



**Report to the
GAVI Alliance Board**
16-17 November 2011

Subject:	Updated long term financial forecast
Report of:	Barry Greene, MD, Finance and Operations
Authored by:	Tony Dutson, Senior Director, Finance & Chief Accounting Officer
Agenda item:	05
Category:	For Guidance/Discussion
Strategic goal:	Alliance operations

Section A: Overview

1. Purpose of the report

- 1.1 This paper informs the Board of the updated GAVI financial forecast for 2011-2016 (Version 4.0Fb).

2. Recommendations

- 2.1 For information only.

3. Executive summary

- 3.1 The updated GAVI financial forecast incorporates the latest demand estimates and funding decisions taken to date¹. The level of resources reflects the results of the 13 June 2011 Pledging Conference and subsequent follow-up with donors, and foreign exchange rates at 30 September 2011.
- 3.2 The financial forecast has been extended through 2016 to provide visibility through the next five calendar years, which is required by the Programme Funding Policy for the endorsement and approval of new programmes in 2011.
- 3.3 **Expenditure of US\$ 9.3 billion** is forecast for 2011-2016. This includes US\$ 7.7 billion for the period 2011-2015, which is larger than the February 2011 estimate of US\$ 6.8 billion (for 2011-2015) mainly because of the magnitude of demand from the new proposals recommended by the IRC in July 2011. The total of US\$ 9.3 billion comprises:

¹ Including the funding decisions that the Executive Committee will consider for approval in November 2011.

- (a) US\$ 5.4 billion for existing programmes and their extension through 2016. This includes provision for the opening of the envisaged new vaccine windows², but not for any other new vaccines.
 - (b) US\$ 1 billion for Business Plan costs in 2011-2016.
 - (c) US\$ 2.9 billion for projected demand from new programmes through 2016 (to be considered for approval in the future).
- 3.4 **Qualifying Resources** amount to **US\$ 9.1 billion** for 2011-2016. This includes an allowance for further contributions from new and existing donors who have not yet pledged for all of those years (in accordance with the Programme Funding Policy). Resources as currently forecast are 3% less than the US\$ 9.4 billion per the previous forecast (provided to the Executive Committee in September), due mainly to movements in exchange rates since the London Pledging Conference³. As and when donors confirm the amount and timing of each contribution tranche, non-US dollar amounts will be hedged where feasible to eliminate subsequent fluctuations in their US dollar equivalent amounts.
- 4. Context**
- 4.1 See sections C, D and E.
- 5. Next steps**
- 5.1 An updated financial forecast will be provided to the next meetings of the Executive Committee and the Board.
- 6. Conclusions**
- 6.1 With Qualifying Resources of US\$ 9.1 billion, expenditure through 2016 for all existing programmes and Business Plan activities estimated at US\$ 6.4 billion is fully covered. Based on current estimates, demand from new programmes to be considered for approval in the future is forecast at US\$ 2.9 billion through 2016; this would require additional resources of US\$ 0.3 billion⁴ for 2016.

² New vaccine windows: for Measles-Rubella, Human Papillomavirus (HPV), Japanese Encephalitis and, from 2018, Typhoid. Subject to adjustment based on PPC recommendations.

³ Qualifying Resources in this forecast include the US dollar equivalent values of pledges in other currencies based on the foreign exchange rates of 30 September 2011. Previous forecasts were based on the 10 June 2011 exchange rates used for the London Pledging Conference.

⁴ US\$ 279 million, rounded to US\$ 0.3 billion.

Section B: Implications

7. Impact on countries

- 7.1 The new visibility on resource availability through 2016 will enable countries to advance their immunisation plans with greater confidence.

8. Impact on the Business Plan / Budget / Programme Financing

- 8.1 The forecast indicates GAVI's programme funding capacity through 2016.

9. Risk implications and mitigations

- 9.1 See Section C.

10. Legal implications

- 10.1 None

11. Consultation

- 11.1 The Strategic Demand forecast is produced by the AVI Team with the demand forecasts for Pneumococcal, Rotavirus and Pentavalent vaccines being reviewed and endorsed by the AVI Management Team.
- 11.2 The expenditure estimates within the forecast have been reviewed by the Audit and Finance Committee on the 28 October 2011 and the Executive Committee on the 15 November 2011.

12. Gender equality implications

- 12.1 None

13. Implications for the Secretariat

- 13.1 The additional new programmes will increase Secretariat activity.

Note: In tables throughout this paper that include rounded numbers, the constituent numbers may not sum to the total because of rounding.

Section C: Country demand in 2011-2016

14. Expenditure estimate

14.1 Country demand⁵ for GAVI support and associated costs is currently estimated to require cash outflows of **US\$ 9.3 billion** in the period 2011-2016, as summarised in Figure 1. Of this:

- (a) US\$ 8.3 billion is for direct programmatic support through GAVI’s vaccine and cash-based programmes (see 14.2);
- (b) US\$ 1.0 billion is estimated for Business Plan costs over the six years, for programme implementation and mission support activities by GAVI partners and the Secretariat. The annual amounts are subject to approval by the Board each year.

Figure 1: Summary of Expenditure 2011-2016

Cash flow basis	Existing Programmes pre Sep 2011		New Programmes endorsed by EC on 26 Sep 2011		New Programmes considered by EC on 15 Nov 2011		Estimate for future demand from New Programmes			Total		
	US\$ million	Endorsed	Prov. for Extensions	Endorsed	Prov. for Extensions	New Requests	Prov. For Extensions	Conditional Approval	Prov. for Extensions		Balance of Demand	
Programmes:												
Penta		1,341	363	150	47			23	13	81	2,018	24%
Pneumo		1,257	363	663	160			506	134	418	3,501	42%
Rota		67	14	215	73			56	15	218	658	8%
Other vaccines		198	15	47	12			-	-	653	925	11%
Total Vaccine Programmes		2,863	754	1,076	292	-	-	584	162	1,370	7,101	85%
Cash-based Programmes		368	2	24	-	24		7	-	788	1,213	15%
Total Programmes		3,231	756	1,099	292	24		592	162	2,158	8,314	100%
Business Plan		302	721	-	-	-		-	-	-	1,022	
Total Expenditure		3,533	1,477	1,099	292	24		592	162	2,158	9,336	
		\$5.0 bn		\$1.4 bn		\$0.02 bn		\$2.9 bn			\$9.3 bn	
		Existing: \$6.4 bn						New: \$2.9 bn				

14.2 Of the **US\$ 9.3 billion** expenditure forecast for 2011-2016:

- a) US\$ 6.4 billion is for existing programmes that have already been endorsed by the Board or the Executive Committee, including a provision for their extension through 2016, and for Business Plan activities through 2016.
- b) US\$ 24 million is for the new Health Systems Strengthening programmes recommended for approval by the Health Systems Funding Platform IRC in September 2011 which will be considered by the Executive Committee in November 2011.
- c) US\$ 2.9 billion is for future demand through 2016 from potential new programmes. This includes US\$ 0.6 billion for proposals that have been

⁵ Country demand based on the Adjusted Strategic Demand Forecast version 4.0, issued in August 2011. Annex 1 provides a summary of GAVI’s forecast estimation methodology.

conditionally recommended for approval by the New Proposals IRC, pending further IRC review early in 2012.

15. Demand has increased

- 15.1 The current estimates are based on the latest Adjusted Strategic Demand Forecast (version 4.0), issued in Quarter 3 of 2011. The forecast reflects the new proposals recommended by the IRC in June 2011 (with expenditure of US\$ 1.2 billion through 2015) and all other funding decisions made through September 2011, as well as those for consideration by the EC in November 2011.
- 15.2 As predicted in the July update to the Board, demand is greater than the previous forecast which was based on the February 2011 (version 3.0) of the Strategic Demand Forecast. This is mainly due to the high level of demand sought through the new proposals recommended for approval by the IRC in July 2011 and approved by the Executive Committee in September 2011. Those proposals reflect a faster vaccine uptake by introducing countries in the first year of implementation than previously forecast, accelerated timelines for introduction and the possibility for a country to introduce more than one vaccine in a given calendar year. Provision is also made for increased business plan expenses.
- 15.3 While the volume of demand has increased, reductions in vaccine prices have partially offset the cost to GAVI of meeting a higher level of demand. The overall expenditure forecast for 2011-2015 has increased by US\$ 851 million, compared to the July forecast, as illustrated below (with further details in Annex 2).

Expenditure		2011-2015				2016	2011-2016
		July 2011	Change in estimates	New Proposals	Oct 2011		
Cash flow basis	US\$ millions						
Existing Programmes		3,730	(154)	1,185	4,761	641	5,402
Business Plan		689	157		846	177	1,022
		4,418	3	1,185	5,606	818	6,424
Future Programmes		2,413	848	(1,185)	2,076	836	2,912
Total Outflows		6,832	851	0	7,682	1,654	9,336

- 15.4 The expenditure forecast includes provision for the opening of the envisaged new vaccine windows for Measles-Rubella, Human Papillomavirus, Japanese Encephalitis (and Typhoid, from 2018, reflected in Section 18), but not for any other new vaccines. Introduction of additional vaccines would further increase demand and expenditure. The estimates are based on current GAVI eligibility and graduation rules; any future modifications to these rules could have a significant impact on expenditures.

- 15.5 Reviews by the Monitoring IRC have historically resulted in the reduction of endorsed programme budgets in light of actual implementation progress; if this continued to be the case, expenditure could be less than currently estimated. The forecast assumes the absence of supply constraints which, if they occurred, would also reduce the expenditure estimate.

Section D: Resources to meet the demand in 2011-2016

16. Resources available

- 16.1 Assured resources for 2011-2016 amount to US\$ 7.9 billion. This includes confirmed direct contributions received or to be received through 2016, proceeds expected from IFFIm and AMC based on existing pledges, and a drawdown of the cash and reserve balance to US\$ 1.1 billion by the end of 2016⁶. The addition of an allowance⁷ of US\$ 1.15 billion, for further direct contributions from new and existing donors who have not yet pledged for all of those years, brings Qualifying Resources to **US\$ 9.1 billion** for 2011-16.

Figure 2: Resources Available

Resources Available	US\$ millions	2011-16
Direct contributions confirmed		4,905
IFFIm proceeds through GFA		1,580
AMC contributions:		
on Existing Programmes	1,024	
on Future Programmes	139	1,163
Investment income		145
Total inflows		7,792
Drawdown of cash & investments		117
Assured Resources		7,910
Allowance for further direct contributions		1,148
Qualifying Resources		9,057

- 16.2 2011-2015: The current value of assured resources 2011-2015 at US\$ 7.7 billion is US\$ 0.2 billion less than previously forecast (per version 4.0Fa). This reflects a reduction of US\$ 0.2 billion arising from the devaluation of various direct contribution currencies relative to the US dollar between the London Pledging Conference and 30 September 2011. The reduced valuation of direct

⁶ A cash and investments balance of US\$ 1.1 billion would provide an eight-month reserve (as is required by the Programme Funding Policy) for an annual expenditure level of US\$ 1.6 billion.

⁷ This conservative allowance, required by the Programme Funding Policy, is based on the annual average of total direct contributions currently confirmed for the three years 2012-2014, which amounts to US\$ 1.1 billion per year. The allowance is included in the financial forecast by assuming that in years where currently confirmed direct contributions total less than US\$ 1.1 billion for the year, further contributions will bring the total to that level. The Secretariat expects that this level will be exceeded.

contributions also lowers the value of the “allowance for further direct contributions” by US\$ 0.1 billion. These decreases are offset by an increase of US\$ 0.1 billion in AMC contributions, such that Qualifying Resources for 2011-2015 are now estimated at US \$7.7 billion instead of US\$ 7.9 billion in July 2011. A comparison of the resource amounts per the financial forecasts is provided below, with further details in Annex 3.

Resources	2011-2015				2016	2011-2016		
	Cash flow basis	US\$ millions	July 2011	Change in estimates	New confirmed	Oct 2011		
Direct contributions - confirmed			4,964	(175) a	90	4,879	25	4,905
Direct contributions - allowance			300	(108) b	(90)	102	1,046	1,148
IFFIm proceeds			1,480			1,480	100	1,580
AMC contributions			880	96 c		976	186	1,163
Cash Drawdown & Invest. Income			275	(15)		260	2	262
Total Inflows			7,899	(202)	0	7,697	1,360	9,057

Notes:

a & b: Impact of exchange rate fluctuations: a reduction US\$ 0.3 billion is reflected in the October forecast.

c: An additional US\$ 0.1 billion for AMC contributions arising from increased demand for pneumococcal vaccine was reflected in the September EC forecast.

17. Capacity to meet projected demand

17.1 Figure 3 below provides an overview of the resources and expenditure estimates, distinguishing between existing programmes and the demand through 2016 expected from potential new programmes in the future.

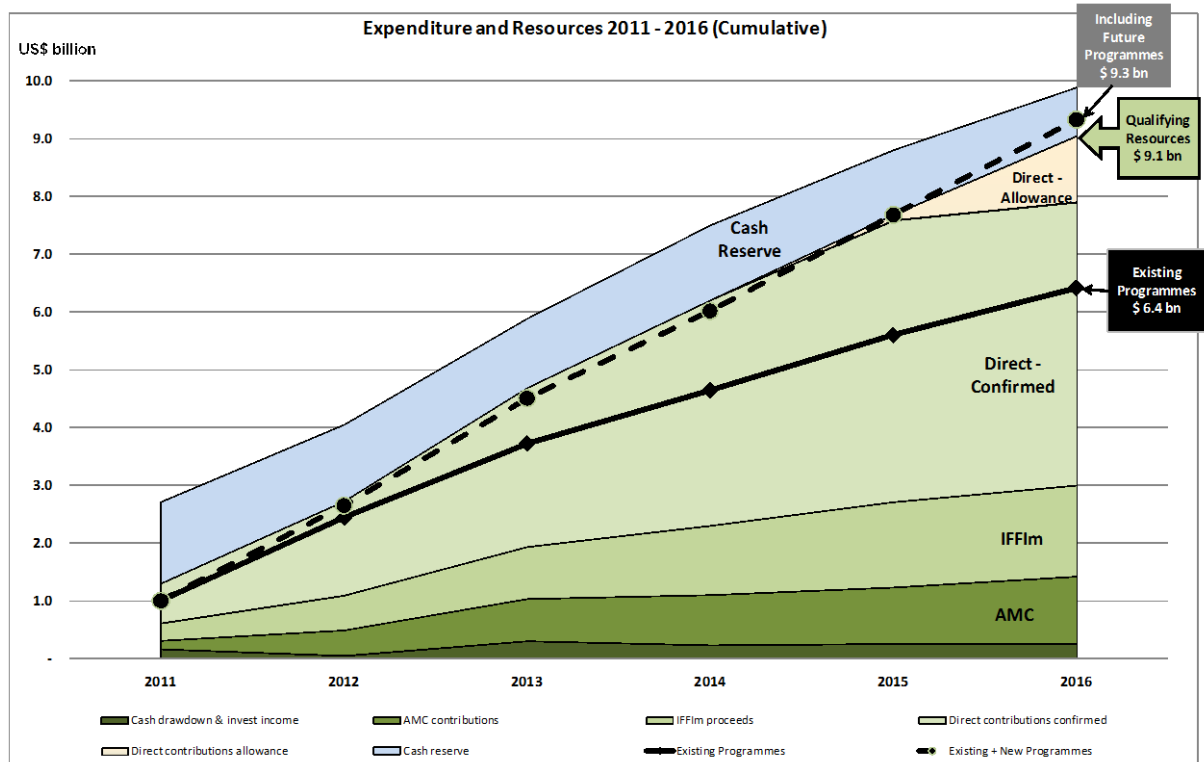
17.2 The expenditure cash flows forecast for 2011-2016 amount to US\$ 9.3 billion. As explained in section 14.2:

- (a) US\$ 6.4 billion of this amount is for existing programmes including the extension of these programmes through 2016; and
- (b) US\$ 2.9 billion is for expected demand from future programmes.

17.3 As illustrated in Figures 3 and 4, in addition to maintaining a cash and investments reserve of US\$ 1.1 billion:

- (a) Expenditure through 2016 for all existing programmes (i.e. all expenditures other than for future programmes) is fully covered by Qualifying Resources through 2013 (i.e. through the next two calendar years) and also through 2016 (as is required by the Programme Funding Policy).
- (b) Additional resources of US\$ 279 million would be needed to fully meet the current estimate demand of from future programmes through 2016. This 2016 shortfall would need to be eliminated prior to approval of new programmes in 2014, so that no shortfall arose through the following two calendar years, as is required by the Programme Funding Policy.

Figure 4: Overview of Resources and Expenditure 2011-2016

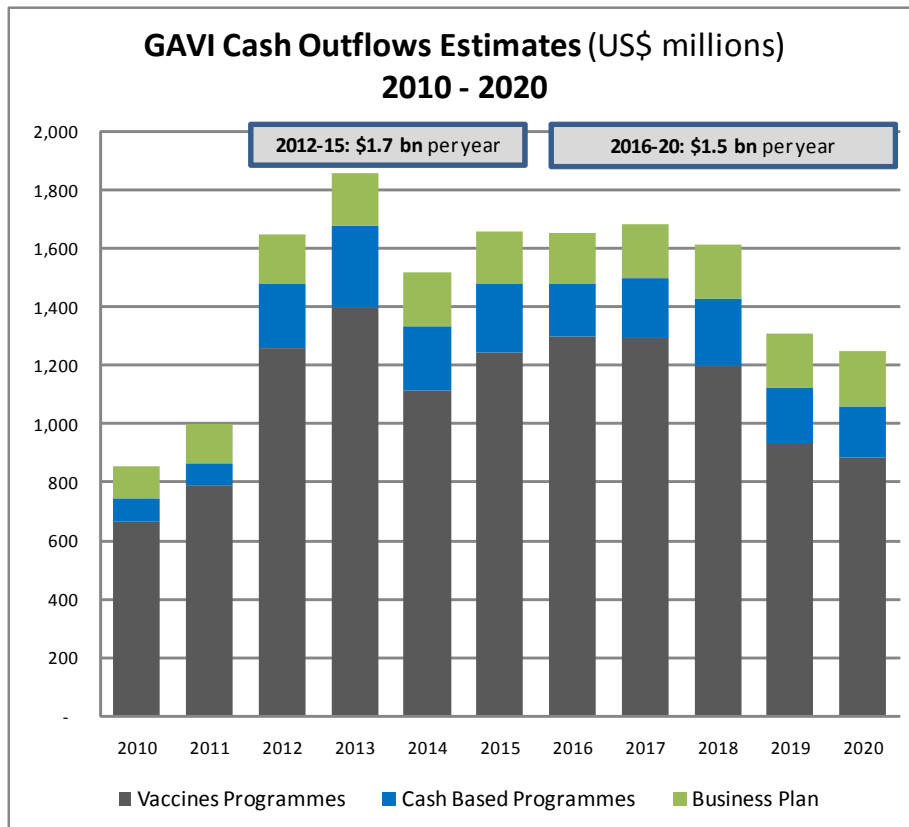


Section E: Outlook through 2020

18. Tentative estimates of demand and resources

- 18.1 Tentative estimates of demand through 2020 (see Figure 5) indicate projected outflows at an average of approximately **US\$ 1.5 billion per year** in 2016-2020. The reduction relative to the average expenditure of US\$ 1.7 billion per year forecast for 2012-2015 is due to factors such as countries graduating from eligibility for GAVI support, the acceleration of introductions into the period 2011- 2016 and the lower cost to GAVI as pneumococcal vaccine declines towards the 'tail price'.
- 18.2 These estimates include provision for the opening of the envisaged new vaccine windows for Measles-Rubella, Human Papillomavirus, Japanese Encephalitis and Typhoid, but not for any other new vaccines. The estimates are based on current GAVI eligibility and graduation rules; any future modifications to these rules could have a significant impact on expenditures.

Figure 5: Tentative estimates of demand through 2020



18.3 Assured resources from existing pledges to IFFIm and AMC and investment income would provide inflows of US\$ 0.2 billion per year in 2016-2020. If direct contributions were maintained at their 2012-2015 level of US\$ 1.1 billion per year, then in addition to that amount, further inflows of approximately US\$ 0.2 billion per year would be needed to fund annual outflows of US\$1.5 billion in 2016-2020.

18.4 As indicated at 17.3(b), additional resources of US\$ 0.3 billion (beyond the 2012-2014 level) are also needed for 2016, based on current estimates.

Annex 1: Forecast estimation methodology

Cash Outflows

Programmatic Expenditures

Vaccines

For Country Programme expenditures there are three main drivers of the expenditure estimates, demand, supply and prices.

- Demand
 - The forecasted demand used for the latest financial estimates are taken from the Adjusted Strategic Demand Forecast (“ASDF”) Version 4.0 updated to reflect the recommendations of the 2011 IRCs for all vaccines. Demand is reflected by “programmatically year” i.e. the year in which the vaccine is available for use in the recipient country.
 - India: Whilst for pentavalent vaccine the demand forecast provides for a roll-out of Penta to five States during the period 2012-18, the financial forecast continues to reflect the original board approved \$165 million commitment. For Pneumococcal vaccine, the forecast assumes that India will not introduce this vaccine before 2016.
- Supply
 - No supply constraints are assumed in the latest dose assumptions.
- Prices
 - Prices are estimated based on best available information. Added to these are assumptions for the costs of freight, safety boxes and syringes.

Investment Cases

- Yellow Fever
 - Included in these costs are estimates for vaccine stockpile, “Outbreak response” and Preventative; costs as well as operational support costs provided by WHO and UNICEF to the extent not covered in the Business Plan.
 - Estimated costs for country specific programmes have been presented separately as part of the Country Programmes section, under Yellow Fever. For 2011-13, US\$ 26.4 million for vaccine stockpile costs has been included under “Approved and Endorsed”
- Meningitis
 - Included in these costs are estimates for vaccine stockpile, “Outbreak response and Preventative
 - Estimated costs for country specific programmes have been presented separately as part of the Country Programmes section, under Meningitis A For 2011-13, US \$13 million for vaccine stockpile costs have been included under “Approved and Endorsed”

Cash Based programmes


- Cash Based Programmes - General
 - A full update of projected expenditures will be in Quarter 1 2012 reflecting the outcome of the decisions of the Board.
 - “Committed” programmes reflect all previous approvals and endorsements by the Board / Executive Committee including recommendations made by the September 2011 Monitoring and HSFP IRCs.
 - “Balance of demand” estimates reflect values consistent with 15% of GAVI support funding cash-based programmes.
- Campaign Operational Costs
 - For all vaccine campaigns, related operational costs have been calculated as US \$0.30 x the target population per country.

- Vaccine Introduction Grants
 - An introduction grant has been calculated per vaccine per country as the greater of US\$ 100,000 or US\$ 0.30 x birth cohort

Expenditures converted from “Programmatic Year” to “Cash outflow”

- GAVI’s expenditure estimates are first built on a “programmatic year” basis and then converted to cash outflows based on a set of standard timing assumptions including historical trends e.g. for vaccines the general assumption is that 20% of the programmatic year’s expenditure will be disbursed in the preceding year, 75% in the year itself and 5% in the subsequent year; for cash-based programmes, it is assumed that 50% will be disbursed in the programmatic year and 50% in the following year.

Example: Converting “Programme Year” to “Cash outflow” for Vaccines

Calendar Year	2011	2012	2013	2014	2015
Programme Year (Implementation) - Board / EC approval					
Programme Budget:		100	100	100	
					
Cash Outflow - Cash flow forecast					
- 2012 Programme budget	20	75	5		
- 2013 Programme budget		20	75	5	
- 2014 Programme budget			20	75	5
Programme Budget:	20	95	100	80	5

Business Plan

- The financial forecast reflects those estimates included in the Business Plan Budget for 2011 and a provisional amount for 2012. The 2012 Budget will be provided to the Board for approval at its meeting on the 16-17 November 2011.
- Beyond 2012, an annual cost increase of 2-3% is assumed for Partner and Secretariat budgets.

Cash Inflows

- Direct Contributions
 - These reflect direct contributions to either the GAVI Alliance or GAVI Campaign and are reflected on a cash basis.
 - Direct contributions and commitments represent received contributions and publicly announced and confirmed commitments as at 13 June 2011 updated for any further commitments and clarifications subsequent to this meeting through to the 14th October 2011. Non-USD contributions have been valued at their US dollar equivalents using the spot rate of 30 September 2011.
- IFFIm / GFA Proceeds
 - The cash inflows projected reflect “GFA to IFFIm transfers”, i.e. the monies that would be available for supporting programmes.
 - The total amount of US\$ 1,480 million projected for the period 2011-2015 reflects the maximum amount of monies that are available from IFFIm based on existing pledges plus the new pledges made in June 2011 from Brazil, Italy and the UK.
- AMC
 - AMC inflow estimates have been derived from the AMC financial model that takes into account both demand and supply assumptions etc.
- Investment Income
 - Investment income is estimated on a conservative basis that assumes overall annual returns on cash and investments of 2% to 2.5%.

Annex 2: Expenditure forecast comparison 2011-2015

Cash flow basis	US\$ millions	2011-2015		
		July 2011	Change in estimates	Oct 2011
Expenditure				
Programmes:				
Penta		1,539	146	1,685
Pneumo		2,435	346	2,781
Rota		404	95	499
Other vaccines		657	183	840
Total Vaccine Programmes		5,035	770	5,804
Cash-based Programmes		1,108	(71)	1,037
Total Programmes		6,143	699	6,842
Business Plan		689	157	846
Total Outflows		6,832	856	7,687
Timing of cashflows		(243)	259	16
Expenditure - Programmatic basis		6,589	1,115	7,703



US\$ millions	Change	Explanation
Penta	265	Accelerated vaccine introductions in countries resulting from New Proposals recommendations (includes Nigeria & Indonesia)
Pneumo-GAVI funded	240	Accelerated vaccine introductions in countries resulting from New Proposals recommendations and higher forecasted doses in key countries (includes Nigeria, Bangladesh & Niger). Some countries are still only "conditionally approved" by the IRC and therefore the new estimate reflects an optimistic assumption on rollout
Pneumo-AMC funded	80	Total Pneumo AMC funded from the period of 2010-2021 has not changed (total \$1.5B). The increase in the AMC funded portion is a result of updated assumptions surrounding the future supply agreements (based on more recent information). The updated assumptions resulted in a time shift of when AMC funds are disbursed, moving more of the funds into the 2011-2016 period in order to meet demand.
Rotavirus	106	The increase in volume is driven by changes in introduction dates as well the incorporation of actual IRC approved doses for new requests. The largest countries receiving IRC approval were Ethiopia, Tanzania & Yemen.
Measles-Rubella	222	The increase in volume is driven by an acceleration in introduction (49 countries vs. 38 countries in v3.0) during the period. Also a new target group was used - girls and boys aged 1-15 vs. in v3.0 18-35 year old females. The cost per dose assumption has also been revised reflecting the latest strategy. Forecast subject to further update based on PPC recommendations pending.
Typhoid	-	Forecast subject to further update based on upcoming Board decisions
Japanese Encephalitis (JE)	(41)	Update cost per dose assumptions from those used in the previous forecast. Forecast subject to further update based on upcoming Board decisions
Human Papillomavirus (HPV)	(28)	
All Other Vaccines	41	
sub total NVS	885	
Cash based		
HSS / ISS / IRIS / CSO	(139)	Reflects an updated implementation plan
Vaccine Introduction Grants	16	Reflects the latest new vaccine introduction plan
Operating costs - campaigns	185	Reflects the latest new and accelerated campaign introduction plans
sub total Cash Based	63	
Investment Cases (YF & MenA)	16	
Total Programmes	964	
Total Business Plan	151	Reflects latest "Business Plan" expenditure forecasts that are presented in the Business
Total Change	1,114	

Annex 3: Resources forecast comparison 2011-2015

Resources Available	2011-2015				
	per forecast:				
	V 3.0Fb	V 4.0Fa	V 4.0Fb	4.0Fb vs. 4.0Fa	
	(July Brd)	(Sep EC)	(Nov EC)		
Direct contributions confirmed	4,964	5,062	4,879	-183	-4%
IFFIm proceeds through GFA	1,480	1,480	1,480	0	0%
AMC contributions	880	979	976	-3	0%
Investment income	80	130	125	-5	-4%
Total inflows	7,404	7,651	7,461	-190	-2%
Drawdown of cash & investments	195	149	135	-14	-9%
Assured Resources	7,599	7,800	7,596	-204	-3%
Allowance for further direct contributions	300	164	102	-62	-38%
Qualifying Resources	7,899	7,964	7,697	-267	-3%

FX Rate used for Direct Contributions	10-Jun	30-Sep	
GBP / USD	1.640	1.563	-4.7%
EURO / USD	1.458	1.360	-6.7%
NOK / USD	0.185	0.173	-6.5%
DKK / USD	0.195	0.183	-6.1%
SEK / USD	0.160	0.147	-8.2%
AUD / USD	1.061	0.979	-7.7%
CAD / USD	1.023	0.968	-5.3%

Evolution of 2011-2015 resources since London Pledging Conference

	US\$ billion
London pledging meeting⁸	7.6
Additional direct contribution	0.1
Additional AMC contributions	0.1
Allowance for further direct contributions	0.2
September AFC/EC forecast	8.0
Adjust for exchange rate movements	-0.3
October AFC / November EC forecast	7.7

⁸ No allowance was included for further direct contributions in the London Pledging Conference communiqué