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Country Factsheets

Technical Specifications



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1. Introduction

The purpose of this document is to define the product specifications for a service provider to carry out the development and implementation of a web-based country factsheet and complementary products.

The service provider will provide support in the areas where internal resources or expertise are not available. These include the development of the website's core functionalities, its design and architecture, including the overall look and feel, database features, and testing.

1.1. Background

As part of its Outcome framework for 2009-2011, UNAIDS has a cross cutting strategy to "Improve country-by-country strategic information generation, analysis and use, including through the mobilization of novel sources".

As concrete steps to facilitate the use of AIDS related data in countries and globally, UNAIDS has setup the following applications:

- Country Fact Sheets – provides graphical and textual information on country's performance based on indicators.
- Indicator Registry – repository of information on indicators to monitor AIDS epidemic.
- Global Response Data-warehouse – warehouse of UNGASS data collected since 2003.
- Country Response Information System (CRIS) – Data collection and analysis tool for national and sub-national monitoring of programmatic indicators.

1.2. Scope

UNAIDS has gone through in-house consultations and assessment on data presentation needs by the users. As a result of this process UNAIDS would like to create a 'one-stop' information technology system to consolidate, integrate and disseminate HIV/AIDS data. The aim is to use the data for more dynamic and innovative ways to analyze and present data from multiple perspectives, which would lead to enhanced performance management and measurement.

On this basis, UNAIDS would like to produce an online (web-based) country factsheet by consolidating information from multiple systems, including data from UNAIDS global partners, into this single system, and presenting the data graphically and textually 'on a single screen'.

The country factsheet will enable users of the system to make better and more informed decisions as well as improve the following:

- Comparison of data between global partners (such as UNAIDS, WHO, USG/PEPFAR, UNICEF, Global Fund, and others);

- Management of data values and harmonization of values reported by agencies;
- Facilitate data reconciliation in countries, prior to UNGASS reporting in 2010;
- Facilitate global, national, and sub-national level analysis of data.

1.3. Deliverables

- a. Country web page factsheets, one for each member state (192 pages total);
- b. Printable PDF factsheets, one for each member state (192 pages total);
- c. 11 web based “motion charts” for the ten priority areas indicators and one for EPI indicators;
- d. Navigation world map to allow drill down to country web page factsheets;
- e. Integration, deployment and configuration of final factsheet products;
- f. System tested by specifications and for quality assurance;
- g. Support and maintenance delivered.

2. Specifications

2.1. User Interface Specifications

The country factsheet is to be divided into two pages. The purpose of the first page is to display AIDS data on a global level, i.e. for all UNAIDS countries for which data is available. This should be the default page of the website and will thereafter be referred to as the global page. The aim of the second page is to display country-specific AIDS data, and will thereafter be referred to as the country page.

The user should be able to navigate between the global and country pages by means of a world map. Specifically, the global page should contain a world map which should allow the user to select /click any country on the map, and upon this selection, the user would be taken directly to the country page. Similarly, the country page should define a small clickable world map to enable the user to go back to the global page. This map would also be useful to put the country in the geographical context of the world while analyzing country-specific data.

The website should be interactive in that the user should be able to click and hover over data items, and other interactions that enrich the user's experience on the website.

Country factsheets should also provide links to the Indicator definitions and metadata contained in the Indicator Registry application. These links should be embedded in the country factsheet, without creating a separate section

for it. A tooltip on those links should also be displayed when the user hovers over the links.

The 11 “motion charts” are going to be designed like the Google Motion Chart widget, which are interactive scatter graphs, allowing the user to select from the a list of indicators on the x and y axis, and to compare various countries. The data for the motion charts will come from the AIDSInfo database, and the set of indicators to include in each motion chart will be predefined.

The user’s computer is assumed to have the following:

- A web browser (Internet Explorer 6 or above, Firefox, Chrome, Safari, or Opera)
- Flash player
- Acrobat Reader
- An active internet connection

2.2. Visual Design

Each page in the country factsheet should display AIDS data in a logical and structured manner, in different physical areas on the web page. The specific data to be displayed within these sections would be determined by the relevant indicator(s) and each section would display AIDS data in a graphical format, using a particular graph or chart, or using tables and text where relevant. The page’s structure and formatting should be developed in such a way as to create online graphical reports.

In the annex, a sample of a fact sheet in two pages shows how one Country Fact Sheet would look like, both on the web, and also as a PDF export.

The website’s style and design should be configurable to the extent that it can be matched to the UNAIDS website for future modification in font, color scheme, and logos. Moreover, the web pages should be compatible and work with all major browsers, including Internet Explorer 6 or above, Firefox, Chrome, Safari, or Opera.

2.3. Data

The factsheet data will be sourced from the existing AIDS-Info database (based on DevInfo database scheme), which is deployed on a SQL Server 2005 database engine. Although, the factsheets will be embedded in the UNAIDS website, the database and factsheet reporting server will run on a separate server.

The database should be designed, developed and maintained in an optimum fashion for best performance and least complexity, and adherence to UNAIDS standards. Hence the database should be scalable, and queries, including stored procedures and functions should be optimized.

2.4. Reports and Exports

The website should allow the user to create hard copy reports by enabling the export of the country fact sheets to a printer-friendly PDF format. The format and content of the PDF country fact sheet will be the same as the web based country factsheets.

2.5. Multi-lingual Interface

The Country factsheets should support all the official UNAIDS languages, including English, French, Spanish and Russian, and the default language should be English. Regarding language selection, the country factsheets should automatically use the current language selection of the UNAIDS website. Hence, the country factsheets language should be configurable by passing parameters to the individual component, so that they will match the parent page's language.

Additionally, the language translation process should be simple, without requiring in-depth technical knowledge. Ideally, the process should incorporate the steps of exporting the information to be translated into a file, such as an Excel spreadsheet, or a .resx file, translating the words and phrases and importing the translations back into the website.

2.6. Server Specification and Hosting

The application will be hosted on a server machine with the following:

- MS SQL Server 2005 Standard Edition;
- Windows Server 2003 64 bit Operating System.

3. Integration

The Country Factsheet will be integrated within the UNAIDS website and this integration should be as rapid, simple and smooth as possible. For this reason, it is required that each graph of the factsheet be developed as a separate module or component. For example, pie charts, geographical maps, etc should all be separate components. Using this modular approach, the same component should be re-used for different countries and different indicators by setting parameters. Similarly, the component's style and size should be easily customizable. In all cases, there should not be any need to have in-depth technical/programming knowledge to perform the integration, ideally only knowledge of HTML markup. An example of this is how Google charts and maps are configured, styled, and embedded inside other web pages.

4. Server Configuration and Deployment

The country factsheet web application as well as its database, complete with the data and features specified in this document, should be deployed on the server leased and setup for hosting of this project. As part of the configuration,

following the deployment, the application should be set up and tested on the web server.

5. Risk Management

- Timeline is based on delivery of system for release to public in September, for review before the global report launch. If the full system is not ready in time, a limited version should be conceived.
- The translation of the factsheets will be done in house, which has a separate timeline, and will follow the completion of the country factsheet development project.


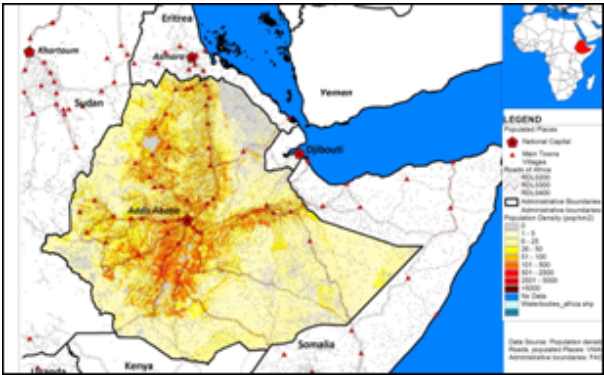
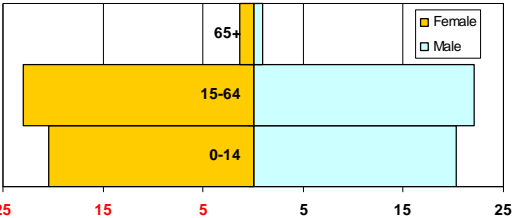
6. Testing and Quality Assurance

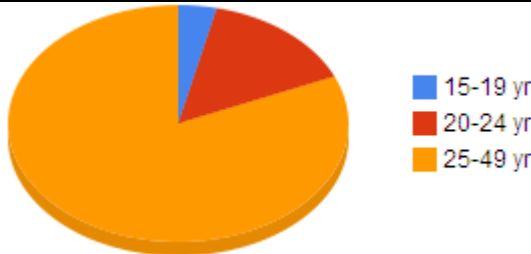
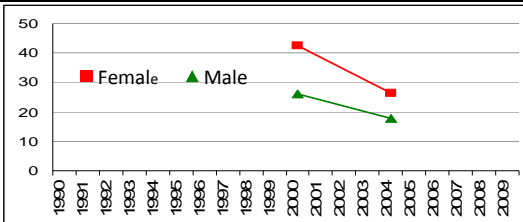
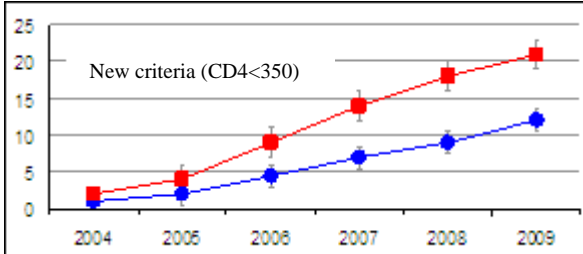
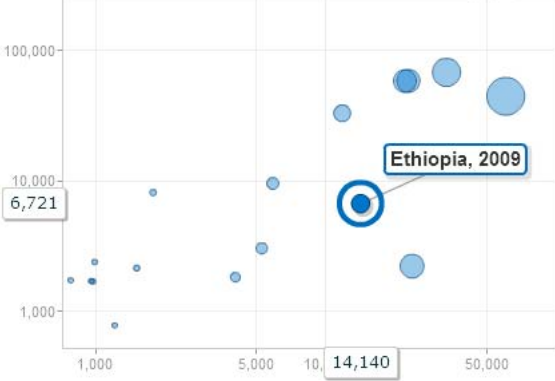
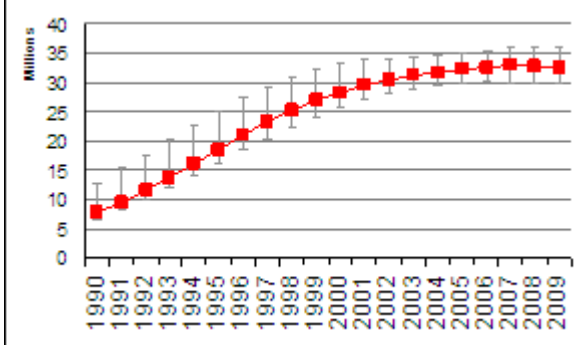
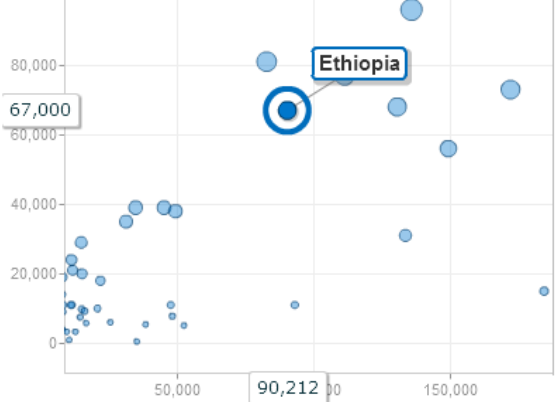
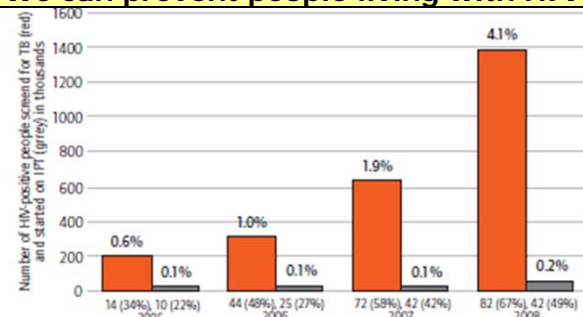
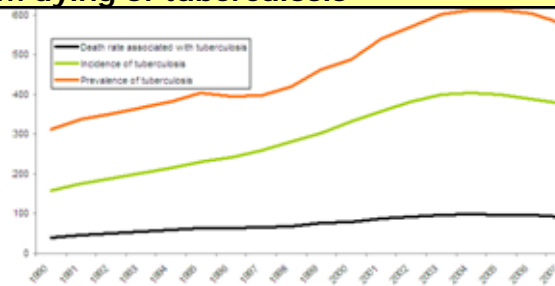
The final system must conform to the specifications laid out in this document

7. Timeline and Phases

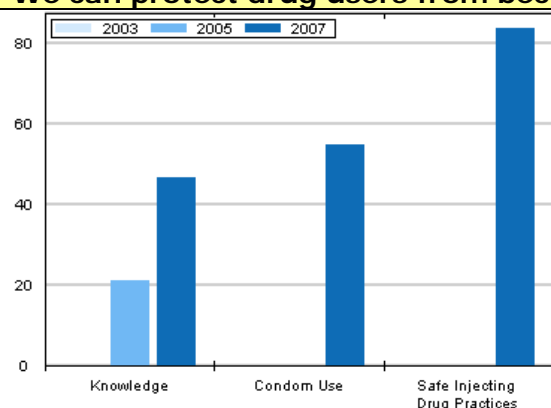
- Technical Specifications Completed (July)
- Global and Country Fact sheets (August)
- Motion Charts (August)
- Deployment, Configuration, and integration into UNAIDS website (September)
- Support and Maintenance (November)

Annex: Country Factsheet Sample

 UNAIDS <small>JOINT UNITED NATIONS PROGRAMME ON HIV/AIDS</small>	ETHIOPIA COUNTRY FACT SHEET n.1, 2010	www.unaids.org
COUNTRY OVERVIEW		
	<p>Human Development Index (HDI) Low Population: 88,000,000 (Source: ???) Age Structure Blood Safety: 100% Population (Millions)</p>  <p>Life Expectancy: 55.8 years ((Source: ???) GDP per capita: \$900 (2009 est.) (Source: ???)</p>	<p>Blood Safety: 100%</p> <p>UNAIDS Regional & Country presence UNAIDS Region: East & Southern Africa UNAIDS Region Contacts UNAIDS Country Contacts:</p>

		Income level: Low income Total health expenditure per capita (USD) 6	
We can reduce sexual transmission of HIV			
 <p>Higher-risk Sex - Males</p>	 <p>More than 1 sex partner the last 12 months and did not use a condom (%)</p>	Source: Source: UNAIDS/UNICEF/WHO, 2010	
We can prevent mothers from dying and babies from becoming infected with HIV			
 <p>■ Estimated antiretroviral therapy coverage (%) ● Estimated percentage of pregnant women living with HIV who received antiretrovirals for preventing mother-to-child-transmission</p>	 <p>HIV-Infected pregnant women who received antiretrovirals vs. New Infant HIV Infections</p>	Source: Source: UNAIDS/UNICEF/WHO, 2010	
We can ensure that people living with HIV receive treatment			
 <p>Number of people living with HIV</p>	 <p>AIDS Deaths due to HIV vs. adults and children with advanced HIV infection receiving ART</p>	In 2007 global coverage of ART was 31%.	
We can prevent people living with HIV from dying of tuberculosis			
 <p>Number of HIV-positive people screened for TB (red) and started on IPT (grey) in thousands</p>	 <p>TB screening of PLHIV and Isoniazid Preventive Therapy (IPT) 2005-2008</p> <p>Only 4% PLHIV screened for TB (orange bars) <1% PLHIV given IPT (grey bars) in 2008</p>		

We can protect drug users from becoming infected with HIV



Does the country have non-discrimination laws or regulations which specify protections for vulnerable sub-populations?

Injecting Drug Users	No
Men who have Sex with Men	No
Sex Workers	Yes

Knowledge: Percentage of IDU who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission.

Condom Use: Percentage of IDU reporting the use of a condom the last time they had sexual intercourse.

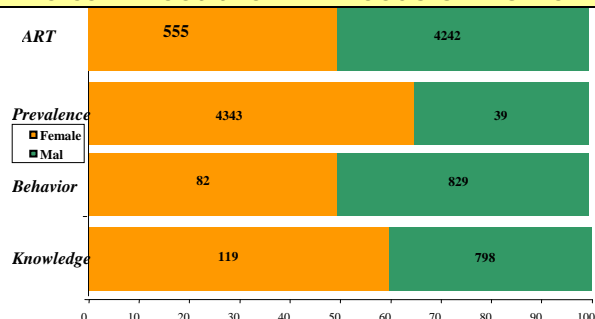
Safe Injecting Drug Practices: Percentage of IDU reporting the use of sterile injecting equipment the last time they injected.

We can remove punitive laws, policies, practices, stigma and discrimination that block effective responses to AIDS

	Government	Civil Society
Does the country have non-discrimination laws or regulations which specify protections for MARPs or other vulnerable sub-populations?		
Does the country have laws or regulations that present obstacles to effective HIV prevention, treatment, care and support for MARPs or other vulnerable sub-populations?		
IEC includes Stigma & Discrimination reduction		
Laws & Regulations that protect PLHIV against discrimination		

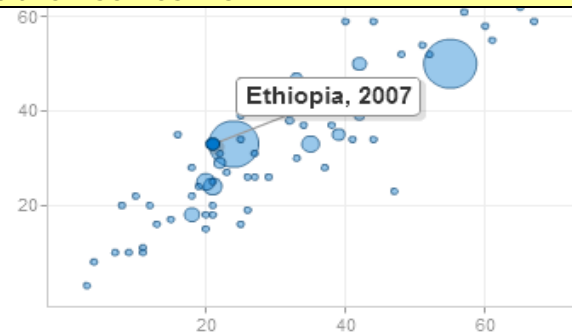
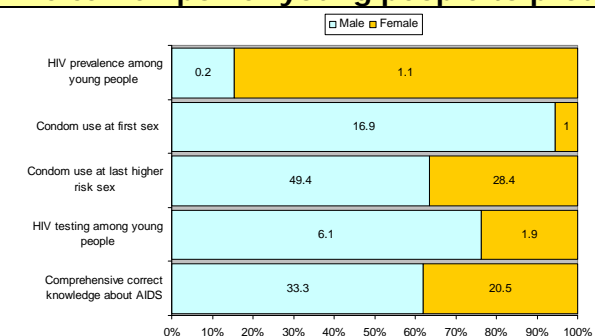
Source: NCPI Questionnaire, UNGASS 2008

We can meet the HIV needs of women and girls and can stop sexual and gender-based violence



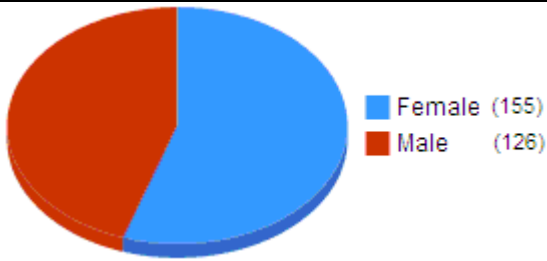
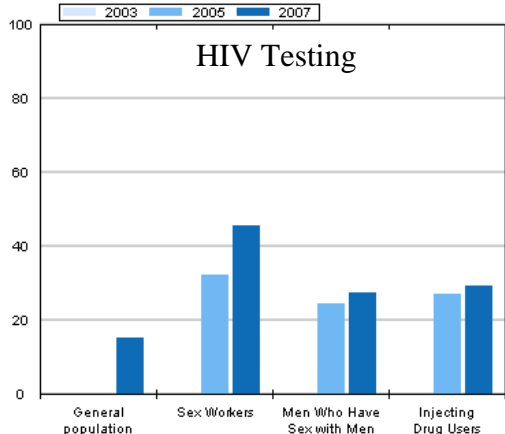
Source: NCPI Questionnaire, UNGASS 2008

We can empower young people to protect themselves from HIV



Source: DHS
 4.7) Comprehensive correct knowledge about AIDS among young people age 15-24 (2 ways to prevent AIDS and reject 3 misconceptions)
 5.6) HIV testing behaviour among young people, sexually active in the last 12 months
 9.5) Young people using a condom at last higher risk sex

We can enhance social protection for people affected by HIV

 <p>Female (155) Male (126)</p> <p>Current school attendance rate of orphans aged 10-14 Proportion of Females to Males</p>	<p>Psychosocial support for people living with HIV and their families:</p> <p><i>Most districts* in need</i></p>	<p>Source: Global Report, UNAIDS 2008</p> <p>Source: NCPI Questionnaire, UNGASS 2008</p>																				
<p>We can empower men who have sex with men, sex workers and transgender people to protect themselves from HIV infection and to fully access antiretroviral therapy:</p>																						
 <p>HIV Testing</p> <table><thead><tr><th>Group</th><th>2003</th><th>2005</th><th>2007</th></tr></thead><tbody><tr><td>General population</td><td>0</td><td>0</td><td>15</td></tr><tr><td>Sex Workers</td><td>32</td><td>32</td><td>45</td></tr><tr><td>Men Who Have Sex with Men</td><td>25</td><td>25</td><td>28</td></tr><tr><td>Injecting Drug Users</td><td>28</td><td>28</td><td>30</td></tr></tbody></table>	Group	2003	2005	2007	General population	0	0	15	Sex Workers	32	32	45	Men Who Have Sex with Men	25	25	28	Injecting Drug Users	28	28	30		<p>Definition: Percentage of women and men aged 15–49 and most-at-risk populations who received an HIV test in the last 12 months and who know their results.</p>
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