procurement using a unified budgeting template (developed under 2016/2017 TCA support). Based on results and feedback of joint work of Ministry of Finance and Ministry of Health with the tool, the latter was revised and improved to meet partners' further requirements. Standard Operating Procedures (SOP) were developed to institutionalize the vaccine procurement budgeting process (including the use of the unified budgeting template). Further work on revision / expansion of the budgeting template, including adding the module to calculate the cold chain equipment maintenance costs has been started and the tool was prepared for inclusion of cold chain equipment maintenance budget module.

As result of it, by using this tool, the Ministry of Health prepared budget for vaccine procurement for 2019 and submitted to the Ministry of Finance. Calculated amount was easily accepted by the Ministry of Finance due to clarity and transparency of calculations. Funds were allocated at the beginning of the 2019 and covered annual needs in vaccine procurement.

4. PERFORMANCE OF GAVI SUPPORT

4.1 PERFORMANCE OF GAVI HSS SUPPORT (IF COUNTRY IS RECEIVING GAVI HSS SUPPORT)

Objective 1	
Objective of the HSS grant (as per the HSS proposal or PSR)	Building staff capacity and sustainability of immunization services (UNICEF)
Priority geographies / population groups or constraints to C&E addressed by the objective	All regions, including the central level and 6 districts
% activities conducted / budget utilization	95%, including costs for construction of national cold chain store, but without costs for construction of 6 district and 1 regional stores
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	<p>A. Construction: 21 construction and reconstruction sites defined</p> <ul style="list-style-type: none"> 62% of construction works completed or cold storage stores in 13 localities are built / repaired Construction of 3 district cold chain storages has been started 3 district and one regional (Bukhara) sites are ready for start of construction, which is planned to be completed by end of this year Central Cold Chain Store: construction works has been started in July and expected to complete in 2020 (warranty period) Fire and security systems: <ul style="list-style-type: none"> Installation completed in 11 regional cold chain stores; installation in progress in 2 regional cold chain stores; Ready for installation in central store, 6 district and one regional cold chain store <p>Challenges:</p> <ul style="list-style-type: none"> National requirements towards large construction projects were not considered during the planning phase; Complexity of construction process requires a thorough quality control: hiring international construction and procurement specialists Formal project planning and coordination with relevant government agencies took significant time; Rapid and steady rise in the cost of materials and services (inflation, rise in wages, additional contractual works and services); Additional works due to inaccuracies in official documents provided from government agencies (incorrect locations of water and gas

pipes, a cemetery, additional services contracted to move electrical panels, etc.);

- Administrative reforms have led to emergence of new districts and delays in defining locations of district cold chain stores;
- Suspension of the construction project in the Bukhara region due to shifting the store from a historical site to a new location.

Impact:

- Longer duration of construction works;
- Significant increase of budget: \$ 3,764,624 against initial \$ 1,623,494;
- Final costs will be available upon completion of the tender process;
- Changes of commercial nature are outside of UNICEF control;
- Reduced cost for construction: \$301,654.41

Actions taken to address the challenges:

- Following national guidelines, the project team obtained expert opinion for all construction projects;
- International experience: UNICEF hires international construction and procurement professionals;
- 10% buffer to allow flexibility in construction process;
- Cooperation with companies in regards to VAT reform;
- Additional meetings organized to reduce construction costs for the central cold chain store, 6 districts and one regional CC storages;
- Construction process monitoring tool implemented;
- Regular update of partners on status of project implementation

B. Cold chain equipment:

- Installation in progress:
 - 33 cold rooms (installation of 6 CR is already completed)
 - 14 generators
 - 33 stabilizers

Challenges:

in installation of cold rooms:

- Selection of international companies canceled due to extremely high pricing;
- Limited number of local companies offering installation services for cold rooms;
- Missing parts identified during unpacking of boxes;
- Defective parts requiring replacement of small mechanisms (valves);
- Delays in installation due to delays in construction

In overall procurement:

- Late transfer of money to UNICEF CO

Impact:

- Extended timeframe required for installation

Actions taken to address challenges:

- Intensifying cooperation between the UNICEF Country Office, Supply Division in Copenhagen and the supplier;
- Replacement of broken and missing parts by supplier

C. Strengthen pre-service and in-service training of medical personnel in immunization:

- The project team including specialists from the Tashkent Pediatric Medical Institute reviewed the curriculum, identified gaps and developed recommendations;
- Findings discussed during multidisciplinary meetings with administration and representatives of relevant departments of medical universities of the Republic in nine medical universities across the country:

	<ul style="list-style-type: none"> Working group comprised of lecturers of 8 leading medical universities in the country has been established to implement the following recommendations: <ul style="list-style-type: none"> Develop teaching and methodological guidelines for lecturers, students and trainees; Consistently introduce topics on immunization and cold chain into curricula, depending on specialization and grade; Define a list of supplementary literature and develop teaching methods for lecturers
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated changes in technical assistance 11	<p>Next activities for this objective include:</p> <ul style="list-style-type: none"> Purchasing <ul style="list-style-type: none"> Forklifts, platforms and pallets for all cold chain stores; Refrigerator trucks - 18 pcs; Minivans - 206 pcs (TBC after final cost of construction is available); Shelves for dry storage areas in all cold chain stores; T-monitoring system; Furniture for logistician's office; Devices for wireless internet; <p>Further activities to strengthen pre-service and in-service training include:</p> <ul style="list-style-type: none"> Conduct a training for university professors in concerned departments; Prepare handouts: <ul style="list-style-type: none"> - SanPIN - Immunization calendar (posters, banners) - Electronic versions of workshop materials - Teaching guide <p>Additional measures to improve student training in universities and medical colleges, which are not covered by the action plan, but were mentioned during discussions with leading specialists of medical universities:</p> <ul style="list-style-type: none"> Create a simulation room in universities (equip rooms with body simulators to allow simulation-based trainings on immunization); Provide technical support – equip institutes with computers, beamers, equipment to shoot videos on immunization; Provide instructional videos for students; Engage teachers in the training courses of the Ministry of Health of the Republic of Uzbekistan and Republican Center for State Sanitary Epidemiological Surveillance.
Objective 2	
Objective of the HSS grant (as per the HSS proposal or PSR)	Improving management of PHC services (WHO)
Priority geographies / population groups or constraints to C&E addressed by the objective	<ul style="list-style-type: none"> Priority areas for 2017-2018: 9 (of 14) regions: Tashkent city, Tashkent, Syrdarya, Jizzakh, Samarkand, Navoi, Bukhara, Kashkadarya, and Surkhandarya regions. Focus group: Immunization service managers and providers, PHC medical staff, vaccinators Untrained newly hired or replaced staff
% activities conducted / budget utilization	<ul style="list-style-type: none"> 100% budget utilization
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	<p>The activities are aiming at in-service trainings for different categories of health care workers at PHC, engaged in immunisation, noting the efforts of UNICEF towards pre-service training.</p> <p>Challenges:</p> <ul style="list-style-type: none"> Optimization and restructuring of the PHC started in the mid 2017 led to an increase of vaccination points from 2000 facilities in 2017 to 3600 in the beginning of 2019.

- Access to training venue in some remote areas is limited due to a distance, transport options and weather conditions.
- While trainings were well accepted, gained knowledge maintenance should be reinforced through supportive supervision and shifting focus from inceptive mode towards peer support.

Impact:

- A cohort of untrained staff filled new positions or replaced retired staff has appeared.
- the need for sustainability and quality of education has increased

Actions taken to address challenges:

- intensified the schedule of trainings ensuring its quality in agreement with the MoH and local health authorities.
- planned activities to improve the quality of cascading trainings and their sustainability
- It is planned to integrate the capacity building system with the existing postgraduate education system

Result:

- By the end of June 35% of immunisation providers were improved capacity in safe immunisation practice. Moreover, addressing the problem of delayed vaccination for children due to false contraindications, recently approved National Guidance on false contraindications was successfully incorporated into HSS training package and used for practitioners.

Below listed activities reflecting directions of work:

A. Activities aimed at addressing problems related to vaccination practice through training of immunisation service providers (EPI managers, general practitioners, pediatricians and vaccinators / nurses)

- 60 training courses conducted in 9 regions based on the WHO MLM Guidelines for primary care specialists (EPI managers, epidemiologists, immunologists, general practitioners and pediatricians);
- 3,638 immunisation service providers trained (1,732 doctors and 1,906 nurses);
- 35% of all immunisation service providers covered by trainings

B. Improving capacity of PHC facility managers

- A special two-day training course "Organization of Immunisation Services at Primary Health Care Facilities" developed for primary health care managers and integrated into a two-week training course for primary health care managers in accordance with a Presidential Decree offered by the Department of Public Health and Health Management of the Tashkent Institute for Post-graduate Medical Education;
- Since 2018, 750 primary care managers (out of 2,200) have strengthened their capacity in the organization and safety of immunisation services at primary health care facilities

C. Introduction of supportive supervision in immunisation programme

- Introduction of supporting supervision in immunisation program in Uzbekistan began with the training of middle-level managers in basics and supporting supervision visits at the primary health care level;
- Given that the main monitoring body that ensures quality of immunisation services is the Center for State Sanitary and Epidemiological Surveillance, namely epidemiologists, managers of the expanded immunisation programme, as well as immunologists and, to some extent, pediatricians, 3 trainings were conducted for 8 regions from June 26 to July 14, 2018 (Tashkent city, Tashkent region, Syrdarya, Jizzakh, Samarkand, Bukhara, Navoi, Kashkadarya and Surkhandarya regions). At least 100 primary health care facilities have been visited and assessed in each region. Field visits

	<p>were conducted in family polyclinics, rural family polyclinics and medical facilities.</p> <p>D. Building capacity of management staff of the Ministry of Health and the immunisation program through exchange visits to countries with successful experience in implementing immunisation programme</p> <ul style="list-style-type: none"> • A study tour has been organized to Ankara, Turkey. As part of this tour, the team of specialists of the Ministry of Health (EPI manager, representatives of the Finance and Legal Departments of the Ministry of Health, as well as representatives of the Center for State Sanitary Epidemiological Surveillance) met with the Logistics and Vaccine Supply Department and the Department of Public Health of the Ministry of Health of Turkey. • The team visited central and regional cold chain stores; • The team observed immunisation service activities at various levels of health care system; • The team got acquainted with the information system of the MoH of Turkey; <p>E. Exchange of experience and discussion of pressing issues at the annual conference</p> <ul style="list-style-type: none"> • As part of the Health System Strengthening (HSS) grant, WHO and UNICEF in Uzbekistan in collaboration with the MoH of Uzbekistan, organized a two-day national immunisation conference for national and local EPI managers on November 30-December 1, 2018. Conference participants included primary health care personnel, SES staff and representatives of international agencies involved in the implementation of the National Immunisation Programme. • The 2018 Conference aimed at discussing current issues in the immunisation programme of the Republic of Uzbekistan within ongoing national reform process, defining priority measures to address them through additional funding. Conference outcomes have informed the application for additional HSS funding.
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated changes in technical assistance) 11	<p>Noting the remaining period for implementation of HSS grant, to ensure sustainability of the efforts under this objective, further activities will be on expanding trainings in remaining geographical areas, such as: the Republic of Karakalpakstan, Khorezm, Fergana, Andijan and Namangan regions aiming to cover 80% of all immunization service providers of the country;</p> <p>To facilitate further change in the immunization practices, supportive supervision activities will be conducted in 1000 healthcare facilities.</p> <p>Also, due to a size of the country, limited capacity to maintain the scale of ongoing trainings, high turnover of health personnel it is planned to further tailor an integrated tool for trainers to conduct cascade trainings;</p> <p>In order to assess the knowledge level before and after training, an electronic version of pre- and post-testing will be developed that can be also used for self-testing. Also, a database of trained staff will be made to monitor coverage of trainings and avoid duplication. It is expected that upon the completion of the grant it will be transferred to the MoH.</p> <p>Sustainability</p> <ul style="list-style-type: none"> • Develop an online independent-learning platform on immunization; • Adapt and align WHO MLM and INP courses to national training standards in post-graduate training; • Increase capacity of trainers in post graduate training centers
Objective 3	
Objective of the HSS grant (as per the HSS proposal or PSR)	Generate demand for preventive services for women and children (UNICEF)

Priority geographies / population groups or constraints to C&E addressed by the objective	All regions, with a focus on priority areas identified during the study
% activities conducted / budget utilization	98%
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	<p>Knowledge, practices and attitudes study in immunization conducted among parents. Strategic communication plan developed.</p> <p>Implementation of planned activities is on-going:</p> <ol style="list-style-type: none"> 6 video clips with key messages prepared for broadcasting on TV; A round table with key partners on major achievements and challenges in immunization conducted; Consultative meeting with managers of major media companies has been organized to improve coverage of immunization related matters; Communication materials developed for distribution among primary health care facilities; A training module on communication developed for visiting nurses; <p>Global Immunization Week conducted, including:</p> <ul style="list-style-type: none"> Key messages conveyed to reduce the spread of myths and misconceptions about immunization; Video clips involving celebrities broadcasted on TV; Campaign in social networks organized to reduce impact of anti-vaccination movement; Success stories published to increase motivation of health care workers; Innovation: live session with a pediatrician organized on Facebook to answer questions from the public; TV and radio shows on public and private channels. <p>Challenges:</p> <ul style="list-style-type: none"> Short time after implementation of communication activities may lead to low increase if parents' knowledge and skills on vaccination
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated changes in technical assistance) 11	<p>Further activities in this area include:</p> <ul style="list-style-type: none"> Engage religious leaders at the national and regional levels; Introduce a module on communication; Organize an active campaign in social networks aimed at anti-vaccination movement; Continue publishing success stories about medical staff to boost motivation; Collaborate with local media agencies to boost demand for immunization services; Support MoH in developing a communication plan on immunization related matters, including introduction of new vaccines in the country
Objective 4	
Objective of the HSS grant (as per the HSS proposal or PSR)	Strengthening data collection and reporting system on maternal and child health and preventive services (UNICEF)
Priority geographies / population groups or constraints to C&E addressed by the objective	In all regions and districts, including the national level
% activities conducted / budget utilization	8%
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed /	<ul style="list-style-type: none"> Situation analysis conducted and terms of reference drafted; Tender at global and local levels organized; 2 companies shortlisted as a result of the tender, however price offers were very high - from \$ 900,000 to \$ 4.5 million, while the estimated budget was at \$ 40,000

financial absorption	
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated changes in technical assistance) 11	<p>The terms of reference were reviewed and optimized. Despite this, there is a number of serious concerns related to VMIS implementation:</p> <ul style="list-style-type: none"> • Approximate calculation of entire process resulted in very high cost of activity comparing to planned amount (\$1,000,000 vs \$40,000); • Serious concerns related to VMIS implementation; Large amount of money required for building infrastructure (equipment for users, increase internet capacity, servers and space for it, etc); • Limited time for implementation (system might be handed over to the government in the middle of the process as it is); • Low capacity of government staff to roll it out and administer; • Budget implications for the Ministry of Health in terms of technical maintenance, administration and follow up

Status of implementation of EVM recommendations.

Overall majority of key EVM recommendations are addressed through the current HSS and CCEOP support. During the WHO technical experts mission it was recommended that country need to urgently develop contingency plan for emergency situations during vaccine transportation in line with relevant EVM SOP.

4.2 PERFORMANCE OF VACCINE SUPPORT

Coverage with IPV vaccine equaled 99.4%, in some areas such as the Republic of Karakalpakstan this indicator was at 98.3%, while in Khorezm and Syrdarya regions - at 98.9%. An interesting fact is that private immunization centers were found to be using polio vaccines; to ensure urgent stock usage, 500 doses of vaccines from a private center were used in immunization service sites throughout the Tashkent region. All private vaccination centers – 12 in Tashkent, one in Samarkand and Andijan, were checked for use of OPV vaccine. The IPV introduction and its uptake was successful. It should be noted, that Uzbekistan requested vaccines for missed birth cohort of 2016-17, however due to global supply shortage this cohorts remains unvaccinated.

Rotavirus vaccine: The country will switch to 3-dose Rotasiil vaccine to be administered at 2, 3, and 4 months of age. The vaccine is prequalified by WHO and has been registered in the Republic. At the end of June 2019, new vaccine Rotasiil had been firstly delivered to the country. The new vaccine will be used from August 2019. Findings from rotavirus vaccine change might be analyzed by the end of 2019.

NITAG has studied all materials related to this vaccine and concluded that its efficacy is equivalent to the 2 dose Rotarix vaccine. Though the country has managed to save around 800 thousand US dollars in terms of vaccine procurement, there are administrative costs moving from 2 dose vaccine to 3 dose vaccine as well as implications to the cold chain.

In April 2019, the Ministry of Health jointly with the Republican Center for State Sanitary Epidemiological Surveillance have prepared presentations on introduction of this vaccine at the regional and district levels. More than 8 thousand general practitioners and 6 thousand vaccinators and their substitutes, as well as 500 doctors, epidemiologists and immunologists have been trained. Space requirements for storage of vaccines have been estimated at all levels.

As Rotasiil in lyophilized will be out of the market in a few years time the government will need to re-think and decide on other products to replace Rotasiil once it is out of the market. This is a good indication that Uzbekistan requires investment and technical assistance on vaccine procurement in more comprehensive manner and establish efficient decision making practices.

HPV: The country is preparing for introduction of HPV vaccine for 9 year-old girls in October 2019. Significant amount of activities, planned as part of the WHO/UNICEF joint immunization plan with the Ministry of Health, have been implemented: action plans are defined and approved by the Ministry of Public Education and the Ministry of Health, lists and addresses of schools, responsible doctors and teachers are prepared, inter-sectoral round tables are conducted, press conferences involving WHO consultants organized, Republican seminar meeting organized, activities with bloggers

and journalists are conducted, a communication plan is being defined. Representatives of khokimiyats, makhallas, women's councils and others are involved in field works starting August 2019. Activities are being implemented to address anti-vaccination groups.

4.3 PERFORMANCE OF GAVI CCEOP SUPPORT

There have been serious changes at the district and primary health care levels in connection to the health care reforms conducted in the country in 2018 which impacted the all cold chain improvement plans including CCEOP supported components. Out of five mandatory CCEOP performance indicators, some challenges arose for reporting two of them:

- IR-C 6.0.1. CCE replacement/rehabilitation in existing equipped sites
- IR-C 6.0.2. CCE extension in unequipped existing and/or new sites

Calculation of these indicators requires assessment of CCE, as well as update of the list of existing equipment, its status and functionality. Taking PHC reforms into account it was decided to split implementation of the CCEOP in the country into several phases.

I. First phase - delivery of equipment to districts:

The operational deployment plan was endorsed by the Ministry of Health in February 2018. Purchasing of equipment was completed by UNICEF Supply Division in 2018. The equipment has arrived in the country in January 2019 and was customs cleared by the government within 4 months. This delay took place due to changes in the customs legislation in early 2019 that affected the cold chain equipment. A total of 558 refrigerators and 206 freezers have been delivered to the country as per plan. Transportation and installation will be carried out by a local company.

II. Second phase - primary level

All data, including addresses and contact persons at district sanitary and epidemiological centers and primary vaccination sites have been collected. The operational deployment plan for the second phase (primary level) was endorsed by the Ministry of Health and forwarded to UNICEF Supply Division. Currently, preparations are underway to place purchase orders for equipment. However, the amount of funds allocated for purchasing of equipment might be insufficient. Therefore, it has been decided to prioritize replacement of equipment and implement CCEOP program step-by-step. Thus, the third CCEOP stage will collect information on the branches of vaccination sites and maternity hospitals, which can be provided to the Supply Division in case of funds availability.

In the course of the project, the UNICEF Supply Division and the country office provided assistance to the government in the form of:

- On-going support;
- Transportation and free storage of containers;
- Regular communication with the manufacturer;
- Commissioning of refrigeration equipment;
- Preparation and conduct of tenders for procurement of cold chain equipment within CCOP;
- The government also carried out a number of activities within the allocated \$ 3 million:
- Construction of new 37 vaccine stores at district level completed in 2018;
- BOQ prepared for construction and reconstruction of the remaining 153 vaccine stores at district CSSES (85 new construction projects, 25 reconstruction projects, 43 capital repairs);
- Training of technical staff on handling refrigeration equipment for vaccine stores conducted;
- Letter of instruction on implementation and control of the CCOP project sent out.

However, in the course of project implementation the team has faced the following challenges:

- Due to changes in the customs legislation (obtaining a certificate of conformity), customs clearance process spanned from January to April 2019;
- Procedure for returning empty containers and railway platforms was not fully clear (in particular, the representative of the container owning company did not get in touch with the team for a long time which resulted in additional delay in returning empty containers)

4.4 FINANCIAL MANAGEMENT PERFORMANCE

WHO utilization remains high around 95%, UNICEF utilization is about 50% in 2018. However, the implementation (mostly contracting and procurement) accelerated in 2019 which increased the utilization rate of UNICEF in 2019 is above 70%. The country received PBF funding US\$1,640,000 in September 2019 and approval is pending for the HSS additional funds US\$ 4,6million.

Expenses	UNICEF	WHO
Staff and other personnel cost	177,594.3	135,490.0
Supplies (Courtesy Expenses)	1,014,339.8	20,427.0
Equipment, furniture and transport	3,915.0	25,390.0
Contractual services (incl. trainings)	2,089,816.8	431,439.0
Travel	93,796.5	97,324.0
Direct payment to partners (Programme Support Costs)	32,760.4	59,680.0
Operational and other direct payments	725,872.5	142,508.0
Total	4,410,187.2	912,259.0

4.5 TRANSITION PLAN MONITORING

The transition plan activities cover the following key objectives:

1. Conduct advocacy activities to ensure sustainable funding of the immunization program: As per plans, 2 round tables organized. One round table brought together participants to discuss accelerated customs clearance procedures and a legislative solution to the accelerated vaccine registration procedure. The second round table was dedicated to highlighting achievements in the immunization program and pointing out existing challenges.
2. Regular participation of the representatives of the Ministry of Health of the Republic of Uzbekistan and the Ministry of Finance in international conferences as a self-procuring country.
3. Selection of an international specialist to support the Ministry of Health of the Republic of Uzbekistan in improving data collection and analysis is in progress.
4. Support development of resource mobilization plan and implementation: Due to late start of the Transition Grant activities the capacity building activities (including development of the resource mobilization plan) has been conducted in 2018 using other funding sources. Resource mobilization activities will be implemented before end of TP period (2019-2020).
5. Building capacity of NITAG: 2018 NITAG funds were planned to be utilized to support participation of Uzbekistan NITAG Chair, members and representatives of NITAG Secretariat in WHO Regional Program Managers Meeting and in a meeting of European Technical Advisory Group. However, these meeting were postponed until 2019. Therefore, the utilization of funds allocated to support these activities was postponed until 2019 accordingly.
6. Support in design and printing of home-based vaccination cards: Development of home-based vaccination cards is ongoing. By March 2019 two versions of the home-based vaccination cards were developed. As soon as final version will be approved MoH, the country will develop an action plan on scaling-up introduction of the home-based vaccination cards in 2020.
7. Support in upgrading immunization website: Website is upgraded and available in two languages at www.privivki.uz
8. Support in introduction of collaborative agreement procedures for registration of WHO prequalified vaccines: Issues faced by country go beyond the registration procedure, so it is important to make sure that the proposed intervention will address the existing issues and bottlenecks. Subject needs to be revisited jointly with HTP unit and HQ colleagues. Activity is re-scheduled for Q2-2019. Planning and preparations for in-country mission to assess the problem are ongoing.
9. Conduct a review of the immunization program completed in 2018.

4.6 TECHNICAL ASSISTANCE (TA) (PROGRESS ON ONGOING TCA PLAN)

The TCA for 2018 included the following objectives:

- Further improve the planning and budgeting tool for annual forecast and costing of vaccine procurement. The tool was adapted to reflect the comments and suggestions of the Ministry of Health. The activity was implemented between October 2018 and January 2019.
- The CCEOP operational deployment plan for district level was developed jointly with the Ministry of Health of the Republic of Uzbekistan, endorsed and forwarded for subsequent procurement to the UNICEF Supply Division;
- Conduct a quick assessment of the HR capacity in supply chain, identify gaps and develop an action plan. This activity was completed in August 2018 . The assessment generated key evidence and relevant information on the situation of the workforce for health and immunization supply chain management in Uzbekistan. The assessment revealed that there is a need for long term and strategic planning for country's supply chain and maintenance plan. The strategic plan should look into the all aspects of the supply chain in the country (not limited to immunization program), its management and coordination. Under the TCA 2019 there are efforts to support the supply chain strategy and action.
- In-country missions to assess the AEFI system and support development of the national AEFI guidelines are conducted. National AEFI manual is developed and endorsed. 18 National level experts trained on AEFI surveillance and AEFI causality assessment on 28 Oct-02 Nov 2018.

The TCA grant for 2019 includes the following objectives:

- Institutionalization of the tool and user manual/methodology for annual forecasting and costing of vaccine procurement is ongoing.
- The CCE operational deployment plan was developed jointly with the Ministry of Health of the Republic of Uzbekistan, endorsed and forwarded for procurement to the UNICEF Supply Division.
- Hiring of a professional to develop a national supply chain strategy and action plan is in progress;
- Developing a training module on logistics and procurement for subsequent piloting in educational institutions of the health care system is in progress.
- Assess the impact of health care reforms on immunization program. This activity was postponed to the first quarter of 2019 and is ready to be launched in May 2019.
- Hiring a specialist to carry out inventory listing and define maintenance plan for all cold chain equipment is in progress.
- Collection of rotavirus and paediatric diarrhoea surveillance data is ongoing. The existing rotavirus surveillance platform continues to be leveraged to identify causes of severe pediatric diarrhea in Uzbekistan to assist the NITAG with evidence for the future introduction of vaccines in development. Country results were presented at the 13th International Rotavirus Symposium in Minsk, Belarus in August 2018 and capacity building was provided at a 'hands-on' capacity building workshop on the analysis and use of rotavirus surveillance data in 2019. Preliminary paediatric diarrhoea surveillance results indicate that rotavirus remains the leading cause of paediatric diarrhoea requiring hospitalization in Uzbekistan. Norovirus, *shigella*, astrovirus, and sapovirus are the next most common causes. Continued monitoring of gastroenteritis pathogens will facilitate decision making by NITAG.
- EVM IP Recommendations integrated into the CCEOP, HSS, TCA and transition grant support. FU mission on IP implementation conducted in April 2019.
- 46 National experts trained during training of trainers on vaccine management SOPs conducted on 19-23 Nov 2018.
- Sub-regional capacity building and planning workshop on new EVM2 assessment and improvement planning tools is postponed as EVM 2 tool is not ready for implementation. Funds to be reprogrammed (starting implementing TCA 2019 activity "developing requirements for the web-based cold chain management system) and the activity will be further implemented in Q1-2020 using TCA 2019 funds.

5 UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Priority action point	Activity	Current status
Management strengthening and improve	1. Assessment of EPI program management capacity	1.GAVI developed a TOR for consultant to do the assessment and move forward, however MOH/EPI did not agree to implement this activity later on (to be funded by the Gavi Secretariat)

efficiency of program management	2.Action plan for the review of the immunization program	2.EPI review conducted and recommendations provided to ICC.
	3.Staffing support	3.Republican SES established logistics unit. Continuous capacity building for existing staff
	4.Strengthening NITAG role	Participation of Uzbekistan NITAG Chair, members and representatives of NITAG Secretariat in WHO Regional Programme Managers Meeting and in a meeting of European Technical Advisory Group planned for October 2019
	5.Strengthening ICC functions	This activity was conducted by One23 consulting company, completed and achieved
	6.Assessment of the impact of primary health care reforms on the immunization program	Selection process of the company to conduct the Assessment of potential effects of healthcare reforms to Immunization program is completed. The selected company started the assessment in summer of 2019.
Sustainability	Capacity building in vaccine procurement, budget planning and procurement needs calculations, plus the revision of the 3-year budget plan and the institutionalization of the budgeting support (see supply chain as per the maintenance plan)	The activity conducted by UNICEF, and UNICEF SD. There is an agreed unified tool developed for forecasting and budgeting for vaccine procurement. A protocol is developed for institutionalizing the process between MOF and MOH.
	Advocacy for attracting domestic funds - a higher-level event, annual, resource mobilization	Advocacy meetings organized for key stakeholders to discuss current issues, challenges and achievements in immunization program
	The consequent expansion of the planning and budgeting tool to include the reporting module and the module for calculating the cost of cold chain equipment maintenance	Vaccine budget and planning tool is successfully used by the partners for calculation of annual vaccine needs and budget; the tool was elaborated to include the cold chain equipment maintenance cost.
	Development and adoption of SOPs on the procurement planning process	46 National experts trained during training of trainers on vaccine management SOPs conducted on 19-23 Nov 2018. SOPs are ready for nationwide scale up.
	The State budget allocation for immunization programme to include: •Cost of cold chain maintenance at all levels •increased utilities cost for cold chain facilities	Revision of 3-year vaccine procurement budget plan is ongoing
Supply chain	Drawing up the cold chain equipment maintenance plan	UNICEF: development of inventory list and cold chain equipment maintenance plan is conducted through TCA 2019. It is expected that international expert will develop the list of existing and new equipment and make maintenance plan relevant to the model and manufacturer of cold chain equipment. These data will be used for elaborated vaccine planning and budgeting tool. Due to recent reforms, there is a need to conduct a thorough inventory of existing cold chain equipment to include into maintenance plan.

Data	Transition plan for supporting of CCEOP implementation	CCEOP implementation is supported through TCA activities. Funds shortage is addressed through PBF funds: \$1,640,000 to be allocated to the country level.
	Action plan for rapid assessment of human resources in the supply chain	This assessment conducted identified a number of gaps and shortage in human resources in the supply chain. Key recommendations are addressed through TCA 2019 such as development of Supply chain strategy and plan of action for further improvement
	Continuation of technical assistance in CCEOP implementation	Due to on-going reforms in healthcare, it was decided to split CCEOP implementation to several phases: district level and primary level. Procurement of cold chain equipment was completed for district level in 2018, equipment arrived, was cleared and started being distributed in 2019. The second phase has been started by sending signed by MOH ODP to UNICEF Supply Division for procurement.
	Assessment of effective vaccine management and development of an action plan for improvement	WHO technical officer on EVM is visiting the country once per 6 months and conducting review of the EVM improvement plan. Latest visit held in April 2019. Results of the review consolidated in ppts and will be included into JA report.
	Continuation of procurement capacity improvement	30 representatives from MOH, Republican and regional SES, medical supplies procuring agencies were trained during procurement workshop where they improved their knowledge on local custom laws and regulations related to vaccine and medical supplies, learned about procurement through UNICEF, and improved the skills on how clear vaccines in custom office
	Piloting of the module in the planning and budgeting tool for the cost of cold chain equipment maintenance	The piloting of this module will start by the end of 2019 and is planned to be used in 2020 for calculating 2021 budgetary needs
	Possible further procurement of CC supplies for the primary care level facilities	Allocation of PBF funds allowed to start procurement for CC equipment at primary level
	Continue Surveillance of newly introduced vaccines	WHO continued to provide overall technical assistance for rotavirus surveillance and pediatric diarrhea surveillance, procured the WHO recommended enzyme immunoassay (EIA) kits to detect the rotavirus antigen, and provided logistics assistance for the external quality assurance (EQA) and external quality control (EQC) programs
	Strengthen AEFI Surveillance	AEFI Surveillance guidance developed in line with WHO recommendations. National expert group for AEFI surveillance established and trained on updated AEFI principles and on conduction of causality analysis. Vaccine Crisis communication guidance and plan developed. Cascade trainings on the new AEFI guidance included into the capacity building component of the HSS grant.
	Conduct Data quality review	Postponed to the 2020 due to busy schedule of the MoH.
	Development of the Roadmap for data quality review findings	Postponed to the 2020
	Improve target population estimates;	Postponed to the 2020
	Development of analytical functions of current information system	Postponed to the 2020
	MICS 2020	Currently, President Decree was issued to support MICS in Uzbekistan and Cabinet of Ministers decree is expected soon. The data collection will be conducted in summer 2020, so first draft data will be available by November 2020. Normally the MICS survey (from planning to the report) takes 2 year. Since late 2018,

Vaccine Specific support		<p>UNICEF has started the MICS survey actual planning. Getting the lessons learnt from previous MICS survey, to ensure having reliable data, it is essential to secure political commitment from the highest level and the actual financial contribution from the government. As of now the following results were achieved:</p> <ul style="list-style-type: none"> • Firstly, Presidential Resolution “On additional measures to ensure the open and transparent governance and strengthening statistical capacity of the country” on April 2019 was adopted that re-enforced commitment of the Government of Uzbekistan to MICS implementation at the highest level. • Secondly, endorsed by Cabinet of Ministers, we established MICS Steering Committee and Technical Committee which are responsible for overall MICS survey coordination and implementation led by two Deputy Prime Ministers. • Thirdly, government commitment was obtained to contribute/cost-share to the MICS budget. <p>Therefore, institutional and legal framework for MICS implementation is set up. The MICS survey is a process of capacity building for government in collecting, analyzing and reporting data. The training for staff from the State Committee on Statistics (SCS) on MICS survey design will be started prior to collection phase. Sampling framework was developed jointly with government. Currently, development of MICS Country Survey Plan (CSP) and customization of MICS questionnaires are going on. Next year, numerous MICS trainings will be conducted followed by field work and reporting.</p>
	HPV vaccine introduction	<p>Ontrack - Round Table to increase awareness about the burden of disease caused by the human papillomavirus in Uzbekistan and to present information on the world experience in introduction of HPV vaccine was carried out on 14 February at the MoH.</p> <p>Road Map for the introduction of HPV vaccine in the framework of Cooperation of the Ministry of Health and the Ministry of Public Education of the Republic of Uzbekistan was adopted in April 2019.</p> <p>Communication Plan for HPV vaccine introduction was developed based on results of formative research and main activities discussed with WHO, MoH and other Government partners. Communication materials for different target groups in line with communication plan are being developed in cooperation with the WHO and MoH to launch them by the end of August 2019.</p> <p>IPC Module developed and integrated into the Program of trainings for teachers and health workers.</p> <p>Training Plan to train 30,000 teachers and 10,000 medical personnel will be developed and implemented starting from August 2019.</p>
	Improving vaccination by preventing false medical exemptions	<p>National guidance on false contraindications was developed and approved by MoH for official use in pre and in-service education. 400 medical workers of Tashkent city including neurologists were trained using that guidance. Module on contraindications also included into training package of the HSS capacity building component.</p>
	Immunization in practice modules adaptation	<p>Implemented. Adopted modules are used for capacity building component of the HSS grant.</p>
	Support for studying the burden of typhoid infection	<p>n/a</p>

Demand Generation	Introduction of collaborative procedures for vaccines registration	Issues faced by country go beyond the registration procedure, so it is important to make sure that the proposed intervention will address the existing issues and bottlenecks. Subject needs to be revisited jointly with HTP unit and HQ colleagues. Activity re-scheduled for Q2-2019. Planning and preparations for in-country mission to assess the problem ongoing
	Continuation of support for the promotion of HPV information	Press conference on HPV introduction was conducted on 12 March 2019. Information about HPV introduction was presented during annual conference for Oncology in May 2019.
	Completion of coverage estimates study and development of communication strategy and plan	KAP study was completed and its findings and recommendations were used for development of Strategic Communication plan. Implementation of activities from the plan started.
	Upgrade of the national immunization website www.privivki.uz	Implemented, website is available on test mode privivki.cms.uz
	Support in implementing communication and social mobilization plan for HPV vaccine introduction (WHO and UNICEF);	Formative research held in February 2019. Results will be presented to MoH on 20 May. Based on recommendations communication strategy and plan will be developed by 24 May 2019. Implementation of the plan will start in June 2019.

5. ACTION PLAN: SUMMARY OF FINDINGS, ACTIONS AND RESOURCE/SUPPORT NEEDS IDENTIFIED AND AGREED DURING THE JOINT APPRAISAL

Key finding / Action 1	Strengthening leadership and improving financial program management
Current response	Activities to strengthen leadership and improve financial performance included in TCA 2018 and TCA 2019
Agreed country actions	Continue support in strengthening capacity of NITAG to make evidence-based decisions on immunization; support to NITAG in making recommendations on use of meningococcal vaccines to respond to bacterial meningitis outbreaks.
Expected outputs / results	NITAG improves capacity to make evidence-based recommendations; NITAG will guide the Ministry of Health on using meningococcal vaccines to prevent / respond to outbreaks.
Associated timeline	2020
Required resources / support and TA	Target Country Assistance for 2020
Key finding / Action 2	Sustainability and funding
Current response	Targeted Country Assistance grant for 2018 and TCA 2019
Agreed country actions	<ul style="list-style-type: none"> Continuation of vaccine/cold chain maintenance budgeting support (including budget tool revision). Support in development/revision of the three-year vaccine procurement budget and potentially the 3-year budgeting template (as no new cMYP will be developed); Continue activities to perform inventory listing, develop and implement a maintenance plan for cold chain equipment; Health care reforms: health care financing (impact of mandatory insurance on immunization program), immunization program guidelines in mandatory insurance program; Continue advocacy for resource mobilization; Implement CCEOP
Expected outputs / results	State budget ensures expanded funding for immunization program without cutting funding for other sectors
Associated timeline	2020
Required resources / support and TA	Targeted Country Assistance grant for 2020 and Transition Plan

Key finding / Action 3	Supply chain
Current response	Targeted Country Assistance grant for 2020
Agreed country actions	<ul style="list-style-type: none"> • Conduct EVM-2; • Support CCEOP implementation; • Support establishment and operation of the Logistics Group (various ministries and departments) to participate in the development and implementation of the national supply chain strategy; • Support in implementation of collaborative registration processes; • Technical support in development and implementation of a web based cold chain management system (institutionalized by the end of 2020);
Expected outputs / results	<ul style="list-style-type: none"> • EVM conducted to assess current changes and evaluate ongoing reforms; • Logistics group engaged in development and implementation of the supply chain strategy; • Web-based cold chain management system developed and institutionalized;
Associated timeline	2020
Required resources / support and TA	Targeted Country Assistance grant for 2020
Key finding / Action 4	Data
Current response	Currently support around data collection and usage is concentrated around polio, measles surveillance and surveillance of the newly introduces vaccines and improving target population estimate (addressed by TP);
Agreed country actions	<ul style="list-style-type: none"> • Continue rotavirus/paediatric diarrhoea surveillance to monitor gastroenteritis pathogens to obtain evidence to support NITAG recommendations on future introduction of enteric vaccines (in development) and to continue to monitor impact of rotavirus vaccine. • Strengthen AEFI Surveillance (serious cases); • Policy guidance on immunization Information system; • Assess surveillance for bacterial meningitis for its capacity to detect and characterize bacterial meningitis outbreaks and obtain evidence to support NITAG recommendations on the use of meningococcal vaccines; • Quality of data; • Provide technical support in conducting hepatitis B serosurvey to evaluate hepatitis B vaccine impact, validate regional hepatitis B control goals, communicate hepatitis B vaccination benefits to policy and decision makers and the public.
Expected outputs / results	Improved data on immunization, vaccine-preventable disease, AEFIs. Baseline data obtained on the leading causes of severe paediatric diarrhoea requiring hospitalization in Uzbekistan post-rotavirus vaccine introduction to support evidence-based decision making on vaccine introduction in the future and data on the impact of rotavirus vaccine introduction. The country demonstrates impact of hepatitis B vaccine and obtain additional evidence to communicate vaccines benefits to the public.
Associated timeline	2019-2020
Required resources / support and TA	Targeted Country Assistance grant for 2020
Key finding / Action 5	Vaccine Specific support
Current response	HPV Vaccine Introduction – Ongoing and introduction is set for October 2019.
Agreed country actions	<ul style="list-style-type: none"> • HPV: Based on HPV Crisis Communication Plan draft generic Vaccine crisis action plan with a specification of preparedness, division of roles for timely and properly address any vaccine related crisis • Implementation of the recommendations of HPV PIE
Expected outputs / results	The action plan, tailored to the needs of Uzbekistan, for an immediate response to vaccine crises events, including unwanted events which are being connected with vaccination (e.g. adverse events following immunization), changes in the

	immunization programme (e.g. introduction of new vaccines) or public and media debates on vaccination (e.g. social media stories, critical media reports).
Associated timeline	2020
Required resources / support and TA	Will use reprogrammed TP funds
Key finding / Action 6	Service delivery
Current response	
Agreed country actions	<ul style="list-style-type: none"> • Assessment of waste management; • Service delivery: delayed vaccination/timeliness of vaccination/contraindication issues. • Provide technical support in conducting evaluation of timeliness of hepatitis B birth dose and based on results of the evaluation, prepare trainings for maternity hospital staff
Expected outputs / result	<ul style="list-style-type: none"> • Improved timeliness of hepatitis B birth dose to ensure the effectiveness of hepatitis B vaccination • Strengthen vaccine management system
Associated timeline	2020
Required resources / support and TA	TCA 2020

1. JOINT APPRAISAL PROCESS, ENDORSEMENT BY THE NATIONAL COORDINATION FORUM (ICC, HSCC OR EQUIVALENT) AND ADDITIONAL COMMENTS

The Joint Appraisal was conducted in May 15-17, 2019 with participation of leading specialists from the Ministry of Health, the Republican Center for State Sanitary and Epidemiological Surveillance, leading pediatricians, neuropathologists, oncologists, as well as representatives from GAVI, WHO and UNICEF (see Appendix B for program and list of participants).

Upon completion of the joint appraisal mission, GAVI, UNICEF and WHO representatives held a number of separate meetings with representatives of the Ministry of Finance, the Senate, the Parliament, the Ministry of Innovation, etc. In the course of these meetings, the participants presented the outcomes of implementation of GAVI projects, and discussed the following topics: a) introduction of HPV vaccine; b) ongoing reforms in the public health care system; and c) replacement of Rotarix with Rotasiil vaccine. During the meetings, GAVI, UNICEF and WHO representatives shared some facts and experience of other countries in similar situations, as well as highlighted potential issues and challenges that the government might face in the near future.

2. ANNEX⁶: COMPLIANCE WITH GAVI REPORTING REQUIREMENTS

	Yes	No	Not applicable
End of year stock level report (due 31 March)			
Grant Performance Framework (GPF) * reporting against all due indicators	X		
Financial Reports *			
Periodic financial reports	X		
Annual financial statement	X		
Annual financial audit report			X
Campaign reports*			
Supplementary Immunisation Activity technical report			X
Campaign coverage survey report			X
Immunisation financing and expenditure information			
Data quality and survey reporting			
Annual data quality desk review	X		
Data improvement plan (DIP)			X
Progress report on data improvement plan implementation			X
In-depth data assessment (conducted in the last five years)			X
Nationally representative coverage survey (conducted in the last five years)			X
Annual progress update on the Effective Vaccine Management (EVM) improvement plan	X		
CCEOP: updated CCE inventory			X
Post Introduction Evaluation (PIE) (specify vaccines):	X		
Measles & rubella situation analysis and 5 year plan			X
Operational plan for the immunisation programme	X		
HSS end of grant evaluation report			X
HPV demonstration programme evaluations			X
Coverage Survey			X
Costing analysis			X
Adolescent Health Assessment report			X
Reporting by partners on TCA	X		

⁶ Confirm the status of reporting to GAVI, indicating whether the following reports have been uploaded onto the Country Portal. **It is important to note that in the case the key reporting requirements (marked with *) are not complied with, GAVI support will not be reviewed for renewal.**