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Guide to produce National AIDS Spending Assessment (NASA)

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Guide to conduct a National AIDS Spending Assessment.

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The coordinators of this document welcome questions and comments, regarded as a valuable contribution to improve its contents. Feedback and suggestions may be addressed to: UNAIDS (EMP/AFE)/Resource Tracking, Resource Needs, and Costing Team (RTN). e-mail: rtdata@unaids.org or fax: +41 22 7914 798.

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National AIDS Spending Assessment (NASA)

National AIDS Spending Assessment (NASA) is the term currently used for country resource tracking activities. NASA is based on, as were its precursors, and thus consistent with, standardized methods, definitions and accounting rules of the globally available and internationally accepted System for National Accounts (SNA), National Health Accounts (NHA), National AIDS Accounts (NAA) and public finance principles applying to budgetary analysis.

In addition, there are components not currently available in these classifications in order to take into account HIV and AIDS actions beyond the health sector.

NASA provides indicators of the financial country response to HIV and AIDS and to support the monitoring of resource mobilization.

Indeed, the NASA resource tracking algorithm was designed to describe the financial flows and expenditures using the same categories as the globally resource needs estimates[1].

This alignment was conducted in order to provide information on the financial gap between resources available and resources needed as advised by the Global UNAIDS Resource Tracking Consortium in order to promote the harmonization of different policy tools frequently used in the HIV and AIDS field.

NASA provides indicators of the financial country response to HIV and AIDS and to support the monitoring of resource mobilization. Thus, NASA is the tool to install a continuous financial information system within the national monitoring and evaluation framework.

NASA is not limited to health expenditures. NASA follows the basic framework and templates of the National Health Accounts, but embrace the tracking of social mitigation, education, labour, justice and other sectors' expenditures, as delineated in the document "Resource Needs for an Expanded Response to AIDS in Low and Middle Income Countries" approved by the UNAIDS Program Coordinating Board.

NASA serves several purposes on different terms. In the short term NASA might be useful to provide information on the UNGASS indicator for Domestic Public expenditure; in the longer term, the full information provided by NASA serves the purpose of monitoring the implementation of National Strategic Plan, advance in the completion of internationally or nationally adopted goals such as universal access to treatment or care, definition of compliance with the principle of additionality required by some international donors or agencies, and others.

NASA is not limited to health expenditures. NASA tracks resources of all sectors to embody the multi-sectoral HIV response.

Information derived from NASA might serve the purpose of analyzing structural bottle-necks and absorptive capacity issues that might impede proper utilization of resources available in the provision of services and goods where they are needed.

[1] Resource needs for an expanded response to aids in low and middle income countries. UNAIDS, August 2005.

The resource tracking team in each country might want to focus their reports on the utility for their country in the policy and decision making. In addition to their potential utility in reporting indicators of progress of the UNGASS Declaration of Commitment on public expenditure, as well as to gather more timely information on the international resource flows (multilateral or bilateral) and promote the coordination of activities from all actors working in the country, in alignment with the UNAIDS promoted "Three Ones Policy".

NASA provides information relevant for decision makers by answering this simple questions: *Who finances? Who manages the funds? Who provides? What is being provided? Who benefits? And How is it being produced?*

Partial or preliminary reports can be prepared, for instance reporting only some sources of the funds, or at any time when any piece is completed. However, in principle, it is recommended that NASA be entirely conducted every calendar year.[2]

NASA allows the measurement of external aid to HIV response at country level and also allows tracking additionality.

Thus, based on the UNGAS3-4 priorities, NASA has three phases of data collection, processing and reporting; (1) total public spending from central, sub-national, local and municipal governments, as well as government managed funds including, but not limited to parastatal organizations and public social security health insurance schemes; (2) international aid from bilateral and multilateral agencies, including the Global Fund for AIDS Tuberculosis and Malaria (GFATM)[5] and private international; and (3) private expenditures, with emphasis on the households' expenditure, mainly out-of-pocket[6], and from corporations (as workplace programs).

[2] For a single occasion, and given the relative urgency, transient, of the countries to report their public expenditure in HIV and AIDS related activities by December 31, 2005 for the 2006 review, it was advised that for this time priority be given to the construction of that indicator, and subsequent phases to complete the spending assessment.

[3] UNAIDS. UNGASS – Monitoring the Declaration of Commitment on HIV/AIDS, 2005.

[4] UNAIDS. CRIS: country response information system. Joint United Nations Programme on HIV/AIDS, July 2005.

[5] The Global Fund to Fight AIDS, Tuberculosis and Malaria**.** www.theglobalfund.org

[6] Rannan-Eliya Ravi P. Household Out-of-pocket Spending in Private Expenditure. Health Policy Research Associates. Sri Lanka 2005.

1 Foreword

1.1 The Evaluation Department within the UNAIDS Executive office, along with the Country and Regional Support Department at the UNAIDS have launched a plan to build national and regional capacity for tracking financing flows and expenditures specifically for HIV and AIDS. The Resource Tracking Unit based at the UNAIDS headquarters has the objective to contribute to health and social policy analysis by formulating National AIDS Spending Assessments.

1.2 The relevant methodological concepts are described in this publication, while a conceptual guidance and a listing of classifications to describe the financial flows and expenditures related to HIV in low and middle income countries are described in the National AIDS Spending Assessment (NASA) classification taxonomy and definitions publication.

1.3 The workshops to create capacity at country level follow a regional arrangement, taking into account the uneven development of AIDS spending assessments and tools. This application helps the training of national counterparts who would as part of their everyday activities inside their National AIDS Authority organization develop and conduct a continuous information system tracking the use of financial resources for HIV and AIDS purposes, to combat the spread of HIV and to alleviate the social and financial consequences of HIV and AIDS.

2 Introduction

2.1 Unique to this guideline is the harmonization among the several HIV and AIDS related programs, interventions and activities. These are captured in the NASA classification of functions. The proposals establishing the NASA classifications have been discussed and agreed by members of the UNAIDS Global Consortium on Resource Tracking at its meeting held at UNAIDS headquarters in September 2005.

2.2 Considerable coordination efforts have been made as part of the harmonization and alignment of the tools available at country level. NASA aims at being comparable with the evaluation of resource needs providing an additional piece of evidence for strategic decision-making at the country level and globally. Also, a significant effort has been done to ensure the consistency between NASA and the NHA HIV sub-accounts frameworks supported by the World Health Organization and USAID-funded Health Systems 2020 (HS 20/20). Three documents are in the running to become the guidelines for national teams who will be developing NASA: *this summary guide on concepts and presentation of classifications, a detailed and extensive Notebook on methods, definitions and procedures for the measurement of HIV and AIDS financing flows and expenditures at country level, and, a crosswalk between National Health Accounts HIV Sub Accounts and NASA*

2.3 In order to provide reliable methods to collect data on resource flows, estimates and projections used or disseminated by .the international community, it was constituted a Global Resource Tracking Consortium comprising the UNAIDS Secretariat and Facilitators. The Consortium is a forum aimed to discuss available data and to advise on the most appropriate assumptions and methods for resource tracking work.

This guide is intended to support the technical capability to conduct the NASA exercise in the country estimation of HIV and AIDS spending assessments

2.4 With the purpose of facilitating the conduction of National AIDS Spending Assessment (NASA), a strategy to strengthen the national and regional capacity has been planned. This endeavour entails the delivery of a standard guideline as a reference document, didactic material, and training of trainers for building competence for the conduction of regional/country training workshops.

2.5 This guide is intended to support the technical capability to conduct the NASA exercise in the country estimation of HIV and AIDS spending assessments.

2.6 This is the third generation of tools to account for financial resources used for HIV and AIDS activities. The first generation was a subset or a sub-account or sub-analysis of the National Health Accounts (NHA) for HIV and AIDS activities. The second adaptation was made to include non-health activities but mainly maintaining the general shape of the NHA.

2.7 The NASA framework clearly calls for the inclusion of activities under the education, social development, welfare sectors, as well as for other activities which are clearly beyond any conceptualization of the health care service delivery system. Furthermore, NASA attempts to be the first step in the harmonization of classifications in a series of policy instruments and aims at a continued harmonization process to link the exercises of resource

tracking (i.e. recent past expenditures) with future resource needs and, potentially with at least some elements of the National Strategic Framework.

2.8 This NASA guide is presented to harmonize strategies and methodologies and to facilitate the institutionalization process, giving the national resource tracking team support and guidance at every stage of the estimation. This is a tool to assist the national team to measure the financial response to AIDS and to provide the basis for continuous resource tracking, including the production of periodical reports on a set of key indicators for decision making, public policy, follow-up and evaluation.

2.9 The resource tracking activities within the health system can be accounted as part of the NHA and it is expected that eventually the NHA provides detailed information of the "AIDS sub-accounts" and that both of these algorithms concur by providing the same estimation of the health expenditures in HIV and AIDS.

2.10 NASA methodology proposes the bottom-up and top-down estimation of the resource flows, by costing/pricing the services and goods delivered by the providers for each of the activities, or functions, and then reconstructing the financial transactions from the sources, through the financing agents, and describing the use of the resources by disaggregating the production function components and the beneficiaries of such functions.

2.11 The reconstruction of the whole financial transactions facilitates the work of eliminating double counting while describing the financial flows and the review of each of the functions might facilitate the comprehensiveness needed in the financial accounting of the National response to HIV and AIDS. This whole process could be characterized as the estimation of financing flows and expenditures in HIV and AIDS services and goods.

NASA methodology proposes a bottom-up and top-down estimation of the resource flows.

2.12 The estimation of the financing of HIV and AIDS activities in low- and middle-income countries supports the UNAIDS "Three Ones Policy"[7] by delivering strategic information for the management of the national response to HIV and AIDS coordinated by a single National AIDS Authority, provides crucial input for the framework of action and is part of a single Monitoring and Evaluation framework.

2.13 In addition to the establishing a continuous information system of the financing of HIV and AIDS, NASA is a tool to facilitate a standardized method to report monitoring indicators of implementation of the Declaration of Commitment as signed during the United Nations General Assembly on AIDS (UNGASS); the indicator on public expenditures on HIV and AIDS is to be reported by December 31st, 2005 for the 2006 review, and it is expected that this indicator be also reported in the future.

2.14 Finally, NASA could be of use in documenting about the supplementary or additionality of international donors. Nevertheless, NASA is a tool to be used by national authorities and it constitutes a tool in support of policy formulation: analysis on the countries' financial absorptive capacity, structural bottlenecks, as well as issues of equity and efficiency of the resource allocation for the expanded response to HIV and AIDS.

[7] "Three Ones" principles for the coordination of national HIV and AIDS responses: One agreed AIDS action framework that provides the basis for coordinating the work of all partners; One national AIDS coordinating authority, with a broad-based multisectoral mandate; One agreed AIDS country-level monitoring and evaluation system.

3 Resource Tracking Framework

Resource tracking

3.1 The main objective of resource tracking at the country level is to determine what is actually disbursed or spent in a country. The resource tracking process follows the money from its origin (i.e. source) down to the destination, the beneficiaries receiving goods and services. Resource tracking must in the difficult economic conditions faced by AIDS-afflicted countries rest on cost-conscious, even parsimonious methods to observe all the financial transactions.

The main objective of resource tracking at the country level is to determine what is actually disbursed or spent in a country.

3.2 Resource tracking is based on the NASA methodology to reconstruct all the financial transactions related to the national response to the HIV and AIDS epidemic. A transaction is a transfer of resources between different economic agents, following the money through the financing sources, buyers and providers and the description of its factors of the production function.

External aid measured

3.3 Earmarked donor funding occupies the centre of the stage and exerts a substantive catalyst role in the government allocative process of most recipient countries and donor practices with major impact in some countries' plans.

3.4 NASA provides a basis for tracking external resources contributed to the HIV and AIDS programmes, since earmarked donor funding acts as a strong incentive for government allocations. NASA monitors sector wide approaches as well as basket-funding practices.

3.5 Thus, NASA facilitates the monitoring of the implementation of projects using resources from initiatives such as the GFATM, and also by helping to track the use of resources to achieve the Millennium Development Goals.

Additionality

3.6 New external funds provided for specific HIV and AIDS programs are said to be additional when they lead to increased overall external funds in the economy for HIV and AIDS programs and activities without reducing public expenditures for those programs and activities.

3.7 For example, the GFATM only finances programs when it is assured that its assistance does not replace or reduce other sources of funding, either those for AIDS, tuberculosis and malaria, or under some interpretations, those that support public funding of health more broadly.

3.8 The pace of the increase in aid must be aligned with the recipient country's absorptive capacity.

Absorptive capacity

3.9 Absorptive capacity refers to critical inputs, other than financing from donor and domestic resources, which could limit the speed, efficiency and effectiveness of the application of money.8 For example, a key input for provision of care and treatment is availability of medical personnel.

3.10 Even if related, there are separate structural bottlenecks which can be described as factors or conditions that can slow progress in the implementation of AIDS interventions aimed at prevention, care and treatment. Applied to resource flows, the term bottlenecks refers to those factors or conditions that slow progress in the use of funds made available, with special emphasis on those from external donors.

Program Support

3.11 The term "Program development/program support costs" includes all the resources invested to enhance capacity for scaling up human resources and program support costs. However, there are many countries where absorptive capacity remains weak and aid increases need to be measured, with particular emphasis on the support for capacity building or capacity strengthening.

3.12 These constraints to scaling-up investments can be gradually relaxed over the medium term through appropriate interventions, such as pre-training and other education programs to create the personnel needed; other capital investments might be seen as required to improve capacity to respond to HIV and AIDS. Needs assessment can help identify these sets of interventions.

Non-health spending

3.13 The classifications based on NHA are limited to the health sector. Thus, the NASA method extends previously accepted conventions by incorporating other policy-relevant spending classes. Policy-relevant categories are added under many of the two digit headings, additional categories will include at actors' level; the ministry of labour, ministry of education and any other institution collaborating with the HIV and AIDS expanded response.

Immediate NASA antecedents

3.14 An experimental tool to estimate financial flows and expenditures at country level is the stand-alone National AIDS Accounts (NAA), using the framework of the National Health Accounts (NHA)9-10. There are detailed guidelines of the NHA and stand-alone NAA11.

[8] National AIDS Spending Assessments: absorptive capacity, bottlenecks, and out-of-pocket spending. Presented at the Sixth Meeting of the UNAIDS Consortium on Resource Tracking, September, 2005.
[9] WHO. Guide to producing national health accounts: with special applications for low-income and middleincome countries. World Health Organization 2003. http://www.who.int/nha
[10] Partners for Health Reform*plus.* December 2003. National Health Accounts Training Manual. Bethesda, MD: The Partners for Health Reform*plus* Project. Abt Associate Inc.
[11] SIDALAC. Technical handbook for estimating the national health accounts on HIV/AIDS. Fundación Mexicana para la Salud, A. C. México 2001.

3.15 The current classifications and catalogues used for NASA were harmonized with those of the OECD and the WHO/USAID/WB guide for NHA12. Also, there is software available to facilitate NASA training13, data entry, analysis and reporting of international, public and private spending.

Main sources of information

3.16 Administrative records and other recurrent reports provide a good share of the information desired to track the financing flows for HIV and AIDS, but they typically provide little information about the transactions of households, non-profit organizations, private medical insurance, off-budget programmes and external financing agencies. For this type of information, resource tracking should conduct activities for primary data collection. The resource tracking team should be prepared to manage some uncertainty and focus its attention on the priority reports. The teams should be well trained to combine "hard" financial figures with "soft" estimates and extrapolations of hard-to-measure items.

Quality of the reports

3.17 NASA's main constrain is the availability of certified information, administrative records and other reports, all of them varying largely from country to country. Thus, NASA refinement on precision is an evolutionary process and subject to continuous improvement. Early cycles may be rudimentary and lacking in detail. As the resource tracking system matures and the underlying data sources that underlie it are refined and strengthened, more detail and more aspects of the health and social system can be introduced. Therefore, resource tracking teams should select information that is most relevant and available and, as in all accounting exercises, learn by doing; assemble data, cross-check matrices, produce a report on the values compiled and evaluate the plausibility of the representation obtained.

Compliance with accounting standards

3.1 The resource tracking procedures have to be standardized to assure comparability, within and between countries. These tools use internationally accepted standard accounting methods, complemented, exceptionally, by economic costing of activities without records available (e.g. opportunistic infections; private expenditure).

3.2 Reports on AIDS accounts have shown the importance of follow a model of accounting all the HIV and AIDS expenditures and have demonstrated the relevance of including in the boundaries a systematic inclusion of non-health spending. In addition to a broader integration of strategic monitoring and planning, the enlarged scope contributes to a keener identification of the critical gap between perceived needs and actual financing.

[12] Organisation for Economic Co-operation and Development. *A system of health accounts. 2000.* OECD: http://www.oecd.org

[13] NASA-RTS. Resource Tracking System for the National AIDS Spending Assessment, 2005.

Categorizing actual spending

3.3 Actual spending includes diverse mechanisms of transaction and disbursement from financing agents to providers to acquire or contract goods and services. Each vector distribution can be analyzed by type of service, beneficiary group, geographic area, and type of facility.

Prices

3.4 The market price of a product or service represents the costs of production, distribution and marketing plus a margin. Market private providers charge the cost of the service and their profits. Households pay out-of-pocket full prices to market producers, pay fees at non-profit organizations outside the market and share subsidized cost with governments' facilities. Underneath each expense and transaction, the cost to produce goods and services is fully paid or shared by the several financing agents. Thus, as in all accounting exercises, a clear distinction should be made between fees or tariff schedules, direct and indirect cost, prices and other valuation methods.

Valuing non-market production of services

3.5 Governments, private employers, or non-profit institutions such as health care providers affiliated to religious bodies produce services -partly or wholly outside the market- and provide them at no cost or at a subsidized cost to users. Hospital services provided free of charge (or nearly free of charge) in government institutions or institutions of non-profit organizations would be valued at the cost to those organizations of producing the services.

3.6 In the case of providers that operate in essentially an unsubsidized fashion, consideration of total revenues is a good starting point for estimating the health spending attributed to them. The figure for expenditure measures the value in monetary terms of consumption of the goods and services of interest.

3.7 Where expenditure on health goods and services is being measured from market production and consumption, this may simply mean compiling information on the total amount of money paid for such goods or activities at the point of final consumption. For example, if an unsubsidized private provider has gross revenues of 1000 units from the sale of services during the year of interest, this 1000 is added to health expenditure. Because market producers must cover all their intermediate expenses, including capital goods used and the labour inputs of owners, the expenditure on final consumption reasonably represents an all-in value.

3.8 Some providers may engage in activities that fall outside the NASA boundary as well as those that lie inside the boundary; for example, community pharmacies must do non-HIV items. When possible, excluded activities should be separated from the ones to be included. This may be done through use of economic statistics such as business surveys, through an input/output model based or through consultation with knowledgeable sources.

Costs of services

3.9 Costs are typically calculated as the actual expenditure on inputs such as staff remuneration (including all benefits) and supplies. This may total more than the ministry budget figure: patients may pay user charges that are retained by the provider, or other organizations may make grants to the provider. The key figure in the valuation is the cost of providing the care, not the source of the money used to pay those costs.

3.10 The process of distributing expenditures by health status involves a top-down approach. Total expenditure of HIV is broken down for various categories and stages of disease. Data sources are primarily clinical records, cost studies, pharmaceutical market records and reports of production of services (bed-days, medical visits, ancillary services and prescriptions).

3.11 For hospitals, total expenditure is divided into five groups having clinical and economic relevance: inpatient care; outpatient care; pharmaceuticals; laboratory/diagnosis and the rest of interventions. Expenditures are then distributed into each of the four groups according to diagnosis categories. Results may be validated using direct and indirect evidence of all kinds, including statistical records from several medical establishments and data obtained from key informants.

User fees

3.12 User charges at government facilities should be included as spending to the extent that they support health facilities or programmes. The question is which entity to credit as the financing agent. In many countries, user charges for health services delivered by publicly funded health facilities are retained by the facility concerned or considered part of that facility's budget. In other countries, the fees are returned to the central ministry and are included in that budget. Regardless of the arrangement, where the fees have been paid by consumers in return for delivery of services, the household is the appropriate financing agent (for the amount of the fees).

3.13 Expenditures by government as a financing agent should be net of those fees. For example, the ministry of health operates a hospital at a cost of 1000, and that the hospital collects 100 in user charges from households. The households are the financing agent for 100 (10%) and the ministry of health is the financing agent for 900 (90%). When user fees are returned to the Ministry of Finance, it is essential that they not be included in the ministry's outlays in order to avoid double counting those expenditures. However, when the fees are retained as additional resources by providers, i.e. supplement ministry of health spending, they do not need to be subtracted from the Ministry's total.

Valuing capital assets

3.14 NASA essentially registers the amount of resources and expenses invested in capital and human resources to improve and expand the production of services. Thus, strengthening the absorptive capacity in some countries. NHA and NAA double count physical investment where the use of assets, such as hospital facilities, requires a capital consumption payment.

3.15 The resource tracking team should document to the extent possible "only the disbursements in capital during the year of the assessment". These expenditures on capital formation should be recorded for all institutions and activities within the expenditure boundary of NASA. This includes items such as new building construction or major renovations, or purchases of large equipment.

The resource tracking team should document to the extent possible "only the disbursements in capital during the year of the assessment".

3.16 Investment in health care facilities and equipment creates assets that typically are used over a long period of time. The acquisition of capital equipment and renovation of the physical plant involves the commitment of large sums of money. NASA includes the total expenditure on gross fixed capital formation during the year of the assessment.

3.17 Two distinct aspects of capital must be considered in measurement of health expenditure: gross fixed capital formation and the consumption of fixed capital. Consumption of fixed capital refers to the value of the capital assets used up for production during the current period. Typically, both market and non-market producers will use (or "wear down") some of the value of fixed capital in producing goods and services during the current period.

3.18 For market producers, this is assumed to be captured in the prices charged at the time of consumption of their goods and services, and so is already captured in the estimates of the value of their production (prices). The cost of the equipment is not charged to an expense account; it is carried on the balance sheet depreciated over the course of its useful life. In private hospitals is embedded in the price of services, in public hospitals seldom is included in the annual budget or charged as a portion of the user's fees.

3.19 For non-market producers, the value of consumption of fixed capital is added to their cost of production of services.

Stocks and inventories

3.20 The perspective of the resource tracking methods is to record the goods that are actually delivered to the beneficiaries. The goods in a warehouse or pharmacy do not represent actual consumption by the beneficiaries. Budgetary plans and commitments not disbursed, but made by financing agents, do not represent actual coverage. Estimates of spending should be adjusted for actual consumption and dispensing at the point of care (e.g. condoms and antiretroviral drugs).

NASA and NHA HIV/AIDS sub accounts

3.21 National Health Accounts is a policy tool used to track expenditures on overall health care. It is based on the International Classification of Health Accounts. Use of the framework to focus on a particular priority area is called a "subaccount."

3.22 HIV/AIDS subaccounts track health expenditures related to HIV/AIDS and are generally conducted by Ministries of Health in tandem with a general NHA estimation (for overall health). This approach allows HIV expenditures to be placed in the context of overall health care, e.g, to compute % of government health spending spent on

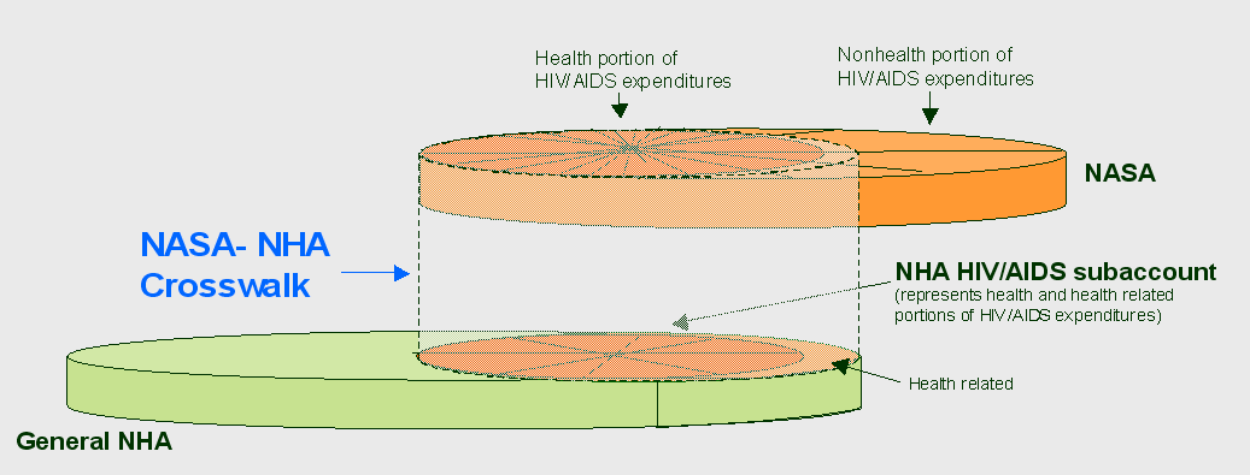
HIV/AIDS. Although focused on health spending, the subaccounts can also report non-health spending as addendum items, thus also helping to contribute to UNGASS reporting requirements.

3.23 While their scopes may have overlapping components, NASA and NHA implementation can occur in a coordinated manner to avoid redundant resource tracking efforts. By doing so, this can meet the needs of both HIV/AIDS and health care stakeholders - national and international.

3.24 The crosswalk between NASA and NHA refers to a one to one mapping of health expenditure HIV/AIDS codes. This mapping facilitates the production of NASA tables from NHA estimations and vice versa.

3.25 The most significant difference between NASA and NHA HIV sub accounts is the inclusion of non health related activities on the NASA methodology (Figure 6). Thus, NASA scope, being multi-sectoral, transcends the health related HIV response.

Figure 1 NASA and HIV/AIDS sun accounts crosswalk diagram



Resource needs

3.18 Resource needs can be estimated globally or in a country-by-country basis. The global estimation represent the total resources needed based on the best available assessment of global needs for AIDS and a rational basis for further discussion about AIDS funding

3.19 in the international arena. It is based on assumptions and modelling methods to predict future economic needs. And even if the coverage levels presented in such exercise, the analysis should not be considered as agreed targets, but as outcomes that could be expected if these resources were effectively spent. Moreover, it must be emphasized that decisions about resource allocations by donors, national governments and any other private or public AIDS programme cannot be based on such worldwide figures.

3.20 Indeed, the country planning and forecast of resources needed must be based on the individual characteristics of the country, like its epidemiology, health system

structure, multi-sectoral response, country's economy, etc. Several exercises aim at conducting an estimate of the resources needed in each country based on their specific conditions.

3.21 The link between the global and the country-specific models exists in a way that allows the comparison of both types of exercises.

3.22 NASA aims at being comparable with any of these two exercises by using the comparable categories, and thus providing an additional piece to such exercises, the empirical evidence of the program costs in the country's own past experience.

4 Scope of the resource tracking effort

4.1 NASA has three well defined stages for resource tracking reporting: (1) public spending from central, sub-national, local and municipal governments; (2) international financing from bilateral and multilateral agencies and (3) private expenditure from corporations, NGOs and households.

4.2 Public spending and external funding figures are part of the routine collection process and of the UNGAS monitoring system. Though monitoring is the routine tracking of key elements of a program and usually includes information from record keeping. Private expenditure which might require household surveys, and more resources, could be included as part of periodic evaluations dependant on the country capacity to conduct scientifically valid population and client-based surveys.

Public spending

4.3 Government data represent the main source of information and usually can be retrieved from government budgetary records. Budgetary and revenue data are available from finance ministries, finance commissions, and other auditing bodies in more detail than is published in public documents. Several reports appear each year, and an analysis is required for each one of them, tracking central, federal, state, provincial, regional and local, municipal expenditures. Especially important is to include ministries other than the ministry of health. Government budgets are typically highly structured, and often exhibit considerable stability in organization over time. The systematic compilation of such data allows its integration in the monitoring system.

4.4 Government budgetary systems may classify expenditures using a functional classification which is not consistent and not sufficiently detailed as the NASA definitions. Thus, the resource tracking team should identify which expenditures are for health and which are not, as well as which expenditures can be assigned to which NASA functions. This requires thorough documentation, not only for the replication of the work in future years, but also

to explain if the estimates of national expenditure differ from the "official numbers".

4.5 Using government budgetary records a distinction between anticipated spending, executed spending, and audited spending should be made. Budgetary estimates of anticipated spending may be subject to variations. Expenditures already executed, although more solid than budget estimates, may be subject to revision as later data becomes available. Audited accounts of actual government expenditures are the most reliable, and in theory are preferable to data on projected or non-audited spending. When data are not customarily published, for example in the form of parliamentary reports, they can usually be obtained from audit agencies.

4.6 In compiling data on government HIV and AIDS spending from budgetary records, resource tracking teams must be attentive that AIDS expenditures are not confined to the health ministry, or to expenditures already classified for administrative purposes as health. Ministries of finance frequently release expenditure data using an institutional rather than a functional classification and may omit sizeable programmes conducted through ministries of education, social development or through special boards. Resource tracking teams should have access to people with thorough knowledge of the HIV and AIDS policies and able to identify programmes that should be included in the NASA.

4.7 Collecting data from sub national authorities can present difficulties in access to data, since data must be collected separately from every governmental level of authority. This is the case when expenditures by sub national authorities are not reported in the consolidated budget reports of the central government. Many countries with decentralized governmental systems have arrangements for intergovernmental fiscal transfers. A good understanding of these arrangements and how they relate to funding of government health services is important when it is time to assign the funds to a particular financing agent. Data on the executed financial operations of social security schemes are relatively easy to obtain and may involve decentralized schemes that should be accounted for. Information is required both on the sources of revenue (to construct tables on financing sources) and on actual expenditures.

International financing

4.8 External resources include official development assistance, such as multilateral agencies, bilateral aid programmes and loan programmes, where the government is one of the parties to the agreement. Also included are activities of international nongovernmental organizations such as the Red Cross. All cash transfers should be recorded in the equivalent national currency and assistance in kind valued at some appropriate monetary value, such as the national price of the good or service involved.

4.9 Some countries require all external financing assistance to be reported to a central government agency. These reporting systems are subject to the same

completeness and reliability problems found in government budgetary records. Data are typically related to amounts disbursed in a given year. Additional data may be needed to identify the specific health components and to classify expenditures by NASA function. Budgeting rules in many countries require that international assistance to government programmes be recorded at full value in the financial accounts for the relevant programmes or departments. Financial flows should be recorded both on the revenue and expenditure side of public expenditure accounts.

4.10 External organizations incur expenditures that they do not report to national authorities or that may not be covered under formal bilateral cooperation agreements. In the case of official development assistance these unreported expenditures can include central administrative costs incurred by the external agencies themselves in administering assistance to countries, and funding to contractors who are based outside the country but provide services to the country's health economy.

4.11 Official development agencies may maintain financial control systems designed to meet the demands of their own national authorities, and there is considerable diversity in the financial data available at different organizations. Financial expenditures may be reported using different fiscal years, data may not distinguish between actual and obligated expenditures, and accounts will typically be maintained in some foreign currency.

4.12 If international assistance is significant in the country's economy, collection of this information — in aggregate and with the appropriate detail – – may involve substantial effort. In the absence of reliable routine data, a survey of external financing agencies is needed. In that survey, organizations should be asked to provide information on all projects they support, with details of annual disbursements, recipient agencies, and sufficient information to allocate the money spent among providers, functions, or target populations.

Private expenditures

4.13 There are two sources of private expenditures; households and corporations. Household expenditures are not available in statistics or other administrative data sources. There is lack of data on household spending for HIV and AIDS activities and very little is known about the importance of the household as a payer. Based on observations gathered during the 1990s in middle-income and low-income economies, household (or out-of-pocket) spending is often second only to government expenditures in terms of size and share of total health spending. Indeed, where there is no social health insurance, out-of-pocket spending can account for between one-third and two-thirds of total health expenditures. It is in out-of-pocket spending that inequalities in the financial burdens of the health care system are most likely to appear.

4.14 The most common and important source of information about households is a survey. A properly designed and conducted survey can provide valuable

details about households' spending as well as their composition and distributional characteristics. Although survey data provide the most reliable estimates for household expenditures, other sources may be of use as well. To the extent that providers collect patient payments and keep their business accounts in a way that allows those payments to be identified, these data can be a way to triangulate (cross-check) or substitute for a household survey.

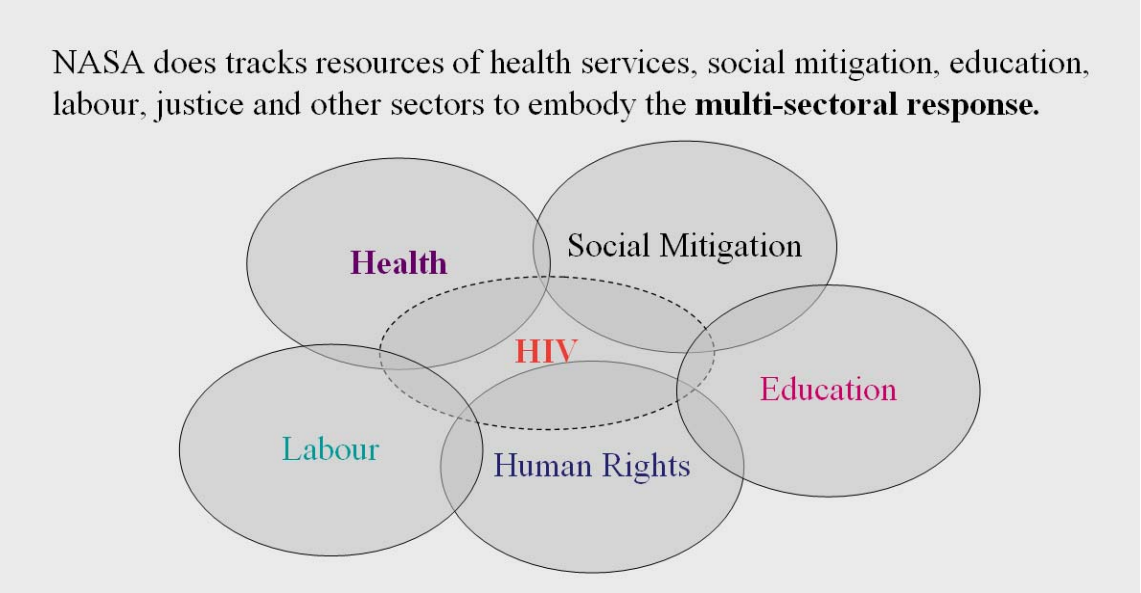
5 NASA methods

NASA boundaries

5.1 NASA is not limited to health expenditures. NASA follows the basic framework and templates of the National Health Accounts, but embrace the tracking of social mitigation, education, labour, justice and other sectors' expenditures, as delineated in the document "Resource Needs for an Expanded Response to AIDS in Low and Middle Income Countries" approved by the UNAIDS Program Coordinating Board14 (Figure 1).

NASA is not limited to health expenditures. NASA tracks resources of all sectors to embody the multi-sectoral HIV response.

Figure 2 Mapping the HIV national response



5.2 In order to conduct international comparisons, the reporting for any given calendar year, the financial transactions are reconstructed and six dimensions of each transaction are recorded or estimated: (1) financing sources, (2) financing agents, (3) functions (HIV and AIDS related interventions and activities), (4) service providers, (5)

[14] UNAIDS. Resource needs for an expanded response to AIDS in low-and middle- income countries. Joint United Nations Programme on HIV/AIDS, 2005.

components or factors of the production function (budgetary items/objects of expenditure) and (6) beneficiaries.

5.3 The transactions should be comprehensibly tracked to determine the actual reach of the beneficiary population. NASA comprise specific boundaries around the transactions related to HIV and AIDS, functions that include eight programmatic areas: (1) prevention, (2) care and treatment, (3) orphans and vulnerable children (OVC), (4) Programme management and administration, (5) human resources, (6) Social protection and social services, (7) Enabling environment (8) HIV related research.

5.4 NASA reconstructs all the transactions related to HIV and AIDS activities, showing the actual spending, consumption and delivery to the beneficiary population. Thus, NASA should report the consumption on pharmaceuticals and its actual spending (e.g. antiretroviral coverage), regardless of its budgeting, national production, total exports, purchasing, or stocks. Whereas National AIDS Accounts would show domestic expenditures on pharmaceuticals, conventional budgetary analysis may only register a budgetary line associated to drugs purchasing; each method reports different figures.

NASA principles

5.5 NASA is the systematic, periodic, multi-vectorial and exhaustive tracking of the actual spending that, coming from international, public and private sectors, comprises the national response to HIV and AIDS. The resource tracking methods are aimed to follow the money from the source up to the beneficiaries receiving goods and services.

5.6 This resource tracking must be exhaustive covering entities, services and expenditures; periodic as result of a continuing recording, integrating and analyzing, to produce annual estimates; systematic, because their categories and record/report structures must be consistent in time and comparable across countries. Other attributes include: policy relevance, consistency, comparability and standardization, all of them implicit in the basic NHA model.

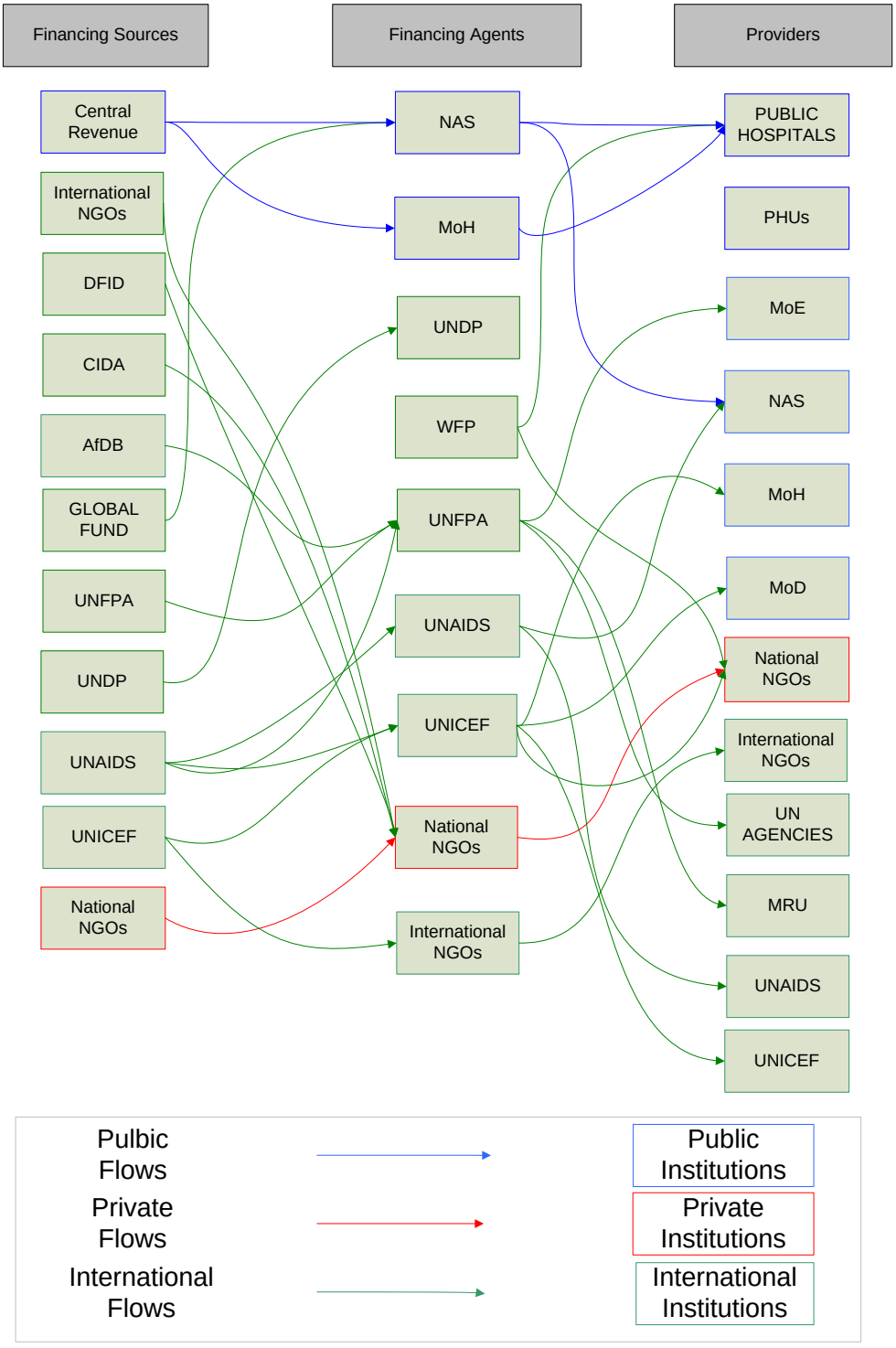
NASA is the systematic, periodic, multi-vectorial and exhaustive tracking of the actual spending that, coming from international, public and private sectors, comprises the national response to HIV and AIDS. The resource tracking methods are aimed to follow the money from the source up to the beneficiaries receiving goods and services.

5.7 NASA tracks all the spending based on a rigorous classification of the actors as well as the purposes of all expenditures conforming the multisectorial response to HIV and AIDS; a complete accounting of all spending, regardless of the origin, destination, or object of the expenditure; a rigorous approach to collecting, cataloguing, and estimating the flows of money related to all HIV and AIDS programmatic areas from prevention and care to social mitigation; and a structure of tracking resources intended for the continuous analysis of their interaction.

Financing flows

5.8 The financial flows refer to the dimension in which financing agents obtain resources from the financing sources to "purchase" the transformation of those resources into goods and services by providers (Figure 1).

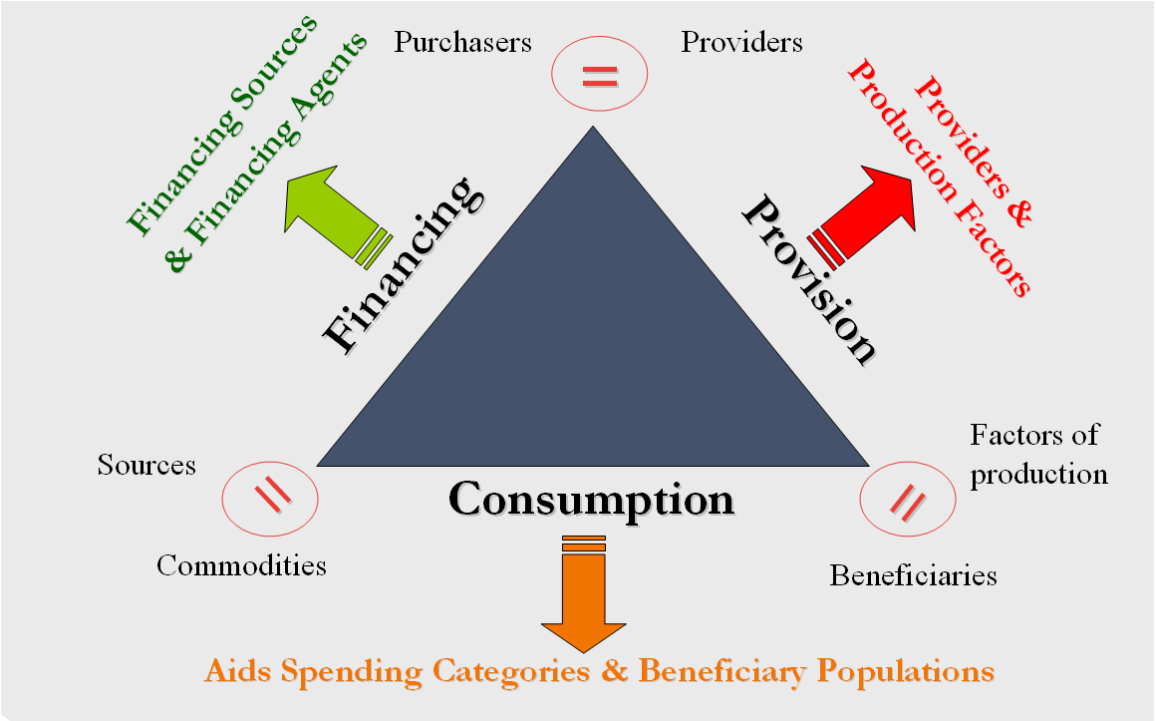
Figure 3 Mapping the HIV financing flows of the national response



NASA dimensions and vectors

5.9 The tracking of the financing flows and expenditures for HIV and AIDS require the collection of all transactions grouped in three dimensions: financing, provision and use. These three dimensions incorporate six vectors: financing, (1) sources and (2) agents; provision, (3) providers and (4) production factors (salaries, commodities, etc.); and use (5) functions (care, prevention, mitigation, education, human rights, etc.), and (6) the beneficiary segments of the population (MSM, IVDU, etc.) (Figure 3).

Figure 4 NASA dimensions and vectors:



5.10 A major advantage of the split of the financing dimension into two vectors (sources and agents) is that this allows identifying disbursements by financing sources and the analysis of additionality of the resources (external sources; bilateral and multilateral funding vis-à-vis domestic sources, such as public and out-of-pocket expenditures).

Reconciling and cross-checking the results

5.11 Since it may be difficult to maintain consistency in the relationships among various elements in the different dimensions, reconciliation is done step by step. The NASA three dimensions system has to be conciliated. When two dimensions are validated as equal, the mathematical properties are that the third is equal; e.g. (FINANCING * PROVISION) = (PROVISION * CONSUMPTION) then (FINANCING * CONSUMPTION) is verified, though, not necessarily the distribution inside the USE dimension. When the process has been completed, it is important to review the

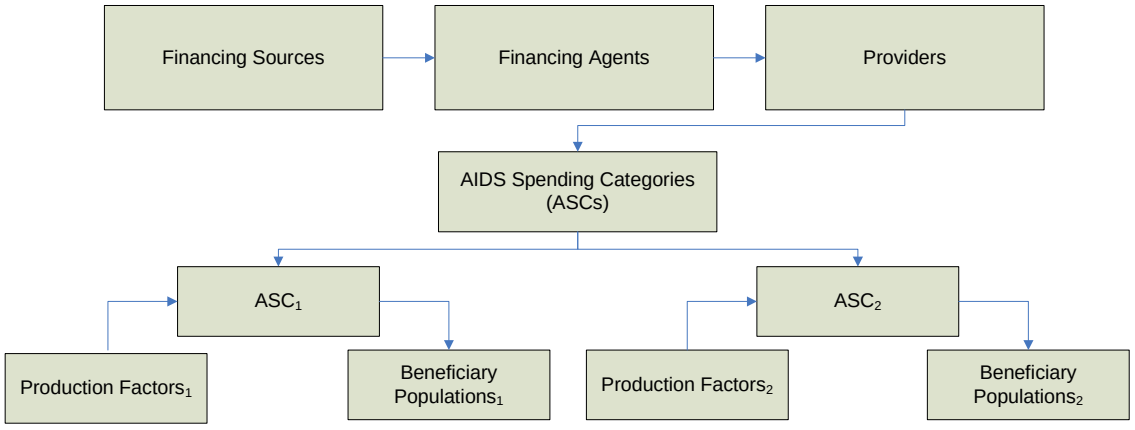
functional breakdown for each agent (and across agents) to make sure that the set of figures makes sense together as well as individually.

Constructing transactions

5.12 A transaction is a transfer of resources between different economic agents. The unit of observation to reconstruct the flows from the origin to its ends is the transaction. Central to the resource tracking work is the comprehensive reconstruction of all transactions to follow the money flows from the financing sources, through buyers and providers and finally to the beneficiaries.

5.13 NASA methodology uses this concept to reflect a the transfer of resources from a financing source to financing agent and finally to a provider of goods or services, who invests in different production factors to generate ASC intended to benefit specific beneficiary populations (Figure 3).

Figure 5 Transactions



The illustration shows the financing flow linking the financing source with the financing agent and the provider. The provider can produce several ASC (two in this example: ASC_1 and ASC_2). Each ASC is produced by a specific combination of resources consumed: production $factors_1$ and production $factors_2$. Also, each of the ASC is produced to reach one or more specific intended beneficiary populations: beneficiary $population_1$ and beneficiary $population_2$.

5.14 When accounting for each and every amount in the filled matrix, the challenge is to ensure the complete integrity of the matrix. All matrix should have the same total, since all are representing the same figure: the total HIV spending of the national response for a given period of time. In several cases it takes several hours to identify accounting asymmetries.

5.15 The identification of transactions starts during the planning step, when mapping the different actors on the HIV response. The source-agend-provider relation is established here, transfer mechanisms and all kind of activities that are financed this way are identified.

Each financial transaction must be recreated to eventually add up to the total national (or any sub-national unit) and each dimension can be cross-tabulated against any other of the dimensions.

5.16 During the data collection the transaction is complemented with the amount of the resources implicit on it.

5.17 Finally, during the data analysis all transactions are completed and crosschecked doing a "bottom up" and "top down" reconciliation to avoid double counting and to ensure that the amounts inputted to the transaction reflect actual spending.

5.18 Therefore, each financial transaction must be recreated to eventually add up to the total national (or any sub-national unit) and each dimension can be cross-tabulated against any other of the dimensions.

5.19 Working with transactions from the beginning of data collection means that all data collected must be accounted for its specific source, agent, provider, ASC(s), production factor(s) and beneficiary population(s). By doing so all data collected is matched in all of its dimensions (financing, production and use) before they are accounted in the matrixes, consequently the closure of the matrixes is guaranteed in advanced. If all transactions are complete and closed, the matrix and estimations will close as well.

5.20 Another important fact to be considered during any resource tracking assessment is to avoid double counting. Especially on HIV responses, where there are several layers of intermediary institutions before the resources reach the provider of services.

Reconstructing the flow of resources on transactions minimizes the risk of double counting.

5.21 Care must be taken to avoid double counting expenditures because disbursements of one entity may be the income of another one, and these intrasector flows must be handled so as to capture the resources only when they are finally incurred.

5.22 Working with transactions minimizes the risk of double counting, by assuring that all data collected is correctly linked to a specific source, by reconstructing the flow of funding, no matter how many intermediary institutions were involved.

5.23 For public and non-for-profit settings, the transaction between providers and patients is unlikely to represent the full value of production, so NASA values non-market transactions as the cost of the relevant inputs incurred in the production of these goods or services.

5.24 Schemes that are not mutually exclusive overestimate spending by counting twice some of the transactions. While exhaustiveness is fairly easily identified in a scheme, violation of the mutual exclusivity condition can be quite subtle. Typically it arises where two or more attributes of health spending are combined, such as a mix of provider types and function types. Or it can arise where the unit of analysis can possess multiple values of the attribute, such as diagnoses attached to a medical encounter. Resource tracking teams have to make sure that their decision rules, classifications and coding of expenditures exhibit mutual exclusivity and exhaustiveness.

Building a cross-tabulation system

5.25 This methodology is based on double entry tables –matrices- to represent the origin and the destination of resources, to avoid doubling counting of expenditures. The results are presented as bivariate matrices to show the flows from sources to

financing agents, from financing agents to providers, from resource cost to providers, from functions to beneficiaries which may be population segments or strategic programs.

5.26 A report typically includes matrices, summary tables, auxiliary tables and synthetic indicators to facilitate the situation analysis and exposition to selected audiences.

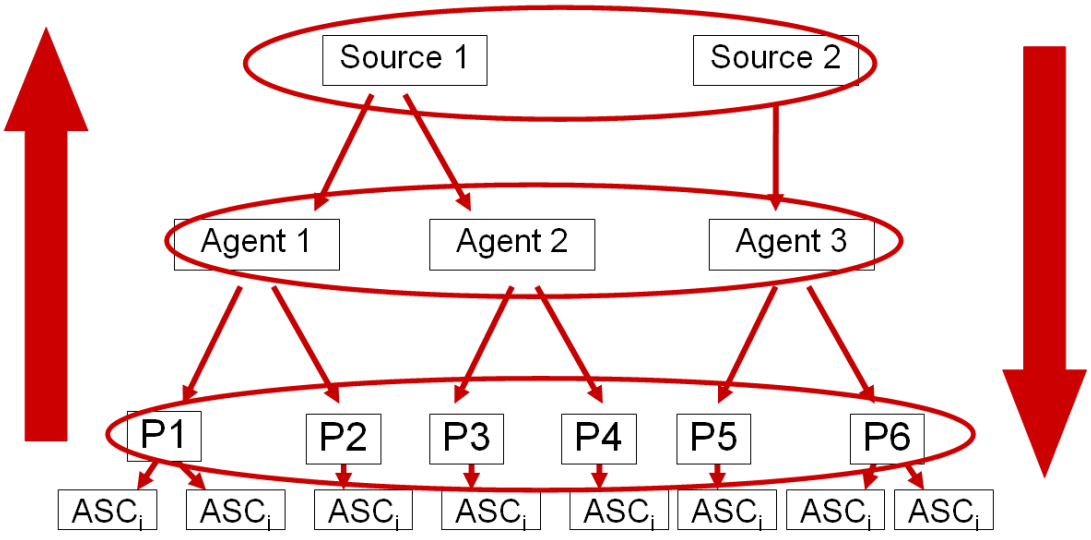
"Bottom up" and "Top down" approach

5.27 NASA methodology proposes the bottom-up and top-down estimation of the resource flows, by costing/pricing the services and goods delivered by the providers for each of the activities, or functions, and then reconstructing the financial transactions from the sources, through the financing agents, and describing the use of the resources by disaggregating the production function components and the beneficiaries of such functions (Figure 5).

NASA methodology proposes the bottom-up and top-down estimation of the resource flows.

5.28 "Bottom up" and "Top down" approach allows resource trackers to account for actual spending and not for resources available or budgets. All data collected and accounted in transactions must be adjusted to reflect actual spending with bottom up.

Figure 6 "Bottom up" and "Top down" approach.



NASA and UNGASS Indicator No. 1

The UNGASS Funding Matrix is constructed with NASA AIDS Spending Categories.

5.29 The National Funding Matrix is used to measure the first UNGASS indicator on National Commitment and Action: AIDS Spending by Funding Source. The matrix is a spreadsheet that enables countries to record AIDS spending within eight categories across three funding sources. This indicator provides critical information that is valuable at both national and global levels of the AIDS response. The National Funding Matrix has been designed to be compatible with different data collection and tracking systems, i.e. National AIDS Spending Assessments (NASA), National Health Accounts and Resource Flows Surveys, so as to transfer information from these tools to the matrix. For countries using the NASA, the matrix is one of the outputs of this tool. (Countries interested in implementing the NASA are encouraged to contact UNAIDS for additional information on this tool.)

5.30 The National Funding Matrix has two basic components: AIDS Spending Categories (How funds allocated to the national response are spent) and Financing Sources (Where funds allocated to the national response are obtained).

5.31 The National Funding Matrix15, in the Core Indicators is constructed with the AIDS Spending Categories (ASC) and with an aggregated level of the NASA Financing Sources (FS).

5.32 The identity of the core indicators and the NASA matrices is not coincidental. It expresses the will to verify the coherence of the programmes implemented in the response to HIV, and of the financial oversight accompanying them.

[15] used to measure the first UNGASS indicator on National Commitment and Action: AIDS Spending by Funding Source. *UNAIDS. 2009. Monitoring the Declaration of Commitment: Guidelines on the Construction of Core Indicators for 2010 reporting. UNAIDS. Geneva.*

6 NASA Classifications

NASA categories

6.1 One of the primary characteristics of resource tracking is to ensure that the classification scheme used is made up of mutually exclusive and exhaustive categories. International comparability across countries will be reached when the use of the NASA classifications for resource tracking is homogeneously used.

6.2 The categories of the NASA classification are mutually exclusive and exhaustive meaning that each transaction cannot go into more than one category. Exhaustiveness means that each and every transaction can go into one category. Thus, each transaction goes into exactly one category.

6.3 In NASA, financial flows and expenditures related to the National Response to HIV are organized according to three dimensions: finance, provision, and consumption. The classification of the three dimensions and six categories comprise the framework of the NASA system. These dimensions incorporate six categories:

Financing	
1. Financing agents (FA)	Entities that pool financial resources to finance service provision programmes and also make programmatic decisions (purchaser-agent).
2. Financing sources (FS)	Entities that provide money to financing agents.
Provision of HIV services	
3. Providers (PS)	Entities that engage in the production, provision, and delivery of HIV services.
4. Production factors (PF)	Resources used for the production of ASC.
Use	
5. AIDS spending categories (ASC)	HIV-related interventions and activities.
6. Beneficiary segments of the population (BP)	Populations intended to benefit from specific activities.

6.4 In NASA, financial flows and expenditures related to the National Response to HIV are organized according to three dimensions: finance, provision, and consumption. The classification of the three dimensions and six categories comprise the framework of the NASA system. These dimensions incorporate six categories:

6.5 In addition to being a standardized tool, the classifications are therefore a means to check the comprehensiveness, consistency, neutrality (with regard to financing and

mode of delivery), and the plausibility of single dimensions. The cross-classifications provide information on the coherence of the system and its axes.

6.6 The classifications listed are designed to comprehensively and consistently cover the AIDS spending categories, the provision of services, and the financing transactions. No cross-national system exactly matches all national institutions and mechanisms developed to pursue shared goals. Additional classifications such as beneficiary populations can be used to organize data on expenditures by demographics and specific characteristics of the beneficiary population.

6.7 The classifications are intended as a tool to organize the information accurately and in a neutral way. They do not preclude the national resource tracking team from adapting the tool to the country specifics, using the meta-data route (sources and methods, footnotes, other) to increase transparency, and to facilitate comparative use when and where required.

6.8 The classification deliberately goes into greater detail to facilitate the work of those who will be collating numbers. It is not expected that all will complete it to such a level of detail. Once no further details are available, the ".98" categories should be used. When finer programmes or precise production factors can be identified, a further detail is allowed with precise indication of its contents.

6.9 When an expenditure is unclassifiable due to lack of specification in the classifications, it should be entered under the corresponding category ".99" (n.e.c. / not elsewhere classified).

6.10 The National AIDS Spending Assessment (NASA): Classification taxonomy and Definitions (UNAIDS 2009) document, presents the classification to produce National AIDS Spending Assessments (NASA). A list of the classifications is detailed on Appendixes 1 to 6 of the Notebook..

6.11 Categories of agents and providers are broadly similar, while the classification of functions (AIDS Spending Categories) has to be comparable across countries and for beneficiaries might depend on the policy interests of decision-makers. The coordination of global classifications among leaders from governments, civil society, UN agencies and other multinational and international institutions is much needed as policy interests might vary from region to region, and sometimes even might be country specific. The search of a harmonized classification that pleases all partners might seem an insurmountable challenge, however it might be possible.

6.12 The classification proposed in this guide tends to be consistent with the strengthening of the coordination, alignment and harmonization processes in the context of the UNAIDS "Three Ones" principles.16

6.13 The NASA classification links the financial transactions by the nature of those activities and categorizes the various actors in the production function (e.g. within the health care system, education or social development sectors, etc.) —financing sources, financing agents, providers of services, and beneficiaries — with the resources used to generate the goods and services provided.

6.14 The classification here presented allows the incorporation of new categories. Policy-relevant subcategories may be added under many of the two digit

[16] UNAIDS. **The "Three Ones" in action:** where we are and where we go from here. Joint United Nations Programme on HIV/AIDS. UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO, World Bank, May 2005.

headings/chapters. For example, under central government, some countries probably may wish to disaggregate under additional categories the ministries of labour, of education as well as any other institution contributing with the HIV and AIDS expanded response.

Financing sources

6.15 Financing sources are entities that provide money to financing agents to be pooled and distributed17. Analysis of financing sources may be of particular interest in countries where funding for the HIV and AIDS response is heavily dependant on international sources of financing or when there are pooled sources through few management entities. The classification is compatible with existing schemes and with the system of national accounts (SNA). It is designed to reflect some of the key policy interests in the National HIV and AIDS response, domestic funding and the donor-country relationship.

6.16 The schedule attempts to distinguish among funds that are allocated by governments, donors funding earmarked and households. All public funds are further divided into general revenue of territorial governments.

6.17 The separation of the objectives and functions of the financing sources from the financing agents can be exemplified by the social security health schemes. The funds from employee contributions to social security schemes and to social health insurance are categorized as the source being household funds to be channelled through specialized financing agents: the social security funds.

6.18 NASA shares a similar classification for Financing Sources with the National Health Accounts applications.

6.19 For example, if there is a National AIDS Council in a given country which receives funds directly from the National Treasury and uses the funds for the activities (or functions) decided by the council itself (using any kind of procedure), then the source is the Ministry of Finance and the financing agency would be the Council itself.

Financing Agents

6.20 Financing agent are entities that pay for or purchase services or goods (health care or others). These entities receive financial resources collected from different financing sources and transfer them to finance a program or as a payment to the providers of services and goods.

Financing agents are institutions making the programmatic decisions on the use of the funds.

6.21 Financing agents are institutions that pool resources collected

[17] The separation between financial sources and financing agents was adopted in order to split these functions and facilitate the analysis of financial bottlenecks. This adaptation is based on the description of the Guide to Producing National Health Accounts (WHO, US-AID, WB, 2003). Previous resource tracking tools, like the National AIDS Accounts did not separate between these two because they followed the only existing international standard from the Organization for Economic Cooperation and Development (OECD).

from different sources, as well as entities (such as households, firms or donors) that pay directly for using their own resources; they are poolers, purchasers as well as distributors of financial resources.

Providers of services

6.22 Providers are not limited to the health sector and include all the entities that engage in the production of goods, services, or activities in response to HIV and AIDS. Providers are owned by non-profit organizations, government, and others that fall within the NASA boundaries.

6.23 HIV and AIDS services are provided in a wide range of settings outside the health sector. The service provided and the entity that provides is sometimes a source of confusion. For example, nutritional support for orphans may occur in public hospitals and in foster homes. In both cases, the type of service does not coincide with one specific type of provider. Resource tracking teams can develop subcategories that separate provider groups of interest. A similar type of sub categorization can be applied to other providers as needed to develop NASA tables adding greater detail to resource tracking information.

The provider of services is contracted by the financing agent for the provision of specific services. The provider will decide on the best way to produce this services (even sub contracting) but will remain as the responsible for the production an delivery of those services.

6.24 NASA includes traditional forms of medicine and some categories have been added for non-allopathic systems of medicine. These are important categories of providers in some countries, especially in South and East Asia. This category is introduced to capture expenditures for hospitals of medical systems such as Ayurveda or traditional Chinese medicine, which are not part of the regular allopathic systems of hospitals. A category has also been added for alternative or traditional providers of outpatient care. As above, this is intended to capture expenditures for providers of systems of medicine not part of the allopathic tradition.

6.25 The category for providers of all other services should include the wide variety of informal and less-than-fully-qualified providers operating in many low-income countries, regardless of whether these services are sanctioned by the legal system. If the category of provider does not exist in a country or if a decision has been made to exclude the services typically rendered by such providers, the new categories need not be used. If the providers do exist and are to be counted but data do not show them separately, it is perfectly acceptable to include them in the "others" category. A new 1-digit category could be added to capture institutions that do not provide health care services but which engage in HIV and AIDS-related activities.

AIDS Spending categories

6.26 The AIDS spending classification is a functional classification that includes the categories of prevention, care and treatment, and other health and non-health services related to HIV. After review and evaluation of past response strategies to HIV, the programmes and budget lines have been structured into eight classes of spending categories:

1. **Prevention**
2. **Care and treatment**
3. **Orphans and vulnerable children**
4. **Programme management and administration**
5. **Human resources**
6. **Social protections and social services**
7. **Enabling environment**
8. **Research**

6.27 The ASC reflect programmatic interventions.

6.28 From policy and programs to interventions: Condom use, for example, is an intervention that an individual can take to reduce risk from a range of diseases; condom distribution is a preventive program to encourage this intervention; thus, the level of expenditure in this programme reflects government decisions and public policies.

Beneficiary populations

6.29 The populations presented here are explicitly targeted or intended to benefit from specific activities, e.g. the intended recipients of the various services. The identification of the beneficiary population (BP) is aimed at quantifying the resources specifically allocated to a population as part of the service delivery process of a programmatic intervention. The BP will be selected according to the intention or target of the expenditure in such programmatic intervention. This represents an outcome linked to the resources spent, regardless of its effectiveness or effective coverage.

Consumption of fixed capital refers to the value of the capital assets used up for production during the current period.

6.30 In principle, the identification of the BPs is dictated by the intended use of the funds. For example, if members of the most-at-risk populations (MARP) are reached by services aimed at the general population, the expenditure should be accounted for the latter, i.e. general population, and cannot be attributed to any specific MARP population.

6.31 The NASA beneficiary populations classification is not intended to be used as a guideline to define populations by their characteristics, which might lead them be considered as those most-at-risk, key or priority populations.18 It is intended to be a

[18] The concepts regarding the terms "most-at-risk populations and key populations at higher risk" are described in detail in: *A guide to monitoring and evaluating national HIV prevention programmes for most-at-risk populations in low-level and concentrated epidemic settings; with applications for generalized epidemics*. UNAIDS, 2007; and in *Practical guidelines for intensifying HIV Prevention.* UNAIDS, 2007. Available at: http://www.unaids.org.

comprehensive list of different populations being considered as the intended beneficiary populations of HIV-related services.

6.32 When there is no explicit intention of directing the benefits to a specific population, the expenditures need to be labelled BP.06 Non-targeted interventions. When the target population is not known, it needs to be recorded as non-targeted, since the objective is to explicitly identify the intended beneficiaries. Individuals might belong to more than one category; however, what needs to be classified is the expenditure according to the primary objective of the programme depending on the implementation of such programmes, e.g. point of the service delivery, type of provider of the services or specific outreach strategy.

6.33 There are several ways to look at the population who benefits from the goods, services, and activities that are included in the National Response to HIV and AIDS. The more common attributes, include demographic, geographical, socioeconomic, health condition and vulnerability status. However, there is a need for prevention interventions and monitoring and evaluation efforts among most-at-risk populations.

6.34 The most-at-risk populations can be grouped based on the behaviours they engage that put them at greater risk for HIV infection. This in turn, identifies those populations that should be a priority for monitoring and evaluation efforts of national and sub national programs. These groupings for most-at-risk populations generally include the following: female sex workers (FSWs), clients of female sex workers, injecting drug users (IDUs); men who have sex with men (MSM). These are populations more likely to have high rates of sexual partnerships, practice anal sex with multiple partners, or who share drug injecting equipment, all of which put them at risk of HIV infection.

6.35 Among the beneficiary populations, less characterized are vulnerable groups. The understanding of the role that different vulnerable groups play in determining the nature of HIV epidemics has allowed to improve the priority given to meeting their basic needs in the global response. Already stigmatized groups face greater social exclusion and are further marginalized from accessing essential prevention and care services, creating a vicious circle further fuelling the epidemic. Where programmes do exist, they are generally limited in their scope and outreach, often by ideological constraints of service providers and stereotyped characterizations of vulnerable group 'members'. The populations most vulnerable to HIV generally lack a political constituency and are often legally constrained from organizing themselves for advocacy or self-help purposes.

Production factors

6.36 The previous classification are focused on the HIV and AIDS outputs, however, it is desirable to analyze the production factors (budgetary items/objects of expenditure) to create those outputs. An analysis of resource spending can have many policy uses, including development of policies regarding payments for human resources, for investment, for expenditure on antiretrovirals, and for other significant inputs.

6.37 There are well-defined schemes to be used; the International Monetary Fund (IMF) Government finance statistics manual and the system of national accounts uses the same economic classification of expenses. This guideline uses comparable breakdowns that can be easily cross walked to other reports. The resource cost

classification captures expenditure according to the standard economic classification of resources used for the production of goods and services. The classification includes two major categories: (1) current expenditures and (2) capital expenditures. This classification includes breakdowns for each category and can be applied in most instances to the activities of providers. This classification has been also used by others named as: object of expenditure or budgetary items.

7 Procedures for data collection, processing and reporting

7.1 The financial transactions are reconstructed from the origin to the final user by identifying three dimensions and six vectors: (1) financing sources, (2) financing agents, (3) providers, (4) functions (HIV related interventions and activities), (5) production factors and (6) the beneficiaries segments of the population. Each vector contributes to generate products applicable to the next steps.

Step 1: Planning

7.2 During the planning stage, the strategy, implementation and timetable are described. The sources and key informants are identified and selected. The methodological basis to produce NASA must be shared by the national teams. The data collection strategy is designed, the data collection forms are adapted; the initial analysis plan is formulated and the activities are programmed. There are formats to record the progress reached as results are obtained. The feasibility of NASA relies on background information, key players and potential information sources identification, checking up the users and informants interest, as well as the integration of an inter-institutional group responsible of facilitate the access to information, participate in the data analysis and contribute to the data dissemination.

Step 2: Data Collection

7.3 In the data collection phase, the progress level is recorded for each estimation component, and specific formats allow generating checklists to be filled by the supervisors along the data collection process, as well as quality control forms to cross check the data collected. The entities collaborating with information, their addresses and contact persons are recorded. The entire information framework is completed, including demographic, epidemiological and economic data to help the estimation process. Detail should be posed on the contact with institutions, the follow up on data collection process, and the quality control of the gathered data.

Step 3: Data Processing

7.4 Collected data can be organized according to NASA matrices with assistance of the NASA-RTS software. The data input reconstruct each one of the transactions, check up the data, and identify gaps, inconsistencies or double accounting. The main products of this step are double entry tables describing HIV and AIDS financial flows in several combinations of entities. The approach permits an easier input of data from different sources and texture, and assists the national teams in the cross checking of the estimates. It also facilitates compliance with the consistency and comparability criteria /or attributes along time and across countries criteria, as it has a standardized categories structure, validated and refined by national experience.

Step 4: Data Analysis

7.5 In this phase the financing and expenditures flows are completed and cross checked. The indicators are calculated by relating HIV and AIDS expenditures with other figures such as national health expenditure, country population and the number of people living with AIDS.

Step 5: Final Report

7.6 In this phase the final report is complete and submitted to the National AIDS Coordinating Authority and Government Officials. An effort should be made to translate the results into useful data for decision-making and also to promote political dialogue. The institutionalization of the resource tracking activities, the ability to overcome the hurdles of an assessment, as well as an educated policy dialogue are the desired outcomes.

8 Acknowledgments

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Appendix I – AIDS Spending Categories

1. Prevention	
1st digit level	2nd digit level
ASC.01 Prevention	ASC.01.01 Communication for social and behaviour change
	ASC.01.02 Community mobilization
	ASC.01.03 Voluntary counselling and testing (VCT)
	ASC.01.04 Risk-reduction for vulnerable and accessible populations19
	ASC.01.05 Prevention – youth in school
	ASC.01.06 Prevention – youth out-of-school
	ASC.01.07 Prevention of HIV transmission aimed at people living with HIV (PLHIV)
	ASC.01.08 Prevention programmes for sex workers and their clients
	ASC.01.09 Programmes for men who have sex with men (MSM)
	ASC.01.10 Harm-reduction programmes for injecting drug users (IDUs)
	ASC.01.11 Prevention programmes in the workplace
	ASC.01.12 Condom social marketing
	ASC.01.13 Public and commercial sector male condom provision
	ASC.01.14 Public and commercial sector female condom provision
	ASC.01.15 Microbicides
	ASC.01.16 Prevention, diagnosis, and treatment of sexually transmitted infections (STI)
	ASC.01.17 Prevention of mother-to-child transmission (PMTCT)
	ASC.01.18 Male circumcision
	ASC.01.19 Blood safety
	ASC.01.20 Safe medical injections
	ASC.01.21 Universal precautions
	ASC.01.22 Post-exposure prophylaxis (PEP)
	ASC.01.98 Prevention activities not broken down by intervention
	ASC.01.99 Prevention activities n.e.c.

2. Care and treatment		
1st digit level	2nd digit level	3rd digit level
ASC.02 Care and treatment	ASC.02.01 Outpatient care	ASC.02.01.01 Provider-initiated testing and counselling (PITC)
		ASC.02.01.02 Opportunistic infection (OI) outpatient prophylaxis and treatment
		ASC.02.01.03 Antiretroviral therapy
		ASC.02.01.04 Nutritional support associated with antiretroviral therapy
		ASC.02.01.05 Specific HIV-related laboratory monitoring
		ASC.02.01.06 Dental programmes for PLHIV
		ASC.02.01.07 Psychological treatment and support services
		ASC.02.01.08 Outpatient palliative care
		ASC.02.01.09 Home-based care
		ASC.02.01.10 Traditional medicine and informal care and

[19] Previously labelled: Programmes for vulnerable and special populations.

		treatment services
		ASC.02.01.98 Outpatient care services not broken down by intervention
		ASC.02.01.99 Outpatient care services n.e.c.
	ASC.02.02 Inpatient care	ASC.02.02.01 Inpatient treatment of opportunistic infections (OI)
		ASC.02.02.02 Inpatient palliative care
		ASC.02.02.98 Inpatient care services not broken down by intervention
		ASC.02.02.99 Inpatient care services n.e.c.
	ASC.02.03 Patient transport and emergency rescue	
	ASC.02.98 Care and treatment services not broken down by intervention	
	ASC.02.99 Care and treatment services n.e.c.	
3. Orphans and vulnerable children (OVC)		
1st digit level	2nd digit level	
ASC.03 Orphans and vulnerable children	ASC.03.01OVC Education	
	ASC.03.02 OVC Basic health care	
	ASC.03.03 OVC Family/home support	
	ASC.03.04 OVC Community support	
	ASC.03.05 OVC Social services and administrative costs	
	ASC.03.06 OVC Institutional care	
	ASC.03.98 OVC Services not broken down by intervention	
	ASC.03.99 OVC services n.e.c.	
4. Programme management and administration		
1st digit level	2nd digit level	
ASC.04 Programme management and administration	ASC.04.01 Planning, coordination, and programme management	
	ASC.04.02 Administration and transaction costs associated with managing and disbursing funds	
	ASC.04.03 Monitoring and evaluation	
	ASC.04.04 Operations research	
	ASC.04.05 Serological-surveillance (serosurveillance)	
	ASC.04.06 HIV drug-resistance surveillance	
	ASC.04.07 Drug supply systems	
	ASC.04.08 Information technology	
	ASC.04.09 Patient tracking	
	ASC.04.10 Upgrading and construction of infrastructure	
	ASC.04.11 Mandatory HIV testing (not VCT)	
	ASC.04.98 Programme management and administration not broken down by type	
	ASC.04.99 Programme management and administration n.e.c	

5. Human Resources	
1st digit level	2nd digit level
ASC.05 Human resources	ASC.05.01 Monetary incentives for human resources
	ASC.05.02 Formative education to build-up an HIV workforce
	ASC.05.03 Training
	ASC.05.98 Human resources not broken down by type
	ASC.05.99 Human resources n.e.c.
6. Social protection and social services	
1st digit level	2nd digit level
ASC.06 Social protection and social services	ASC.06.01 Social protection through monetary benefits
	ASC.06.02 Social protection through in-kind benefits
	ASC.06.03 Social protection through provision of social services
	ASC.06.04 HIV-specific income generation projects
	ASC.06.98 Social protection services and social services not broken down by type
	ASC.06.99 Social protection services and social services n.e.c.
7. Enabling environment	
1st digit level	2nd digit level
ASC.07 Enabling environment	ASC.07.01 Advocacy
	ASC.07.02 Human rights programmes
	ASC.07.03 AIDS-specific institutional development
	ASC.07.04 AIDS-specific programmes focused on women
	ASC.07.05 Programmes to reduce Gender Based Violence
	ASC.07.98 Enabling environment not broken down by type
	ASC.07.99 Enabling environment n.e.c.
8. HIV-related research	
1st digit level	2nd digit level
ASC.08 HIV-related research	ASC.08.01 Biomedical research
	ASC.08.02 Clinical research
	ASC.08.03 Epidemiological research
	ASC.08.04 Social science research
	ASC.08.05 Vaccine-related research
	ASC.08.98 HIV-related research activities not broken down by type
	ASC.08.99 HIV-related research activities n.e.c.

Appendix II – Beneficiary Populations

1. People living with HIV	
1st digit level	2nd digit level
BP.01 People living with HIV	BP.01.01 Adult and young people (aged 15 and over) living with HIV
	BP.01.02 Children (aged under 15) living with HIV
	BP.01.98 People living with HIV not broken down by age or gender
2. Most-at-risk populations	
1st digit level	2nd digit level
BP.02 Most-at-risk populations	BP.02.01 Injecting drug users (IDU) and their sexual partners
	BP.02.02 Sex workers (SW) and their clients
	BP.02.03 Men who have sex with men (MSM)
	BP.02.98 "Most-at-risk populations" not broken down by type
3. Other key populations	
1st digit level	2nd digit level
BP.03 Other key populations	BP.03.01 Orphans and vulnerable children (OVC)
	BP.03.02 Children born or to be born of women living with HIV
	BP.03.03 Refugees (externally displaced)
	BP.03.04 Internally displaced populations (because of an emergency)
	BP.03.05 Migrants/mobile populations
	BP.03.06 Indigenous groups
	BP.03.07 Prisoners and other institutionalized persons
	BP.03.08 Truck drivers/transport workers and commercial drivers
	BP.03.09 Children and youth living in the street
	BP.03.10 Children and youth gang members
	BP.03.11 Children and youth out of school
	BP.03.12 Institutionalized children and youth
	BP.03.13 Partners of people living with HIV
	BP.03.14 Recipients of blood or blood products
	BP.03.98 Other key populations not broken down by type
	BP.03.99 Other key populations n.e.c.

4. Specific "accessible" populations	
1st digit level	2nd digit level
BP.04 Specific "accessible" populations	BP.04.01 People attending STI clinics
	BP.04.02 Elementary school students
	BP.04.03 Junior high/high school students
	BP.04.04 University students
	BP.04.05 Health care workers
	BP.04.06 Sailors
	BP.04.07 Military
	BP.04.08 Police and other uniformed services (other than the military)
	BP.04.09 Ex-combatants and other armed non-uniformed groups
	BP.04.10 Factory employees (e.g. for workplace interventions)
	BP.04.98 Specific "accessible " populations not broken down by type
	BP.04.99 Specific "accessible " populations n.e.c.
5. General population	
1st digit level	2nd digit level
BP.05 General population	BP.05.01 General adult population (aged older than 24)
	BP.05.02 Children (aged under 15)
	BP.05.03 Youth (aged 15 to 24)
	BP.05.98 General population not broken down by age or gender

6. Non-targeted interventions

BP.06 Non-targeted interventions

99. Specific targeted populations not elsewhere classified

BP.99 Specific targeted populations not elsewhere classified (n.e.c.)

Appendix III – Providers of services

1. Public sector providers		
1st digit level	2nd digit level	3rd digit level
PS.01 Public sector providers	PS.01.01 Governmental organizations	PS.01.01.01 Hospitals
		PS.01.01.02 Ambulatory care
		PS.01.01.03 Dental offices
		PS.01.01.04 Mental health and substance abuse facilities
		PS.01.01.05 Laboratory and imaging facilities
		PS.01.01.06 Blood banks
		PS.01.01.07 Ambulance services
		PS.01.01.08 Pharmacies and providers of medical goods
		PS.01.01.09 Traditional or non-allopathic care providers
		PS.01.01.10 Schools and training facilities
		PS.01.01.11 Foster homes/shelters
		PS.01.01.12 Orphanages
		PS.01.01.13 Research institutions
		PS.01.01.14 Government entities
		PS.01.01.99 Governmental organizations n.e.c.
	PS.01.02 Parastatal organizations	PS.01.02.01 Hospitals
		PS.01.02.02 Ambulatory care
		PS.01.02.03 Dental offices
		PS.01.02.04 Mental health and substance abuse facilities
		PS.01.02.05 Laboratory and imaging facilities
		PS.01.02.06 Blood banks
		PS.01.02.07 Ambulance services
		PS.01.02.08 Pharmacies and providers of medical goods
		PS.01.02.09 Traditional or non-allopathic care providers
		PS.01.02.10 Schools and training facilities
		PS.01.02.11 Foster homes/shelters
		PS.01.02.12 Orphanages
		PS.01.02.13 Research institutions
		PS.01.02.99 Parastatal organizations n.e.c.
	PS.01.99 Public sector providers n.e.c.	

2. Private sector providers			
1st digit level	2nd digit level	3rd digit level	4th digit level
PS.02 Private sector providers	PS.02.01 Non-profit providers	PS.02.01.01 Non-profit non-faith-based providers	PS.02.01.01.01 Hospitals
			PS.02.01.01.02 Ambulatory care
			PS.02.01.01.03 Dental offices
			PS.02.01.01.04 Mental health and substance abuse facilities
			PS.02.01.01.05 Laboratory and imaging facilities
			PS.02.01.01.06 Blood banks
			PS.02.01.01.07 Ambulance services
			PS.02.01.01.08 Pharmacies and providers of medical goods
			PS.02.01.01.09 Traditional or non-allopathic care providers
			PS.02.01.01.10 Schools and training facilities
			PS.02.01.01.11 Foster homes/shelters
			PS.02.01.01.12 Orphanages
			PS.02.01.01.13 Research institutions PS.02.01.01.14 Self-help and informal community-based organizations
			PS.02.01.01.15 Civil society organizations PS.02.01.01.99 Other non-profit non-faith-based providers n.e.c.
		PS.02.01.02 Non-profit faith-based providers	PS.02.01.02.01 Hospitals
			PS.02.01.02.02 Ambulatory care
			PS.02.01.02.03 Dental offices
			PS.02.01.02.04 Mental health and substance abuse facilities
			PS.02.01.02.05 Laboratory and imaging facilities
			PS.02.01.02.06 Blood banks
			PS.02.01.02.07 Ambulance services
			PS.02.01.02.08 Pharmacies and providers of medical goods
			PS.02.01.02.09 Traditional or non-allopathic care providers
			PS.02.01.02.10 Schools and training facilities
			PS.02.01.02.11 Foster homes/shelters
			PS.02.01.02.12 Orphanages
			PS.02.01.02.13 Self-help and informal community-based organizations
			PS.02.01.02.14 Civil society organizations
			PS.02.01.02.99 Other non-profit faith-based private sector providers n.e.c.
		PS.02.01.99 Other non-profit private sector providers n.e.c.	

1st digit level	2nd digit level	3rd digit level
PS.02 Private sector providers	PS.02.02Profit-making private sector providers (including profit-making FBOs)	PS.02.02.01 Hospitals
		PS.02.02.02 Ambulatory care
		PS.02.02.03 Dental offices
		PS.02.02.04 Mental health and substance abuse facilities
		PS.02.02.05 Laboratory and imaging facilities
		PS.02.02.06 Blood banks
		PS.02.02.07 Ambulance services
		PS.02.02.08 Pharmacies and providers of medical goods
		PS.02.02.09 Traditional or non-allopathic care providers
		PS.02.02.10 Schools and training facilities
		PS.02.02.11 Foster homes/shelters
		PS.02.02.12 Orphanages
		PS.02.02.13 Research institutions
		PS.02.02.14 Consultancy firms
		PS.02.02.15 "Workplace"
		PS.02.02.99 Profit-making private sector providers n.e.c.
	PS.02.99 Private sector providers n.e.c.	
3. Bilateral and multilateral entities – in country offices		
1st digit level	2nd digit level	
PS.03 Bilateral and multilateral entities – in country offices	PS.03.01Bilateral agencies	
	PS.03.02 Multilateral agencies	
4. Rest-of-the world providers		
PS.04 Rest-of-the world providers (services received outside the country)		
99. Other Providers n.e.c.		
PS.99 Providers n.e.c.		

Appendix IV – Production Factors

1. Current expenditures	
1st digit level	2nd digit level
PF.01 Current expenditures	PF.01.01 Labour income (compensation of employees and remuneration of owners)
	PF.01.02 Supplies and services
	PF.01.98 Current expenditures not broken down by type
	PF.01.99 Current expenditures n.e.c.
2. Capital expenditures	
1st digit level	2nd digit level
PF.02 Capital expenditures	PF.02.01Buildings
	PF.02.02Equipment
	PF.02.98Capital expenditure not broken down by type
	PF.02.99 Capital expenditure n.e.c.
98. Production factors not broken down by type	
PF.98 Production factors not broken down by type	

Appendix V – Financing Agents

1. Public sector		
1st digit level	2nd digit level	3rd digit level
FA.01 Public sector	FA.01.01 Territorial governments	FA.01.01.01 Central or federal authorities
		FA.01.01.02 State/provincial/regional authorities
		FA.01.01.03 Local/municipal authorities
	FA.01.02 Public social security	
	FA.01.03 Government employee insurance programmes	
	FA.01.04 Parastatal organizations	
	FA.01.99 Other public financing agents n.e.c.	
2. Private sector		
1st digit level	2nd digit level	
FA.02 Private sector	FA.02.01 Private social security	
	FA 02.02 Private employer insurance programmes	
	FA.02.03 Private insurance enterprises (other than social insurance)	
	FA.02.04 Private households (out-of-pocket payments)	
	FA.02.05 Non-profit-making institutions (other than social insurance)	
	FA.02.06 Private non-parastatal organizations and corporations (other than health insurance)	
	FA.02.99 Other private financing agents n.e.c.	
3. International purchasing organizations		
1st digit level	2nd digit level	
FA.03 International purchasing organizations	FA.03.01 Country offices of bilateral agencies managing external resources and fulfilling financing agent roles	
	FA.03.02 Multilateral agencies managing external resources	
	FA.03.03 International non-profit-making organizations and foundations	
	FA 03.04 International profit-making organizations	
	FA 03.99 Other international financing agents n.e.c.	

Appendix VI – Financing Sources

1. Public funds	
1st digit level	2nd digit level
FS.01 Public funds	FS.01.01 Territorial government funds
	FS.01.02 Social security funds
	FS.01.99 Other public funds n.e.c.
2. Private Funds	
1st digit level	2nd digit level
FS.02 Private Funds	FS.02.01 Profit-making institutions and corporations
	FS.02.02 Households' funds
	FS.02.03 Non-profit-making institutions (other than social insurance)
	FS.02.99 Private financing sources n.e.c.
3. International Funds	
1st digit level	2nd digit level
FS.03 International funds	FS.03.01 Direct bilateral contributions
	FS.03.02 Multilateral Agencies (ii)
	FS.03.03 International non-profit-making organizations and foundations
	FS.03.04 International profit-making organizations
	FS.03.99 International funds n.e.c.

Appendix VII – UNGASS Funding Matrix

AIDS Spending Categories	TOTAL (Local Currency)	Public Sub-Total	Central / National	Sub- National	Dev. Banks Reimbursable (e.g. Loans)	Social Security	All Other Public	International Sub-Total	Bilaterals	UN Agencies	Global Fund	Dev. Bank Non-Reimbursable (e.g. Grants)	All Other Multilateral	All Other International	Private Sub-Total	For-profit institutions / Corporations	Household funds	All Other Private
TOTAL (Local Currency)																		
1. Prevention (sub-total)																		
1.01 Communication for social and behavioural change																		
1.02 Community mobilization																		
1.03 Voluntary counselling and testing (VCT)																		
1.04 Risk-reduction for vulnerable and accessible populations																		
1.05. Prevention - Youth in school																		
1.06 Prevention - Youth out-of-school																		
1.07 Prevention of HIV transmission aimed at people living with HIV																		
1.08 Prevention programmes for sex workers and their clients																		
1.09 Programmes for men who have sex with men																		
1.10 Harm-reduction programmes for injecting drug users																		
1.11 Prevention programmes in the workplace																		
1.12 Condom social marketing																		
1.13 Public and commercial sector male condom provision																		
1.14 Public and commercial sector female condom provision																		
1.15 Microbicides																		
1.16 Prevention, diagnosis and treatment of sexually transmitted infections (STI)																		
1.17 Prevention of mother-to-child transmission																		
1.18 Male Circumsicion																		
1.19 Blood safety																		
1.20 Safe medical injections																		
1.21 Universal precautions																		
1.22 Post-exposure prophylaxis																		
1.98 Prevention activities not disaggregated by intervention																		
1.99 Prevention activities not elsewhere classified																		
2. Care and Treatment (sub-total)																		
2.01 Outpatient care (sub-total)																		
2.01.01 Provider- initiated testing and counselling																		
2.01.02 Opportunistic infection (OI) outpatient prophylaxis and treatment																		
2.01.03 Antiretroviral therapy																		
2.01.04 Nutritional support associated to ARV therapy																		
2.01.05 Specific HIV-related laboratory monitoring																		
2.01.06 Dental programmes for PLHIV																		
2.01.07 Psychological treatment and support services																		
2.01.08 Outpatient palliative care																		
2.01.09 Home-based care																		
2.01.10 Traditional medicine and informal care and treatment services																		
2.01.98 Outpatient care services not disaggregated by intervention																		
2.01.99 Outpatient Care services not elsewhere classified																		
2.02 In-patient care (sub-total)																		
2.02.01 Inpatient treatment of opportunistic infections (OI)																		
2.02.02 Inpatient palliative care																		
2.02.98 Inpatient care services not disaggregated by intervention																		
2.02.99 In-patient services not elsewhere classified																		
2.03 Patient transport and emergency rescue																		
2.98 Care and treatment services not disaggregated by intervention																		
2.99 Care and treatment services not-elsewhere classified																		
3. Orphans and Vulnerable Children (sub-total)																		
3.01 OVC Education																		
3.02 OVC Basic health care																		
3.03 OVC Family/home support																		
3.04 OVC Community support																		
3.05 OVC Social services and Administrative costs																		
3.06 OVC Institutional Care																		
3.98 OVC services not disaggregated by intervention																		
3.99 OVC services not-elsewhere classified																		
4. Program Management and Administration Strengthening (sub-total)																		
4.01 Planning, coordination and programme management																		
4.02 Administration and transaction costs associated with managing and disbursing funds																		
4.03 Monitoring and evaluation																		
4.04 Operations research																		
4.05 Serological-surveillance (Serosurveillance)																		
4.06 HIV drug-resistance surveillance																		
4.07 Drug supply systems																		
4.08 Information technology																		
4.09 Patient tracking																		
4.10 Upgrading and construction of infrastructure																		
4.11 Mandatory HIV testing (not VCT)																		
4.98 Program Management and Administration Strengthening not disaggregated by type																		
4.99 Program Management and Administration Strengthening not-elsewhere classified																		
5. Human resources (sub-total)																		
5.01 Monetary incentives for human resources																		
5.02 Formative education to build-up an HIV workforce																		
5.03 Training																		
5.98 Incentives for Human Resources not specified by kind																		
5.99 Incentives for Human Resources not elsewhere classified																		
6. Social Protection and Social Services (excluding OVC) (sub-total)																		
6.01 Social protection through monetary benefits																		
6.02 Social protection through in-kind benefits																		
6.03 Social protection through provision of social services																		
6.04 HIV-specific income generation projects																		
6.98 Social protection services and social services not disaggregated by type																		
6.99 Social protection services and social services not elsewhere classified																		

7. Enabling Environment (sub-total)																		
7.01 Advocacy																		
7.02 Human rights programmes																		
7.03 AIDS-specific institutional development																		
7.04 AIDS-specific programmes focused on women																		
7.05 Programmes to reduce Gender Based Violence																		
7.98 Enabling Environment and Community Development not disaggregated by type																		
7.99 Enabling Environment and Community Development not elsewhere classified																		
8. Research excluding operations research which is included under (sub-total)																		
8.01 Biomedical research																		
8.02 Clinical research																		
8.03 Epidemiological research																		
8.04 Social science research																		
8.05 Vaccine-related research																		
8.98 Research not disaggregated by type																		
8.99 Research not elsewhere classified																		

Appendix VIII – Glossary and some concepts used in the construction of NASA

Above the line: transactions which an accounting system includes in the production (or consumption) total considered.

Accounting matrices are defined as the presentation of macro- or meso-accounts in a matrix form, relates to the wide range of possibilities for expanding or condensing this form of display: each transaction to be represented by a single entry and the nature of the transaction to be inferred from its position, in accordance with specific circumstances and analytical needs.

Accounts are a tool which records for a given aspect of economic life: a) the provision and use of resources for the domain under review; b) the changes in assets and in liabilities related to that domain; c) the stock of assets and liabilities at a stated point in time. Accounts measure levels related to a fixed point in time and flows or changes occurring over a period. Accounting is a systematic recording or display of economic transactions expressed in a synthetic or summary format, that conforms to conventionally agreed definitions and rules.

Actual final consumption of general government is measured by the value of the collective (as opposed to individual) consumption services provided to the community, or to large sections of the community, by general government; it is derived from their final consumption expenditure by subtracting the value of social transfers in kind payable. The term underlies in the context of NASA the purchases (including administrative services) made by units of governments for the purposes of preventing the spread of the disease, maintaining a functional status and improving the well-being of dependents affected by the disease of population segments.

Accrual accounting records flows at the time economic value is created, transformed, exchanged, transferred or extinguished; this means that flows which imply a change of ownership are entered when ownership passes, services are recorded when provided and output is entered at the time products are created (see also *cash accounting*).

Additivity is a property pertaining to a set of interdependent index numbers related by definition or by accounting constraints under which an aggregate is defined as the sum of its components; additivity requires this identity to be preserved when the values of both an aggregate and its components in some reference period are extrapolated over time using a set of volume index numbers. In the NASA context, additionality refers strictly to increases in the volume of financing obtained from external resources to pay for HIV and AIDS goods and services that entail no reduction in the volume of domestic financing. In a broader context, increases of external financing that are not offset by reductions in domestic funding

on HIV and AIDS proper (including social mitigation), on opportunistic infections and other HIV and AIDS related promotion of well-being.

ARV designates a complex antiretroviral therapy, comprising three or four distinct medications.

Assets: entities over which individual or institutional units enforce ownership rights, and from which owners holding them over a period of time derive economic benefits.

Audit refers to the requirement and practice for economic entities to have their balance sheet, financial reports and accounts examined by a competent accountant in view of an expert statement on the conformity of the financial flows reported in relation to the entity reviewed statutes and the accuracy of the financial status reported.

Basic prices are the preferred method of valuing the AIDS spending or output of the national response to HIV and AIDS. They reflect the amount received by the producer for a unit of goods or services minus any taxes payable plus any subsidies receivable by that unit as a consequence of production or sale (i.e. the cost of production including subsidies). The only taxes included are the taxes on the production process (e.g. business rates and vehicle excise duty paid by business, the transport charges per se to be invoiced separately by producers); the retail prices of commodities are inclusive of total costs (including transportation) referred to as purchaser prices.

A beneficiary is an individual or a population segment entitled or otherwise receiving a commodity paid for a public or a private financing agent (financing pool or out-of-pocket household spending).

Benefits in kind applies to services provided to households free of charge at the point of access or heavily subsidized, such as shelter and board provided to pre-school children during the day or part of the day, financial assistance towards payment of a nurse to look after children during the day, shelter and board provided to children and families on a permanent basis (orphanages, foster families, etc.), goods and services provided at home to children or to those who care for them, miscellaneous services and goods provided to families, young people or children (holiday and leisure centres). The list of these benefits is country-specific as are entitlement and, usually, mode of delivery.

Blood service refers to the timely supply of hospitals with high-quality blood components.

Bottom-up refers to the estimation of the elements of an aggregate and added up to generate the estimated value of the total (a contrasting approach is the *top down*).

A budget is a detailed prospective payment plan stating the expected source of revenue and the intended purpose of the outlays, usually cast in slices that correspond to the terms or periods that the accounts attempt to measure.

Capital in NASA refers to physical assets (and some intangibles) acquired by providers commodities that are earmarked for the production of final consumption commodities. Several measurement characteristics affect this entry, such as gross (original) value or net (of a notional wear and tear and obsolescence) value, or book value (cost at the time of origin) or replacement value (the present-day value of the expected cost of replacing the asset).

Capital formation refers to the net acquisition of fixed assets or of inventories (net of disposals).

Capital transfers in NASA is the term designating transactions whereby a government authority provides a grant to a private entity to acquire a capital asset.

Capitation designates a payment method by which a fixed amount per person or per patient is paid to the health professionals concerned, regardless of services provided. That amount is determined by average service costs for the range of services expected. In some countries, hospitals are also experience-paid, the basis being, however, the average cost for a list of diagnoses.

Cash accounting refers to records of payments/receipts at the times they occur (see also accrual accounting).

Cash benefits are money transfers to households for a specific social purpose, such as maternity allowances, birth grants, parental leave benefits, family or child allowances, and other periodic or lump-sum payments to support households and help them meet the costs of specific needs (for example, those of the lone parent families or families with handicapped children). The list of these benefits is country-specific as are entitlement and, usually, accessibility mode.

A census is a survey conducted at the level of the entire population or, when economic units, the universe observed when economic units.(see also *survey*)

The central product classification (CPC) is a classification based on the physical characteristics of goods or on the nature of the services rendered; each type of good or service distinguished in the CPC is defined in such a way that it is normally produced by only one activity as defined in the International Standard Industrial Classification (ISIC).

Changes in inventories is the value of the difference between the production of a branch sector and its sales plus the commodities purchased and not used up in the production process during the accounting period.

The classification of individual consumption by purpose (COICOP) is used to identify the objectives of individual consumption expenditure.

The classification of the functions of government (COFOG) is used to identify the socioeconomic objectives of current transactions, capital outlays and acquisition of financial assets by general government and its subsectors

The classification of the purposes of non-profit institutions (COPNI) is used to identify the socioeconomic objectives of current transactions, capital outlays and acquisition of financial assets by non-profit institutions serving households.

Co-insurance refers to a fixed amount or percentage of the charges levied on commodities delivered.

Collective services are services deliverable simultaneously to a whole community or to particular sections of the community, such as those in a particular region or a locality. Their

use is usually passive and does not require the explicit agreement or active participation of all the individuals concerned. Their consumption by an individual does not diminish the amount available to others in the same community or section of the community; there is no rivalry in acquisition. They include the planning, monitoring and evaluation of health programmes, setting and enforcement of public standards, regulation, licensing and supervision of providers (to which public health services contribute in part – see corresponding entry). Because their usage cannot be charged individually, they are frequently financed out of taxation or other governmental revenue.

Community services deal with the systematic monitoring of population health and of interventions designed to enhance the health status of the population. They are closer to collective services in an economic approach (see entry for *Collective services*). Linkages to the provision dimension which, in turn, mirrors consumption, allow their coverage to be defined. Community programmes are not necessarily publicly delivered services; e.g. programme control activities including vaccination and health promotion and education through NGOs and community volunteers. They can also involve a cure approach with the following characteristics:

- programmes that have a high risk anticipation purpose, disease/disability "prevention";
- a public good, i.e. services accessible to a greater share of the population than would be accessible under prevailing primary income distribution and/or eligibility criteria;
- programmes with a high equity and effectiveness purpose, geared mainly towards vulnerable groups or that are universal so as to ensure very high take-up rates by vulnerable groups;
- programmes whose carry-out entails sizeable economies of scale over the delivery of services at the patient discretion or whose take-up rate might otherwise be uneven;
- programmes that target specific population segments and/or specific risks and/or that use specific technologies to combat diseases spreading across sizeable population segments. Some of them might entail a high subsidy for the procurement of goods, e.g. mass vaccination, the free distribution of condoms, a subsidized supply of prostheses, therapeutic appliances or prevention devices such as treated mosquito nets to vulnerable groups in malaria-prone countries.

Compensation of employees is the total remuneration, in cash or in kind, payable by an enterprise to an employee in return for work done by the latter during the accounting period.

Compliance is the ability of a patient to execute an authoritative therapeutic regimen prescribed by a practitioner. (In a pharmacological context, the respect by a patient of the therapeutic regimen agreed to between the patient and a practitioner is referred to as "adherence" and the shared decision-making and agreement between a patient and a practitioner regarding a therapeutic strategy is referred to as "concordance".)

Confidence interval (CI): the 95% confidence interval or 95% confidence limits refers to a distribution which would include 95% of the results from studies of the same size and design. This is close to but not identical to stating that the true size of the effect (never exactly known) has a 95% chance of falling within these limits. When the interval does not overlap the value against which the outcome should be judged, the result is considered to be statistically significant.

Consolidation is a special kind of cancelling out of flows and stocks; it involves the elimination of those transactions or debtor/creditor relationships which occur between two

transactors belonging to the same institutional sector or subsector. In NASA, situations occur in which the central government funds regional or local authorities for specific missions; the consolidated expenditure in not the sum of the two flows but the final outlays of the regional or local deduction made of the intra-governmental transfer from the national to the sub-national authorities.

A consumption good or service is one that is used (without further transformation in production) by households, NPISHs or government units for the direct satisfaction of individual needs or wants, or the collective needs of members of the community. In the NASA context, most *spending categories* fit this definition.

Consolidated refers to net flows of intra-sectoral (intra-governmental or intra-public-sector) transfers.

Consumption of fixed capital represents the reduction in the value of the fixed assets used in production during the accounting period resulting from physical deterioration, normal obsolescence or normal accidental damage. The consumption of capital is a cost of production, excluding thus the value of fixed assets destroyed by acts of war or exceptional events such as major natural disasters which occur very infrequently. Reflecting underlying resource costs and demands at the time a production takes place, this value is not necessarily identified as an exclusive payment but is integrated in a more comprehensive fee-for-service or fee-per-episode, such as the remuneration for dental services; the imputed value of the labour services and of the rental services if capital is estimated from a gross operating surplus (in business accounting usually referred to as profit or gross operating surplus) comprising this mixed income. Consumption of capital is to be distinguished from business accounting depreciation (based on historical costs) as it is a forward-looking measure, determined by future and not past events (the replacement cost of the equipment in use).

Co-payments refer to an arrangement whereby an entitled person pays a part of the cost of services supplied (health care or other HIV and AIDS-related benefit) either as a *deductible* or flat amount before the third-party payer (usually an insurance-and/or a social protection scheme) pays the remainder or a *co-insurance* or pro-rated share of the charge or cost of the benefit.

Current expenditure refers to spending on recurring items, notably employee compensation, consumables such as medicines, usage fees including honoraria for professional service suppliers and merchandise other than provider equipment.

Deductibles (see *co-payments*).

Deflator refers to the implicit or explicit price index used to separate volume and price increases in the observed growth of output.

Depreciation as usually calculated in business accounts is a method of allocating the costs of past expenditures on fixed assets over subsequent accounting periods; note that the depreciation methods favoured in business accounting and those prescribed by tax authorities almost invariably deviate from the concept of consumption of fixed capital employed in the SNA and so the term “consumption of fixed capital” is used in the SNA to distinguish it from “depreciation” as typically measured in business accounts.

Diagnosis refers to the observation and validation of signs, symptoms or tests of a somatic disorder.

Donations of materials and supplies should be treated to reflect real values, so the amounts should be recorded preferably at historical cost at market prices of the recipient country, net of subsidies minus indirect taxes.

Double counting refers to a transaction or other value included twice (or more) in a NASA matrix, such as a co-payment when the part of the reimbursement to a household is not deducted from out-of pocket payments. All transactions should be counted, but only once.

Double deflation is a method whereby gross value added is measured at constant prices by subtracting intermediate consumption at constant prices from output at constant prices; this method is feasible only for constant price estimates which are additive, such as those calculated using a Laspeyres' formula (either fixed-base or for estimates expressed in the previous year's prices) (see also *price indices*).

Economically significant prices refers to price levels which have a major effect on the supply of goods or services (whereas non-market output refers to commodities provided free of charge or at price levels that generate no substantive obstacles to their consumption.

Employee social contributions are compulsory social contributions and voluntary social contributions.

Employers' social contributions are the value of social contributions paid by employers to provide social benefits for their employees. They are part of compensation of employees. When the payments are not made – i.e. when an employer provides benefits directly to the employees without involving an insurance enterprise, the implicit contributions have to be imputed in the year in which the liability is being created (imputation applies principally but not exclusively for persons funds, including sickness and disability benefits financed by the employer).

For a unit or sector, national accounting is based on the principle of double entry, as in business accounting, whereby each transaction must be recorded twice, once as a resource (or a change in liabilities) and once as a use (or a change in assets).

An entity is an actor or agent in the system (governments, business, organizations, individuals or families).

Etiology refers to the causes of disease and their mode of operation.

Evaluation is a time-bound exercise that attempts to assess systematically and objectively the relevance, performance and success, or the lack thereof, of ongoing and completed programmes. Evaluation is undertaken selectively to answer specific questions to guide decision-makers and/or programme managers, and to provide information on whether underlying theories and assumptions used in programme development were valid, what worked and what did not work and why. Evaluation commonly aims to determine the relevance, validity of design, efficiency, effectiveness, impact and sustainability of a programme.

Evaluative activities comprise situational analyses, baseline surveys, applied research and diagnostic studies. They are distinct from evaluation, although their findings can be used to improve, modify or adapt programme design and implementation.

Evidence-based medicine refers to the conscientious, explicit and judicious use of current best knowledge in making decisions about the care of an individual patient.

Evidence-based (health) system refers to the conscientious, explicit and judicious use of current best knowledge in making decisions about the planning, the conduct and the evaluation of a care and treatment system that serves the objectives of the health system, and specifically the national response to HIV and AIDS.

Expenditures are the values of the amounts that buyers pay, or agree to pay, to sellers in exchange for goods or services that sellers provide to them or to other institutional units designated by the buyers.

Externalities are changes in the condition or circumstances of institutional units caused by the economic actions of other units without the consent of the former.

Extra-budgetary entities are funds or institutions whose management is generally in the hands of a public authority and that are not regulated by budget appropriations voted on by Parliament.

Factor inputs (resource costs) refer to labour, capital, natural resources, know how and entrepreneurial resources combined to produce an output of goods and services.

Faith-based organizations, which are part of the non-profit private sector, play an important role in the advocacy, financing and delivery of health care and other services provided as part of the national response to HIV and AIDS. Their role includes the procurement, storage and training in supply management of medicines, maintenance services for medical equipment, medicines production, medicines information services, and the negotiation of arrangements with governments.

Fee-for-service payments refer to medical or other services paid to providers on a service-by-service and/or to or item supplied basis as opposed to flat beneficiary contributions, such as salary payments, prospective case-mix type of payments and capitated forms of payments.

Final consumption of households is the value of the consumption goods and services acquired by households, whether by purchase in general, or by transfer from government units or NPISHs, and used by them for the satisfaction of their needs and wants; it is derived from their final consumption expenditure by adding the value of social transfers in kind receivable. The term underlies in the context of NASA the purchases made by individuals for the purposes of maintaining a functional status and improving the well-being of dependents of patients who have died from AIDS.

Financing agents designate institutions or entities which mobilize funds in the hands of financing sources for the purpose of purchasing NASA-related commodities (those embraced by the NASA spending categories). The purchases or payments constitute an array ranging from outright purchases to subsidies (usually from government to producers, but also cross-subsidization between products) to transfers (to households, intra-government transfers

being netted out), from straight to complex forms including advance payments and late payments which NASA invites accountants to adjust (see *accrual accounting*).

Financial intermediation is the activity by which an institutional unit acquires financial assets and incurs liabilities on its own account by engaging in financial transactions on the market. The assets and liabilities of financial intermediaries have different characteristics so that the funds are transformed or repackaged with respect to maturity, risk, scale in the financial intermediation process.

Financing sources refers in NASA to the various types of transactions whereby resources are transferred from entities holding financial assets to financing pooling agencies which make the discretionary payment and purchasing decisions related to HIV and AIDS interventions.

Fixed assets refers to producer equipment (or structure) continuously or repeatedly used in a production process, such as structures (plant or tracks, for instance) and equipment (e.g. machinery and vehicles).

Flows reflect the creation, transformation, exchange, transfer or extinction of economic value. They involve changes in the volume, composition or value of the assets and liabilities of an institutional unit.

A function refers to a set of determinants which activate a dimension (what dynamizes the pooling and mobilization of funds: the financing function, what activates the provision process: the production function, what makes up final use: the consumption function). In the *System of health accounts* and in the *Guide to producing national health accounts,* function designates only end-use.

Functional classifications provide a means of classifying, by purpose or socioeconomic objective (type of service) certain transactions of producers (activities equated with services consumed) and of three institutional sectors – namely households, general government and non-profit institutions serving households (NPISH).

An expenditure-based GDP consists of total final expenditures at purchasers' prices (including the free on board (f.o.b.) value of exports of goods and services), less the f.o.b. value of imports of goods and services. Except when not calculated, the NASA numerators should be displayed.

The general government sector consists of the totality of institutional units, which, in addition to fulfilling their political responsibilities and their role of economic regulation, produce principally non-market services (possibly goods) for individual or collective consumption and redistribute income and wealth. It comprises the territorial authorities (central/federal government – regional/provincial/state governments – district/municipal and other local governments), trust funds (principally social security schemes) and extra-budgetary funds but not public corporations; when the latter are included, the precise nomenclature is public sector (the health and other social programmes carried out by public corporations usually conducted with government directives and not as an autonomous corporate decision, the interventions on HIV and AIDS conducted by these corporations are assimilated to quasi extra-budgetary funds and thus reported by most countries as general government). As general government transactions may be tabulated consolidated (net of intra-government transfers) or gross
(cash flows out of each level), the estimates should be appropriately qualified.

Grants are voluntary transfers, current or capital in nature (see also *subsidies*).

The gross domestic product is the total value of output in the economic territory studied, measured at market or purchaser prices or at factor cost.

Gross fixed capital formation is measured by the total value of a producer's acquisitions, less disposals, of fixed assets during the accounting period plus certain additions to the value of non-produced assets (such as subsoil assets or major improvements in the quantity, quality or productivity of land) realized by the productive activity of institutional units. The fixed assets are divided in structures (constructions) and equipment (e.g. for laboratory or surgeries). For operational reasons, transport equipment (vehicles) is often identified separately.

Gross value added is the value of output less the value of intermediate consumption; it is a measure of the contribution to GDP made by an individual producer, industry or sector; gross value added is the source from which the primary incomes of the SNA are generated and is therefore carried forward into the primary distribution of income account.

A health insurance policy is a contract between an individual and an insurer by which in the event of specified diseases (in some contacts also in the event of accidents) the insurer will pay to the insured party a partial (sometimes total) part of the costs incurred, directly to the provider or to the insured party. The main types of contracts are between the general population and a social security scheme; between employers on behalf of their employees; and between individuals and for-profit or not-for-profit entities.

Health promotion is a process to enable individuals or target population groups to increase control over, and to enhance their health status.

Health status is a measure or index to represent a synthetic average or the distribution of these functional characteristics in the population or in targeted population groups.

Health technology assessment is a (rigorous) appraisal of the evidence claims attached to a specific intervention, mainly clinical, and cost-effectiveness. This includes procedures, settings and programmes, the evaluation of medical equipment, pharmaceuticals, therapeutic appliances and therapeutic procedures.

The hedonic method is a regression technique used to estimate the prices of qualities or models that are not available on the market during particular periods, but whose prices during those periods are needed to be able to construct price relatives. It is based on the hypothesis that the prices of different models on sale on the market at the same time are functions of certain measurable characteristics such as size, weight, power, speed, etc. and so regression methods can be used to estimate by how much the price varies in relation to each of the characteristics. The British Office of National Statistics is currently exploring the feasibility and the sensitivity of introducing effectiveness gains in public education and health expenditure, susceptible to influence in years ahead NASA measurement.

Home care relates to medical, paramedical and selected types of social care complementing the medical and paramedical care for patients with functional disabilities provided outside hospitals, dispensaries and health care professionals' offices and delivery facilities, usually in the patient's home.

A household is a small group of persons who share the same living accommodation, who pool some, or all, of their income and wealth and who consume certain types of goods and services collectively, mainly housing and food.

Actual final consumption of households is the value of the consumption goods and services acquired by households, whether by purchase in general, or by transfer from government units or NPISHs, and used by them for the satisfaction of their needs and wants; it is derived from their final consumption expenditure by adding the value of social transfers in kind receivable. Some transactions that it is desirable to include in the accounts do not take place in money terms and so cannot be measured directly; in such cases a conventional value is imputed to the corresponding expenditure (the conventions used vary from case to case and are described in the SNA as necessary).

An imputation is an informed estimation of a missing value, a guess of an expected plausible value when actual data are missing.

Inpatient care refers to services delivered to patients visiting a health care institution (usually a hospital) in which they stay overnight.

The International Classification for Health Accounts (ICHA) consists of three classifications (financing agents, providers, spending categories) adopted as the instrument to construct the System of Health Accounts cross-classification tables.

International Monetary Fund (IMF), comprising around 180 member countries, supervises the exchange rate mechanisms, makes available to its members a pool of foreign exchange to assist them when they have balance of payments difficulties and provides economic intelligence (including statistical services) and analyses to guide macro-economic policies.

Interest (interest payments) is (are) the amount that the debtor becomes liable to pay to the creditor over a given period of time without reducing the amount of principal outstanding, under the terms of the financial instrument agreed between them.

An intervention refers to a wilful exposure to a process (e.g. therapeutic process) designed to alleviate facets of a situation, exposure to an environmental agent, harm from a recent exposure to a risk.

Inventories (also referred to as stocks) consist of finished goods held by a producer prior to sale, further processing or other use) and products (material and fuel) acquired from other producers to be used for intermediate consumption or resold without further processing.

ISIC is the United Nations International Standard Industrial Classification of All Economic Activities; the third revision of ISIC was used in the 1993 SNA. The fourth revision is to be implemented starting in 2008.

Local government units are institutional units whose fiscal, legislative and executive authority extends over the smallest geographical areas distinguished for administrative and political purposes.

Market valuation refers to pricing that is observed or derived for the transactions measured.

Mass media (see *communication* and *behavioural change*).

Materials and supplies are goods and services used in the provision process as intermediate inputs, excluding fixed capital or fixed investments whose contribution is measured.

Mitigation relates to programmes targeted to the poor, the vulnerable and other high-risk groups.

Mixed incomes is the income of unincorporated enterprises owned by households to which the owner(s) may contribute with his/her (their) unpaid labour inputs that cannot be separated from the operating surplus, which also covers the income on fixed assets and contains production of households for their own final use.

Morbidity is the rate of illness in a stated population but not death (percentage/per 1000/per 100 000 of total population or population in a defined segment).

Mortality is rate of deaths per 1000 population or other pre-defined population segment.

Non-market refers to output and transactions produced by non-profit institutions supplied free or at a price that is not economically significant (is charged to raise revenue or to reduce excess demand).

Non-profit institutions (NPIs) are legal or social entities created for the purpose of producing goods and services, whose status does not permit them to be a source of income, profit or other financial gain for the units that establish, control or finance them.

Number needed to treat (NNT) is an indicator to measure treatment effectiveness. The number of people that should benefit from a specific treatment or intervention during a given period of time to prevent an additional adverse outcome or achieve an additional beneficial outcome.

Nursing staff designates nurses, medical assistants and midwives (persons who have completed at least a country's basic course in nursing or whose long practical experience and capacitation has earned them formal recognition by the authorities of the hospital concerned of being a practical nurse).

Operating surplus refers to the value arising from the production of goods and services after costs and before allocation of flows to property income.

Opportunity cost is a concept commonly used in economics; it is measured by reference to the opportunities foregone at the time an asset or resource is used, as distinct from the costs incurred at some time in the past to acquire the asset, or the payments which could be realized by an alternative use of a resource (e.g. the use of labour in a voluntary capacity being valued at the wages which could have been earned in a paid job).

Outcome relates to the results of an intervention or process in terms of individual or societal expectations.

Out-of-pocket spending applies to the direct disbursements of households, including in NASA gratuities and payments in-kind, made to health practitioners and to suppliers of social assistance linked to AIDS intervention programmes, including medical goods suppliers

(pharmaceuticals and therapeutic appliances), other goods and services whose primary intent is to contribute to the restoration or to the enhancement of the health status and the social status of individuals or population groups as listed in the NASA spending categories and supporting classifications.

Outpatient care refers to medical care and selected forms of social care for patients who are functionally disabled, which is provided to patients visiting a health care institution in which they are kept for only a few hours and accommodation for overnight stay in the facility is not required.

Output consists of those goods or services that are produced within an establishment that become available for use outside that establishment, plus any goods and services produced for own final use.

Own account production is the output for final consumption or for gross capital formation by a producer.

Palliative care (from Latin *palliare,* to cloak) is any form of medical care or treatment that concentrates on reducing the severity of disease symptoms or slowing the disease's progress, rather than providing a cure. While palliative care may occasionally be used in conjunction with curative therapy, providing that the curative therapy will not cause additional morbidity, the primary aim of palliative care is to improve quality of life by reducing or eliminating pain and other physical symptoms.

Payroll taxes paid by enterprises, assessed as a percentage of the wages and salaries paid on the basis, are identified in the expanded classification of financing sources.

PG (see *Producers' guide*).

PMTCT is the standard abbreviation for Prevention of mother-to-child transmission programmes.

The price of a good or service is the value of one unit of that good or service.

A price index reflects an average of the proportionate changes in the prices of a specified set of goods and services between two periods of time.

A price relative is the ratio of the price of a specific product in one period to the price of the same product in some other period. In PPP comparisons, used notably by two handful of Latin American countries, a price relative refers to the ratios of the same product in two countries (which may be a reference country against which the prices of a group of countries is

A Fisher's ideal price index is the geometric mean of the Laspeyres and Paasche price indices. A Fisher's Ideal volume index is the geometric mean of the Laspeyres and Paasche volume indices.

A Laspeyres price index is a weighted arithmetic average of price relatives using the values of the earlier period as weights. A Laspeyres volume index is a weighted arithmetic average of quantity relatives using the values of the earlier period as weights.

A Paasche price index is the harmonic average of price relatives using the values of the later period as weights.

A Paasche volume index is the harmonic average of volume relatives using the values of the later period as weights.

Pre-ART refers to a phase of the treatment of HIV-infected patients that precedes the administration of an antiretroviral or ARV therapy.

Preventive services entail a reduction of exposure to risks and to the effects of increased risks. It focalizes actions linked to specific environments, involving co-responsibility, through behaviour of individuals and communities. Much (unmeasured) prevention is attained in the home, in the workplace and in public spaces, only marginally identified as child protection, breast cancer screening, school health) or in mostly non-care educational community programmes. It involves an individual when the attainment of a public health target is integrated in a personalized care programme. Preventive services are current costs to reduce potential future risks, valued at historical resource use costs, much of which shifted to labour exchanges, to equipment purchases such as automotive equipment.

Prevention comprises services linked to health promotion, primary prevention, secondary prevention, community programmes and services geared to increasing the health stock of a population. There is typically a distinction between:

- *health promotion* or services designed to reduce risk exposure and their consequences and to enhance the health status of the total population or sizeable population groups;
- *primary prevention* relating to overt individual health risks or their effect, the early detection of serious risks for the health of population segments before clinical conditions are perceived or epidemiological warnings emerge; and
- *secondary prevention* designed to identify and treat people with an established disease and those at very high risk of developing it, as well as treating and rehabilitating patients who have already had a disease and seek to avoid sequelae and risk factor interventions. Its final aims are to contribute to: extending overall survival, improving quality of life and decreasing need for intervention procedures as well as reducing the incidence of subsequent episodes.

The private sector includes non-financial and financial corporations, non-profit institutions serving mainly households (NPISH) and households.

A PPP (purchasing power parity) is a price relative which measures the number of units of country B's currency that are needed in country B to purchase the same quantity of an individual good or service as 1 unit of country A's currency will purchase in country. For audiences unprepared to use much economic jargon, PPP are akin to a measure or index attempting to measure in gross terms a level-of-living equivalent.

Private corporations are the resident corporations and quasi-corporations not controlled by government agencies.

PG (Producers' Guide) is the standard abbreviation of the 2003 World Bank/World Health Organization/USAID *Guide to producing national health accounts* with special applications for low-income and middle-income countries.

Prognosis refers to the probable course of a disease over time.

Providers in NASA are entities which are paid for by financing agents in exchange for, or in anticipation of activities producing commodities entering the basket of NASA goods and services, which can have health care or social care attributes (including administration and advocacy in nature). As activities also yield non-NASA products, NASA is developing a functional classification that is intended to be more rigorous than the ICHA and social care classifications from which the early HIV and AIDS functional classifications are issued.

A production is an activity, carried out under the responsibility, control and management of an institutional unit, which uses inputs of labour, capital and goods and services to produce outputs of goods and services.

Public corporations are resident corporations and quasi-corporations subject to control by government units, with control over a corporation being defined as the ability to determine general corporate policy by choosing appropriate directors, if necessary.

Public administrations as producer of goods and services consider departments, establishments and other entities of a central/federal, regional/provincial or local/municipal which are devoted to the supply of administration, defence, education, health, social, economic promotion and other services, financed through ordinary and supplementary budgets or extra-budgetary funds.

Public health services (in ISIC, Division 07 Health, Group 07.4) relates to the administration, inspection, operation or support of services such as blood-banks (collecting, processing, storing, shipping), disease detection (cancer, tuberculosis, venereal disease), prevention (immunization, inoculation), monitoring (infant nutrition, child health), epidemiological data collection, family planning services and so forth. Their mandate includes the preparation and dissemination of information on community and communal health matters, as well as a contribution to the planning, monitoring and evaluation of health programmes, the setting and enforcement of public standards, and an involvement in the regulation, licensing and supervision of providers. These services are delivered by special teams to groups of clients, most of whom are in good health, at workplaces, schools or other non-medical settings. Public health services are not normally connected with a hospital, clinic or health practitioner office, although some such institutions may receive a specific public health mandate. Public health services are not routinely delivered by medically qualified doctors, although some may be associated to specific activities, e.g. the screening of blood-bank collection. They comprise specialized testing laboratories but medical analysis laboratories (ISIC class 07.2.4) and laboratories engaged in determining the causes of disease (ISIC class 07.5.0) constitute statistically distinct services.

Public corporations refer to entities owned by a nation which have a substantial degree of financial and managerial independence from the public authority that created them.

The public sector comprises all general government entities and public corporations.

Purchaser's prices refer to the amount actually paid by the end user (purchaser), excluding any deductible Value added tax (VAT) or similar deductible tax (excluding taxes on *intermediate consumption* of a health care or social care nature which make up the national response to HIV and AIDS).

Quality refers to characteristics which the evaluator (person or institution) deems to be an important part of the utility a consumer or purchaser derives from a commodity (good or service), such as functional reliability or comprehensiveness of a multi-attribute defined commodity or consistency or durability or attainment of set objectives. A quality is usually a quantity index applied to commodities which offer attributes other commodities of the same class do not have to the same extent.

Quality assurance refers to technical, operational and managerial activities aiming to ensure that all services reaching a patient are safe, effective and acceptable.

Quality of life refers to the ability of a person or population segment to satisfactorily exert his/her functional abilities.

Quantitative data is the term for information which describes the extent of an observed phenomenon in numerical terms.

A quantity index is built up from information on quantities, such as the number or total weight of goods or the number of services. A quantity index has no meaning from an economic point of view if it involves adding quantities that are not commensurate, although it is often used as a proxy for a volume index (see also *price index* and *volume index*).

The Quasi corporations are unincorporated enterprises that function as if they were corporations.

R&D health expenditure (ISIC division 07, group 07.5) comprise outlays on the administration and operation of government agencies engaged in applied research and experimental development related to health, grants, loans and subsidies to support applied research and experimental development related to health undertaken by nongovernment bodies such as research institutes and universities. They include outlays on laboratories engaged in determining the causes of disease, but exclude basic research (ISIC class 01.4.0).

A randomized controlled trial is a scientific experiment commonly used in testing health care services.

A register is a written record of events or transactions or names.

Residents comprise general governments, private non-profit making bodies serving households, individuals and enterprises operating within the territory of a given economy.

Resources refers to the side of the current accounts where transactions which add to the amount of economic value of a unit or a sector appear (for example, wages and salaries are a resource for the unit or sector receiving them); by convention, resources are put on the right side of a T-account (see also *T-account*).

Resource costs are the factor or inputs entering the provision or delivery process.

The rest of the world consists of all non-resident institutional units that enter into transactions with resident units, or have other economic links with resident units.

Risk pooling refers to the spreading of potential liabilities of the minority in a large stratified group.

A sample is a segment of a population that is representative of a whole.

Satellite accounts provide a framework linked to the central accounts and which enables attention to be focused on a certain field or aspect of economic and social life in the context of national accounts, with principal focus on value added or time budgets. Common examples are satellite accounts for the environment, or tourism, or unpaid household work. The Functional Accounts, which constitute the other large branch of meso-accounts

A sector refers to a group of units sharing a role in an economic system. Conventionally, NASA relates to a public sector, a private sector and a rest-of-the world sector.

A Segment is a smaller group.

Services are outputs produced to order and which cannot be traded separately from their production; ownership rights cannot be established over community services and by the time their production is completed they must have been provided to the consumers. A group of service industries, whose outputs have characteristics of goods, concerned with the provision, storage, communication and dissemination of information, advice and entertainment in the broadest sense of those terms, for which ownership rights can be established, may be classified as a quasi goods industry depending on the medium by which these outputs are supplied. A small subset of this subclass enters into the production of a few NASA services.

Sexually transmitted infection (STI) used in the context of NASA as distinct from the more conventional sexually transmitted diseases (STD) – includes a broader population segment, infected but presenting no visible stigma of the disease.

SHA: *A System of Health Accounts* is the manual diffused by OECD in 2000.

SNA: *Standard National Accounts* is the Commission of the European Community/International Monetary Fund/Organisation for Economic Co-operation /United Nations/World Bank manual encompassing the conventional and agreed rules to construct and maintain macro-economic accounts. The 1993 edition is not yet uniformly implemented by the majority of nations, which still rely on the 1968 edition. A revised version (SNA08) is expected to be adopted during 2008.

A Social accounting matrix (SAM) is a presentation of the SNA in matrix form that incorporates whatever degree of detail is of special interest. The construction of an SAM exploits the available flexibility to highlight special interests and concerns which the SNA macro-accountants may not sufficiently highlight, displaying the interconnections, disaggregating the household sector into intervention-specific segments, showing the link between income generation and consumption, notably, choosing types of disaggregation appropriate for the subject, incorporating extensive adjustments to serve specific analytical purposes.

Social assistance benefits are transfers made by government units or NPIs to households intended to meet the same kinds of needs as social insurance benefits but provided outside an organized social insurance scheme and not conditional on previous payments of contributions. Only benefits designated in the NASA functional benefits should be retained in NASA accounting.

Social benefits are current transfers received by households intended to provide for the needs that arise from certain events or circumstances, for example, sickness,

unemployment, retirement, housing, education or family circumstances. Only benefits designated in the NASA spending categories classification should be retained in NASA accounting.

Social exclusion (in ISIC, Division 10, Social protection, Group 07) applies to cash benefits and benefits in kind to persons who are socially isolated or at risk of social isolation such as persons who are destitute, low-income earners, immigrants, indigenous people, refugees, alcohol and substance abusers, victims of criminal violence, etc. The activity relates to the administration and operation of schemes relevant to the alleviation of the plight, comprising cash benefits, such as income support and other cash payments to the destitute and vulnerable persons to help reduce the consequences of poverty or assist in difficult situations; comprising benefits in kind, such as short-term and long-term shelter and board provided to destitute and vulnerable persons, rehabilitation of alcohol and substance abusers, services and goods to help vulnerable persons such as counselling, day shelter, help with carrying out daily tasks, food, clothing, fuel, etc.

Social insurance schemes are schemes in which social contributions are paid by employees or others, or by employers on behalf of their employees, to secure entitlement to social insurance benefits, in the current or subsequent periods, for the employees or other contributors, their dependants or survivors.

Social security funds are separately organized from the other activities of government units and hold their assets and liabilities separately from the latter. They are separate institutional units, autonomous funds with their own assets and liabilities and engage in financial transactions on their own account.

Stand by means "in reserve, ready to be used" (e.g. a credit line requested to be usable on call at the borrower's request).

State-owned enterprises (crown-owned enterprises, nationalized enterprises, parastatal entities), treated in the National Accounts as quasi private entities selling their wares on markets, are dealt with by several accountants as quasi-governmental entities for NASA commodities because as secondary producers of NASA-type benefits they do not act according to a commercial logic but, if not wholly according to public policy principles, largely in accordance with social, not economic criteria.

A statistical unit is the unit of observation or measurement for which data are collected.

Structures designate the constructions and immobile fixed investments (capital formation) entering the capital stock.

Subsidies are current unrequited payments that government units, including non-resident government units, make to enterprises on the basis of the levels of their production activities or the quantities or values of the goods or services which they produce, sell or import.

A supply and use table in NASA is a matrix that records how supplies of different kinds of goods and services originate from domestic industries and imports and how those supplies are allocated between various intermediate or final uses, including exports. In the NASA approach.

Surveillance refers to the close observation of a person or group, especially one under suspicion. The act of observing or the condition of being observed.

A survey is an investigation into the characteristics of a population segment or population samples, usually stratified for representativeness, designed to capture shared characteristics and differences that are grossed up to picture a behavioural relationship.

Taxes are compulsory unrequited transfers to general government.

Taxonomy refers to the science or principles of classification.

Therapy refers to a selection of effective treatments which meet the values of a patient or a population segment. (The effectiveness or efficacy of treatments at the individual level is often measured by way of a recuperation of the patient's quality of life, at the level of a population segment, by means of randomized controlled trial).

Transfers are unrequited payment made by one unit to another. The main types are taxes, social contributions and social benefits.

Triaxial means that there are three dimensions.

Unconsolidated refers to intra-sectoral flows (intragovernmental or between private agents) which are added up without netting out.

Unit refers to a fundamental quantity of measurement.

The term use(s) refers to transactions in the current accounts that reduce the amount of economic value of a unit or sector (for example, wages and salaries are a use for the unit or sector that must pay them); by convention, uses are put on the left side of the account

A T-account is a display which lists in adjacent columns the transactions occurring in the system monitored: the transactions arrayed as uses (expenditure) and resources (revenue), the level of assets and liabilities (changes thereof during the period of observation, usually a year when dealing with NASA categories).

Top down estimation refers to figures whose aggregate value is known and distributed into plausible elements considered to enter into its composition.

Transactions – at the centre of the NASA tables, created around a cross-classification of two transaction categories each – consist in an exchange between two parties, such as the purchase of NASA commodities against a budget assignment (including an external grant), a direct payment, an entitlement right, or one of a long list of and other.

Transfer payments relate to institutions (usually in NASA governments) transferring assets (money) to households without any payment in return, typically reimbursement of medical and paramedical expenditure.

Transparency relates to the openness of a process, to non-secretiveness regarding its value and mode of approach.

Triangulation is a statistical procedure permitting one to impute a missing value by comparing it to estimates found in other datasets comprising it also.

User fees/user charges at government facilities in most countries constitute an essential financing source for the programmes levying them (supporting the operation and the maintenance of the facilities when the user charges for services at publicly funded facilities are retained by it or considered part of its budget). When the fees are returned to the central ministry, they may be included in its recurrent budget. Regardless of the arrangement, where fees have been paid by consumers in return for delivery of services, the household is the appropriate financing agent (for the amount of the fees). Expenditures by the government as a financing agent should be net of those fees. When the ministry of health operates a hospital at a cost of 1000, and the hospital collects 100 in user charges from households the households are the financing agent for 100 (10%) and the ministry of health is the financing agent for 900 (90%). When user fees are returned to the ministry of finance, it is essential that they *not* be included in the ministry's outlays to avoid double-counting those expenditures.

Validation is the process of assessing a result by a method (sometimes several methods) other than the method originally used to obtain the cell, row, column, matrix examined.

Value at the level of a single, homogeneous good or service is equal to the price per unit of quantity multiplied by the number of quantity units of that good or service; in contrast to price, value is independent of the choice of quantity unit.

Gross value added is the value of output less the value of intermediate consumption; it is a measure of the contribution to GDP made by an individual producer, industry or sector; gross value added is the source from which the primary incomes of the SNA are generated and is therefore carried forward into the primary distribution of income account.

Value added tax (VAT) is a tax collected by enterprises in stages (at each sale of a commodity) which is ultimately charged in full to the final purchaser. (The concept is opposed to a sales tax which may be applied *in cascade* at various stages of transaction, not reimbursed to intermediate purchasers, those before the end stage).

Vector is a set of variables.

A volume index is most commonly presented as a weighted average of the proportionate changes in the quantities of a specified set of goods or services between two periods of time; volume indices may also compare the relative levels of activity in different countries (e.g. those calculated using PPPs).

Vulnerable and special populations, in the context of NASA, are target population segments at high risk of HIV contamination, particularly indigenous groups, migrants, prisoners, recruits in the armed forces, truck drivers, displaced persons in situation of civil war and conflicts. In the context of NASA, orphans – although a vulnerable population segment – are listed under OVC – Orphans and Vulnerable Children and not under the Vulnerable and special populations group vocable as this is a specific target group that should not be counted twice.

Selected References

i. Barnett, C., Bhawalkar, M., Nandakumar, A.K., P. Schneider, 2001, The Application of the National Health Accounts Framework to HIV/AIDS in Rwanda, Partnerships for Health Reform, Abt Associate Inc., Bethesda, Maryland, USA. Special Initiative Report No.31, February 2001.

ii. De Renzio, P. (2004). "The Challenge of Absorptive Capacity: Will lack of absorptive capacity prevent effective use of additional aid resources in pursuit of the MDGs?" Report on Seminar held at DFID, 9 September 2004. Available at www.odi.org.uk

iii. Drew RS, Makufa C, Foster G. "Strategies for providing care and support to children orphaned by AIDS." AIDS Care. 1998 April 10 Supplement 1:S9-15.

iv. Ghana AIDS Commission (GAC), in cooperation with SIDALAC. 2004. "Level and Flow of Financial Resources in Response to HIV/AIDS." A PowerPoint presentation. Accra: GAC.

v. Guthrie, T., and Hickey, A. eds. (2004). Funding the Fight: Budgeting for HIV/AIDS in Developing Countries. Cape Town: Idasa AIDS Budget Unit. October 2004. Available at www.idasa.org.za

vi. Guidelines on construction of core indicators. Joint United Nations Programme on HIV/AIDS. UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO, World Bank, 2009.

vii. GFATM. Monitoring and evaluation toolkit: HIV/AIDS, Tuberculosis and Malaria. The Global Fund to Fight AIDS, Tuberculosis and Malaria. June 2004. www.theglobalfund.org

viii. *Health research questionnaire 2005.* Global Forum for Health Research. www.globalforumhealth.org

ix. Health Promotion Office, International Health Policy Program & Ministry of Public Health (2001) Report on Cost-Effectiveness Study of Prevention Mother-to-Child Transmission in 13 Provinces in Northeastern and Northern Provinces, September, Bangkok

x. IDASA and Fundar Sida. 2004. Public Budgets for HIV/AIDS Epidemic: Summary Reports for Africa and Latin America. CD-ROM.

xi. Inter American Development Bank. Resource Needs for HIV/AIDS: model for estimating resource needs for prevention, care, and mitigation. Washington, D.C. September 2002.

xii. Izazola-Licea, Jose Antonio, Daniel Aran, and Ricardo D. Valladares, ed. 2003. El financiamiento de las respuestas nacionales contra el SIDA en America Latina y el Caribe y el flujo de financiamiento internacional. Funsalud, Mexico City Mexico. 492 p.

xiii. Izazola-Licea JA, Valladares-Cardona R. [Financing and expenditure on HIV and AIDS]. Financiamiento y gasto en respuesta al VIH/SIDA. Inter American Development Bank. 2003. . (Sustainable Development Department Technical papers series ; SOC-133). Available in Spanish at http://www.iadb.org/sds/publication/publication_3363_e.htm .

xiv. Izazola JA, Avila-Figueroa C, Aran D, Piola S, Perdomo R, et al. Country response to HIV/AIDS: National Health Accounts on HIV/AIDS in Brazil, Guatemala, Honduras, Mexico & Uruguay. *AIDS* 2002;16:s66-s75.

xv. Reli Kelly, Bertozzi SM, Avila-Figueroa C. Cost-effectiveness of strategies to reduce Mother-to-child HIV transmission in a low HIV-prevalence setting. *Health Policy and Planning* 2003;18(3):290-298.

xvi. Martin, G. (2003) A Comparative Analysis of the Financing of HIV/AIDS Programmes in Botswana, Lesotho, Mozambique, South Africa, Swaziland and Zimbabwe, Human Science Research Council, October 2003.

xvii. *Monitoring financial flows for health research.* Global Forum for Health Research, 2001. www.globalforumhealth.org

xviii. National AIDS Spending Assessments: absorptive capacity, bottlenecks, and out-of-pocket spending. Presented at the UNAIDS Resource Tracking Consortium, September, 2005.

xix. Organisation for Economic Cooperation and Development, International Monetary Fund, World Bank et al. *System of national accounts 1993.* 1994.

xx. Organisation for Economic Co-operation and Development. *A system of health accounts. 2000.* OECD: http://www.oecd.org

xxi. OECD (2004) International Development: Creditor Reporting System, CRS aid activities in support of HIV/AIDS control, http://stats.oecd.org/ODB/DisplayOWC.aspx/DatasetCode=CRS/HIVAIDS by Recipient accessed, November 2004.

xxii. Partners for Health Reform*plus.* December 2003. National Health Accounts Training Manual. Bethesda, MD: The Partners for Health Reform*plus* Project. Abt Associate Inc.

xxiii. Rannan-Eliya Ravi P. Compilador. National Health Accounts Estimation Methods: Household Out-of-pocket Spending in Private Expenditure. Monograph prepared for WHO/NHA Unit, Geneva, Switzerland. Health Policy Research Associates. SRI LANKA 2005.

xxiv. Schwartlander B, Stover J, Walker N, Bollinger L, Gutierrez JP, McGreevey W, Opuni M, Forsythe S, Kumaranayake L, Watts C, Bertozzi S. "Resource Needs for HIV/AIDS." Science 292:2434-37. 29 June 2001.

xxv. SIDALAC. 2003. *Financiamiento y Gasto en respuesta al VIH/SIDA: Lecciones Aprendidas en America Latina y el Caribe (cited in text as FyG).* . Fundación Mexicana para la Salud: México City DF.

xxvi. SIDALAC. 2004. Financial Indicators of the National Responses to HIV/AIDS in Latin America and the Caribbean, 1999–2002. National HIV/AIDS Accounts. Estimation of the Level and Trends of the Flows of Financing and Expenditures in HIV/AIDS Activities. Mexico City: FUNSALUD.

xxvii. UNAIDS and the Harvard School of Public Health. Level and Flow of National and International Resources for the Response to HIV/AIDS, 1996-1997. 1-37. 1999. Geneva, Switzerland, UNAIDS.

xxviii. UNAIDS. 2004. National Spending for HIV/AIDS, 2004. UNAIDS. Geneva, Switzerland.

xxix. UNAIDS. Financing the expanded response to AIDS. Joint United Nations Programme on HIV/AIDS. UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO, World Bank, July 2004.

xxx. UNAIDS. The "Three Ones" in action: where we are and where we go from here. Joint United Nations Programme on HIV/AIDS. UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO, World Bank, May 2005.

xxxi. UNAIDS. Intensifying HIV prevention. UNAIDS policy position paper. Joint United Nations Programme on HIV/AIDS. UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO, World Bank, 2005.

xxxii. UNAIDS. CRIS: country response information system. Joint United Nations Programme on HIV/AIDS. UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO, World Bank, July 2005.

xxxiii. UNAIDS. UNGASS – Monitoring the Declaration of Commitment on HIV/AIDS

xxxiv. UNAIDS. Making the money work through greater UN support for AIDS responses. The 2006-2007 Consolidated UN Technical Support Plan for AIDS. Joint United Nations Programme on HIV/AIDS. UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO, World Bank, 2005.

xxxv. UNAIDS. Resource needs for an expanded response to AIDS in low-and middle- income countries. Joint United Nations Programme on HIV/AIDS. UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO, World Bank, 2005.

xxxvi. UNAIDS. Expanding access to HIV treatment through community-based organizations. A joint publication of Sidaction, UNAIDS and WHO. Joint United Nations Programme on HIV/AIDS. UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO, World Bank, 2005.

xxxvii. UNAIDS. Global Task Team on improving AIDS coordination among multilateral institutions and International Donors. Joint United Nations

Programme on HIV/AIDS. UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO, World Bank, 2005.

xxxviii. UNAIDS. Financing the expanded response to AIDS: HIV and microbicide research and development. Joint United Nations Programme on HIV/AIDS. UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO, World Bank, 2005.

xxxix. Valladares R, Daniel Arán, Carlos Ávila, Patricia Hernández, José Antonio Izazola Licea, Sergio Piola, Luciana Texeira. Technical handbook for estimating the national health accounts on HIV/AIDS. Sidalac. Fundación Mexicana para la Salud, A. C. Mexico 2001.

xl. Waddington Catriona. Does earmarked donor funding make it more or less likely that developing countries will allocate their resources toward programmes that yield the greatest health benefits? Bull WHO 2004; 82: 703-708.

xli. Waranya Teokul, Walaiporn Patcharanarumol, Chitpranee Vasavid, Nipha Kittireangcharn, Bhumisuk Khananurak, Pornpimol Cheewacheun, Viroj Tangcharoensathien. Thailand National AIDS Account. National Economics and Social Development Board, Office of Prime Minister & International Health Policy Program-Thailand, Ministry of Public Health. October 11, 2004.

xlii. WHO. Guide to producing national health accounts: with special applications for low-income and middle income countries. © World Health Organization 2003. WHO (World Health Organization): http://www.who.int/nha