

Use of IATI in Country Systems

Working Paper 1: Data Quality Analysis and Initial Consultations

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This is the first of an ongoing working paper series by Development Gateway with support provided by the French Ministry of Foreign Affairs to assess the opportunities and challenges for use of IATI data in country systems. The program focuses on Burkina Faso, Chad, Cote d'Ivoire, Madagascar, and Senegal. This working paper is also informed by DG's ongoing work with the Governments of Kosovo and Malawi and discussions led by the IATI Secretariat at the IATI Regional Data Use conference in Accra, Ghana in April 2015.

This document, which aims to inform discussion at the IATI Technical Advisory Group (TAG) and Steering Committee meetings from May 30-June 2, 2015, summarizes the findings of Development Gateway during i) initial consultations with partner country government staff, ii) rigorous data quality review for all major IATI publishers in each of the five countries, and iii) development of an open source tool for importing IATI data into Aid Information Management Systems (AIMS). A second working paper, which will detail lessons learned from the country implementation phase of the program and further government consultations, is forthcoming in September 2015.

This paper does not represent the official views of the French Foreign Ministry.

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Executive Summary

Since its launch following the 2008 High Level Forum in Accra, the International Aid Transparency Initiative (IATI) has followed a strong growth trajectory. As IATI continues to mature, with data from more than 300 individual publishers – including many of the largest funders for individual partner countries – the attention of the IATI community has increasingly focused on how these data can be *used*, particularly by partner country governments in their Aid Information Management Systems (AIMS). Uptake by partner countries has, however, been slow for a number of reasons, which the work reported here is designed to understand better. Detailed analyses of the usefulness of IATI data from a government perspective are needed to inform future evolution of the IATI standard and to derive the full benefits of the initiative in terms of timeliness of information, data quality, and lower transaction costs.. This paper seeks to analyze IATI data coverage and quality in light of specific country needs identified through conversations with government staff as part of an ongoing program to create sustainable integrations of IATI data into country systems in Burkina Faso, Chad, Cote d'Ivoire, Madagascar, and Senegal. The paper also draws on a [decade of organizational experience](#) implementing Aid Information Management Systems in 25+ countries.

The data quality analysis performed during the scoping phase of this country program resulted in the selection of 5 IATI publishers to be imported in each country. **This typically resulted in additions of \$100s of Millions of aid flows to be captured in country systems, which were previously “blind spots” for partner country governments.** Figure 1 below illustrates how IATI data integration for 5 selected DPs expands the coverage of Burkina Faso’s AMP by over US\$600,000 from 2012-2014. This clearly illustrates the opportunity for IATI to make a significant contribution to resource management and development coordination, while maintaining strong ownership of country systems. Additional benefits could accrue to government AIMS users in the form of time saved, as data quality improve and additional DPs can have their reporting moved from manual to automated (IATI) processes.

However, for this potential to be realized, several enhancements to both the IATI standard and existing IATI data quality must be made. Many of these enhancements are discussed in this working paper, with further suggestions to be made in a second paper following the in-country implementation phase of this program.

The methodology used in analyzing data for “appropriate fit” in country systems included the following steps:

- Step 1. Identification of key fields for country use
- Step 2. Comparison of aggregate financials in IATI and AMP
- Step 3. Assessment of data completion in priority fields
- Step 4. Assessment of reporting timeliness and frequency
- Step 5. Selection of IATI publishers for import into country systems

Suggested enhancements to the IATI standard include:

- Inclusion of an on/off budget indicator field in the standard
- Possible inclusion of National Planning Objectives field in the standard
- Inclusion of sub-sector field in the standard
- Mandatory use of OECD DAC sector codes
- Mandatory publication in local language of recipient country

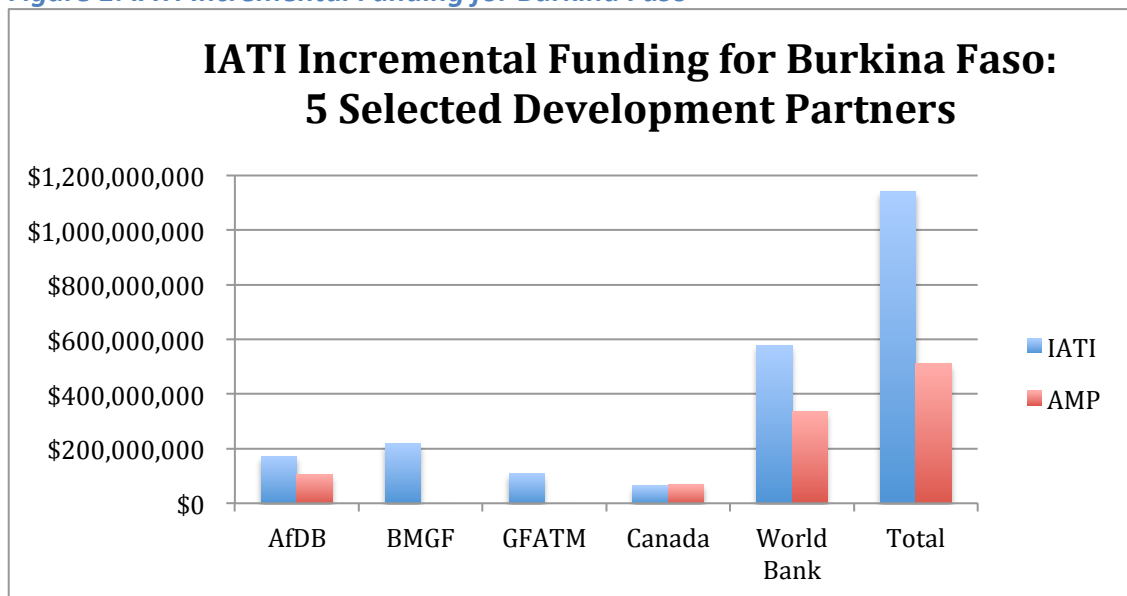
Priority improvements to publisher data quality

- Focus on high quality data in a subset of priority fields for country use (see Table 1 below)
- Prioritize transaction data quality
- Publish data in a timely (at least quarterly) manner
- Include sub-national data according to current (2.01) standard

It should also be noted that many potential IATI users in partner country governments may struggle to use IATI XML in analyzing data prior to import. Investments in existing tools, for example the Datastore, could help to make IATI data more accessible and user-friendly – inclusion of user guides and tutorials on these tools would further strengthen the ability of government staff to use IATI data with greater ease.

In addition to the opportunities and recommendations outlined above, Annex 1 and Annex 2 provide further details on the implementation of the ongoing IATI import program. Annex 1 details the upcoming timeline and country workplan process for each of the 5 participating countries. Annex 2 provides further detail on the technical architecture and process for the forthcoming IATI-AIMS Import Tool, which will be released as an open source platform on GITHub in mid-June.

Figure 1: IATI Incremental Funding for Burkina Faso



Background

Context

Since its launch following the 2008 High Level Forum in Accra, the International Aid Transparency Initiative (IATI) has followed a strong growth trajectory. Currently, the [IATI Registry](#) contains data from more than 300 individual publishers, including bilateral donors, multilateral development banks, private foundations, NGOs, and other organizations. This has been rightfully cited as a “[tipping point](#)” in IATI’s maturation, as most of the largest development partners (DPs) in most countries are now reporting their data through the IATI registry. This is a significant aid transparency achievement at the global level.

Fully harvesting the potential and promise of IATI now requires that we understand better and address the reason for which the uptake of IATI data by partner countries has been slower. Some key challenges have been identified by country governments, including concerns over IATI data quality and timeliness, as well the inability of Aid Information Management Systems (AIMS) to natively “speak” the IATI data format. However, these concerns have not been systematically reviewed from the perspective of the needs of a country system. This paper seeks to address that gap by analyzing IATI data quality in light of specific country needs identified through conversations with government staff, combined with a [decade of organizational experience](#) implementing Aid Information Management Systems in 25+ countries.

In January 2015 Development Gateway (DG), with support from the French Ministry of Foreign Affairs and International Development initiated a program to work in partnership with the Governments of Burkina Faso, Chad, Cote d’Ivoire, Madagascar, and Senegal to explore the potential use of IATI data by each government’s Aid Management Platform (AMP – see text box 1) through sustainable IATI-AMP integrations. More broadly, the program has applicability to the growing body of work around the role of Government as a data consumer as opposed to merely a provider of open data in the Open Data ecosystem,. More detailed program goals and country work plans are outlined in Annex 1.

This document is designed to inform upcoming discussions at the IATI Technical Advisory Group (TAG) and Steering Committee meetings, taking place in Ottawa from May 30-June 2, 2015. A final report, detailing the lessons learned from the country implementation phase of this program, is forthcoming in September 2015.

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Learning Agenda

We all understand that donors’ and partners’ information needs are often different. And it may be that IATI will not (and may not) always respond to all the AMP users’

needs. A better understanding of these different needs, and of the best ways in which IATI can reasonably meet them, would therefore have a positive impact on future IATI development and would improve the use of IATI data by donors and countries. We hope that this work, which represents the most intensive use to date of IATI data in country systems, will provide a wealth of lessons and practical recommendations to maximize the usefulness and usage of IATI in country systems.

Some of the questions we have explored include:

1. What benefits (time savings, data coverage/quality improvements) can governments expect from using high-quality IATI data?
2. What changes should be made to the IATI standard to improve its usefulness and usability in country systems?
3. What barriers (technical, process, skills, cultural) discourage IATI use, and how might they be addressed in other countries and contexts?
4. What common data quality/timeliness issues exist in the IATI data sets that make it difficult to use in country systems?

By answering these questions, we hope to contribute concrete examples on IATI data use by partner countries, and take a collective step toward a broader use of IATI data in country systems. In addition to this paper, we will provide a subsequent working paper outlining what we learn from the country integration implementations, and an open source tool for IATI field/value mappings and data import, including support for multiple versions of the IATI standard (starting with 1.03, 1.04, and 2.01).

Country Selection and AMP Program Overview

The process of consultation with these countries, and with the broader AMP community of 25+ countries, made significant progress during the December 2014 AMP Good Practices Workshop, with the participation of the IATI Secretariat (through Development Initiatives) in a useful session on IATI data use and challenges. During the session, the work program was announced and consultations with Chad and CIV were initiated

Text Box 1: Aid Management Platform

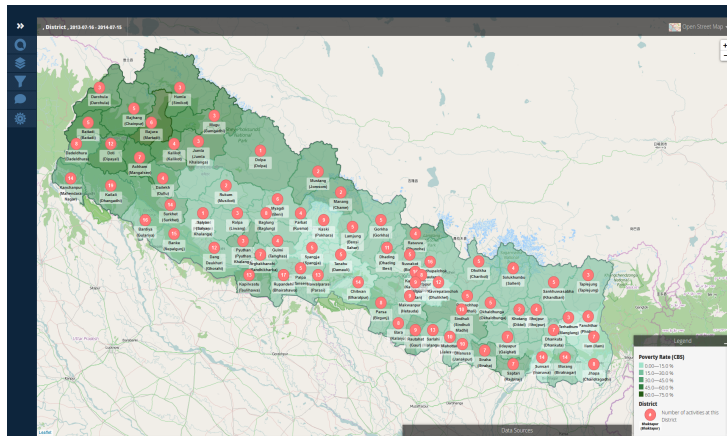
AMP is an Aid Information Management System (AIMS) that has been implemented in over 25 countries on 5 continents. This tool incorporates every essential feature of comprehensive data management and reporting solutions, including user-friendly data entry features, a robust engine for data storage, advanced administrative functions for metadata management, customizable reporting, and interactive dashboard analytical tools. AMP uses customizable interactive dashboards and cutting-edge GIS tools to help decision-makers use data to inform evidenced-based decisions. AMP also boasts a sophisticated, but user-friendly, report generator that ensures that users can quickly and easily obtain a great deal of information about the activities recorded in the system.

AMP is used frequently in generating annual development cooperation reports, in assessing DP portfolio alignment with government priorities, in coordinating the DP community, and in building country ownership. DG works closely with government partners over a 3-year period with the goal of developing a sustainable AIMS for country-led development planning. AMP systems have been made public in over 10 countries via a user-friendly public portal.

to great enthusiasm. Additional feedback from other AMP countries centered around i) data quality, ii) country-specific fields and classifications (National Planning Objectives), iii) timeliness of reporting, and iv) technical/capacity barriers to understanding and using XML data.

After the AMP Workshop, DG reached out to each of the five country governments to confirm interest in participation, collect AMP data for comparison with IATI (both for coverage and quality), and begin defining a joint timeline and workplan – properly integrated into the Government’s broader Aid Management priorities and milestones. Further consultations occurred with Burkina Faso and Madagascar during the IATI Regional Workshop on Data Usage in Accra, Ghana from March 19-20.

In addition to the particular benefit of assisting countries to benefit from open data to expand the coverage and improve the quality of their AIMS, the program is designed to identify lessons learned, outstanding challenges, recommendations to both the IATI community and country governments, and next steps for improved supply of and demand for IATI data.



This paper briefly outlines the program methodology and presents our initial findings on how the IATI standard and IATI data can be enhanced for increased country use and benefit.

Data Review Methodology and Development Partner Selection

Because each AMP already contains data on many DPs, and not all IATI data are of sufficient quality (based upon the criteria outlined below) for country use, a subset of IATI publishers was identified for each country to be part of the initial import. This list of DPs will ideally grow over time, as IATI data quality continue to improve and country governments are increasingly confident in their use of IATI data.

The goal of the data analysis phase was to 1) gauge the likelihood that high-quality, comprehensive, accurate data can be imported from IATI in each country; and 2) assess the actual *value* that this imported IATI data would have for partner countries. This “desirability” factor was generally measured either by volume of

funding represented in IATI and/or political value (i.e., a specific request from the Government Ministry for inclusion).

Step 1: Identification of Key Fields

We began by identifying which key data fields are commonly *used* in AMP reports, dashboards, and maps, as well as which data fields (e.g. transaction dates, primary sector) are commonly required fields in AMP¹, meaning that a project cannot be submitted for inclusion in the AMP database unless each required field is properly completed. This set of “core” fields, driven by real use cases of country governments in aid management, planning, and coordination, became our focus of analysis for data completeness and quality, to ensure that any data imported from IATI are usable and provide the proper value-add to the country system dataset (see Table 1).

Table 1: Definition of Key Fields

| Field Name | Field Definition |
|-----------------------------------|--|
| Title | Title of Project |
| Start Date (planned) | Planned initiation of project activities |
| Start Date (actual) | Actual initiation of project activities |
| End Date (planned) | Planned completion of project activities |
| End Date (actual) | Actual completion of project activities |
| Recipient Country | Country name |
| Recipient Country % (if multiple) | If multiple countries are funded through a project, % of funding to each country |
| Sector (primary) | Primary sector or purpose of project |
| Reporting Org | Organization reporting the activity to IATI |
| Transaction Type Code | Type of transaction (e.g. commitment, disbursement, expenditure) |
| Transaction Date | Date of transaction |
| Transaction Currency | Currency used for amounts in transaction |
| Transaction Value | Financial amount of transaction (in specified currency) |
| Funding Org | Organization providing the funding |
| Sub-national locations* | Individual locations in which project activities will take place |
| National Planning Objectives** | Identification of which pillar(s) of national development plan are targeted by project |
| On/off/through budget/treasury** | Identifies whether funding is captured in national budget plan, and whether funding is channeled through the |

¹ Based upon our prior experience with other AIMS applications, core fields tend to be similar across different AIMS implementations, regardless of software provider or platform.

| | |
|--|--------------------------|
| | government budget system |
|--|--------------------------|

**Multiple fields, checked presence of usable sub-national data (including lat/long). Note that AMP requires at least one sub-national location unless the activity is specifically flagged as national.*

***Fields not included in IATI standard which are often required in AMP*

Step 2: Comparison of Aggregate Financials

In the second step, we compared aggregate financial data by donor organization between IATI and AMP. This allowed us to identify i) which development partners (DPs) are reporting only to IATI, not to AMP, and ii) for which DPs did significant financial gaps between IATI and AMP exist. The typical cause of (i) is the absence of a country office by that IATI reporter and/or a lack of formal relationship between the funder and the country government. For each country, we compared the past 2-3 years to account for the fact that many DPs only recently began reporting to IATI and that two AMPs (e.g. CIV, Chad) had only begun operation during 2014 and would be unlikely to have information on projects which were closed prior to AMP initiation.

Step 3: Assess Data Completeness of Priority Fields

Third, for each of the largest IATI reporters, we calculated the percentage of incomplete (blank) fields across the “core” set of fields defined in step one. This represented our initial assessment of import feasibility. Particular emphasis was placed on transaction fields (e.g. date, currency, transaction type, value). **One key challenge was the absence of two frequently required AMP fields from the IATI standard: “On/Off Budget Status” and “National Planning Objectives.”** National Planning Objectives are typically used in monitoring the government’s National Development Plan, including assessing DP alignment with national priorities. National Planning Objectives, however, may be challenging to implement in IATI and a thoughtful, consultative approach should be used prior to their potential inclusion. On/off budget status was described as “crucial”, and “easy to implement” by one Senior AMP government staff member, for identifying activities that take place outside of the government system. For our purposes, transactions without dates cannot be imported into AMP, causing IATI reporters with high rates of empty transaction date fields to be excluded from consideration.

Step 4: Assess Timeliness of Reporting

Fourth, using the [IATI Timeliness Dashboard](#), we determined the frequency with which publishers are updating their data. Priority was given to reporters updating **at least quarterly**, with annual reporters only being considered for inclusion if a) no existing AMP data for that reporter is available, or b) there is a *significant* increase in available financial data from IATI over AMP.

Step 5: Selection of IATI Publishers

Based upon the initial feasibility assessment and desirability assessments, we selected a subset of 5 IATI reporters per country to further investigate for import into AMP. Typically, these consisted of DPs which were entirely absent from AMP, although some exceptions (based on extremely high funding or data quality

discrepancies) exist. For example, World Bank funding reported to IATI for Senegal was substantially higher than amounts reported in AMP.

The following table (2) summarizes IATI DP selection – done by a combination of the data quality of each DP and their value-add above what is already captured in that country’s AMP – based upon the methodology described above.

Table 2: IATI Publisher Selection by Country

| Burkina Faso | Chad | Cote d’Ivoire | Madagascar | Senegal |
|---|---|---|--|---|
| <i>African Development Bank*</i> | Bill and Melinda Gates Foundation | <i>African Development Bank*</i> | <i>African Development Fund*</i> | <i>African Development Bank*</i> |
| Bill and Melinda Gates Foundation | JICA | <i>African Development Fund*</i> | Bill and Melinda Gates Foundation | <i>Canada (DFATD)*</i> |
| GFATM | <i>African Development Fund*</i> | Global Partnership for Education | GFATM | Bill and Melinda Gates Foundation |
| <i>Canada (DFATD)*</i> | <i>Australia</i> | Bill and Melinda Gates Foundation | Humanitarian Aid Office of the European Commission | GFATM |
| World Bank* | UNOCHA FTS | <i>GAVI</i> | <i>GAVI</i> | <i>GAVI</i> |

**Indicates DP already in AMP*

Publishes forward-looking data

Monthly Publication

Quarterly Publication

Six-Monthly Publication

Annual Publication

Key Data Quality Analysis Findings

Several types of relevant data quality challenges presented themselves frequently across reporters and countries during our initial analysis. Since these challenges affect the fields most needed by government AIMS users, they represent critical opportunities to **increase data usability by enhancing IATI data quality in the right places.**

Of the data quality issues reviewed, poor quality of transaction data (see below) was the primary cause of eliminating IATI reporters from consideration for inclusion in the import process. Missing sector and sub-national data also presented key challenges, as both represent required fields in most AMPs. It is notable that many AMP countries also struggle with start/end data completeness and quality, representing a shared opportunity for improvement in both the IATI and AIMS communities. Notable data findings are listed in detail below:

Transaction data

Transaction data are often incomplete, including missing date fields and currency specifications. This is especially challenging because IATI reporters use different currencies to report aid flows. While the forthcoming “IATI import tool” and AIMS will be able to manage currency conversions automatically during import (*if* they are specified), performing currency conversions during the data analysis phase could be a significant hurdle for government staff. **Given that the primary use of AIMS is to track financial transactions occurring within a given month, quarter, or fiscal year, missing date fields render the IATI data ineffective in a country setting.** It is noted that frequently, transactions in IATI are used to summarize total transactions for a given fiscal or calendar year, rather than to itemize individual transactions based on the actual dates on which they occurred. Given that reporter and country fiscal years are often different, having specific transaction dates is critical for country use.

Forward-Looking Financial Data

In several AMP countries, including Madagascar, Development Partners are requested to enter their planned disbursements for the upcoming fiscal year as part of the budgeting and planning process. **These funding projections for the fiscal year are used in the government’s budget planning process, and in strategic discussions with development partners on upcoming funding priorities.**

Forward-looking financial data are frequently missing from IATI reporting. This challenge is compounded when some DPs do not report disbursements and commitments broken down by year. For example, GFATM Senegal IATI data has \$937 million in commitments for 2001, with no commitments between 2003-2014, while there are \$212 million in disbursements between 2003-2014. Similarly, GFATM Burkina Faso has total disbursements of \$107 million and \$0 in commitments during the same period (2001-2014). Overall, **only 52% of IATI country-publisher combinations include any forward-looking transaction data** (with 28% of these combinations including the African Development Bank or African Development Fund). Fortunately, the IATI Secretariat and TAG have made forward-looking financial data a priority in their advocacy efforts in enhancing IATI data quality.

While for political and operational reasons, providing multi-year funding projections may be unfeasible for many IATI reporters, **at a minimum, Planned Disbursements for the upcoming 12 months should be included in IATI publication.**

Sector Data Quality

Table 3: % of Activities with Missing Sectors in IATI data, by Country

| Burkina Faso | Chad | Cote d’Ivoire | Madagascar | Senegal |
|--------------|------|---------------|------------|---------|
| 39.1% | 38% | 14.66% | 15.23% | 14.65% |

Sub-sector information is not included in the standard. Each AMP implementation requires primary sector information for all activities, which is used in most government analyses of DP funding allocation and fragmentation. Sub-sector information is frequently captured in many AMPs.

Additionally, IATI sector data are largely unstandardized and typically not reported in French, even for Francophone partner countries. This makes the data difficult to work with for government staff, which need to map sectors from IATI-AIMS classifications prior to import. In the case of Madagascar, **IATI data for 2012-2014 contained 137 unique sectors**, while the government uses a set of **25 unique sectors** – creating mappings from 137-25 sectors is particularly challenging while simultaneously translating from English (IATI) to French (AMP) (see Table 3 below). This challenge may or may not be helped by the 2.01 upgrade's requirement for numeric codes, rather than narrative sector names. For example, if the numeric code is not from the OECD DAC codelist, it may be increasingly challenging for country governments to use, while if the DAC sector codelist (or a similar standardized codelist) is used universally, it would simplify efforts by requiring only a one-time mapping of DAC-AMP classifications. Further, many AMPs use the DAC classifications natively, and would therefore not require any sector mapping.

Table 4: Sub-Set of Potential Sector Mappings from IATI-AMP Madagascar

| IATI Sector Classification | Proposed AMP Sector Mapping |
|---|--------------------------------------|
| Agrarian reform | AGRICULTURE |
| Agricultural co-operatives | AGRICULTURE |
| Agricultural development | AGRICULTURE |
| Agricultural education/training | AGRICULTURE |
| Agricultural financial services | AGRICULTURE |
| Agricultural land resources | AGRICULTURE |
| Agricultural policy and administrative management | AGRICULTURE |
| Agricultural research | AGRICULTURE |
| Agricultural services | AGRICULTURE |
| Agricultural water resources | AGRICULTURE |
| Agro-industries | AGRICULTURE |
| Basic drinking water supply | DISTRIBUTION D'EAU ET ASSAINISSEMENT |
| Basic drinking water supply and basic sanitation | DISTRIBUTION D'EAU ET ASSAINISSEMENT |
| Basic health care | SANTE |
| Basic health infrastructure | SANTE |
| Basic life skills for youth and adults | |
| Basic nutrition | |
| Basic sanitation | DISTRIBUTION D'EAU ET ASSAINISSEMENT |
| Reconstruction relief and rehabilitation | AIDE HUMANITAIRE |
| Regional trade agreements (RTAs) | |
| Relief co-ordination | AIDE HUMANITAIRE |

Sub-National Locations

Sub-national location information, which is required for non-national activities in nearly every AMP and is used frequently in analyzing fragmentation and targeting of assistance, is largely absent from the IATI registry for the 5 countries studied. The notable exception is AfDB, with sub-national data representing one of the key reasons for its inclusion in all 5 countries (along with quarterly reporting and reasonably high overall data quality). Over the past 5 years, governments have placed increasing emphasis on sub-national financial data, in recognition of the need to effectively allocate funding *within* a country to target areas with high poverty or other needs. In order to meet the first Sustainable Development Goal to eliminate poverty in all of its form, sub-national data to target investments is a critical input.

Project Dates

Project dates fields are often missing in the IATI data reviewed. As activities typically are implemented with funding disbursed over a period of several years, it is critical for countries to understand which activities are active and when individual activities will start or end. At a minimum, one start date (planned or actual, depending upon whether the activity has commenced) and one completion date (planned or actual, depending upon whether the activity has been completed) should be included for each IATI activity.

Funding Allocation for Multi-Country Projects

For some reporters, particularly the Gates Foundation, which often deploy activities across multiple countries, the absence of reliable country percentages presented challenges in funding allocation. For example, some activities included multiple countries with the available percentages summing to less or more than 100%, while for other activities percentage estimates were entirely absent. If a government is part of a multi-country activity, it cannot effectively plan without understanding the proportion of overall program funding which will be deployed within its borders.

Timeliness of Reporting

Table 5: Frequency of Reporting for Publishers Selected to Import

| Annual | Six-Monthly | Quarterly | Monthly |
|--------|-------------|-----------|---------|
| 48% | 4% | 36% | 12% |

Timeliness of publication is a significant concern, with less than half of publishers selected for this import exercise publishing at least quarterly (see Table 5). For annual publishers, these data will only be useful to countries to the extent that they represent a) entirely new information (i.e. a publisher currently not captured in AMP), or b) significant increases in financial coverage (i.e. a publisher for whom AMP data are particularly poor). The IATI Secretariat has requested reporters to provide data on a quarterly basis, at minimum. **As AIMS are frequently used to generate quarterly reports, provide estimated disbursements for upcoming**

fiscal years, or to generate ad-hoc reports based upon latest figures, quarterly reporting should be seen as the absolute minimum standard for IATI reporters. Due to fiscal year misalignment, this challenge can often be exacerbated. For example if an IATI reporter provides annual updates in December for a partner country with a fiscal year of July 1-June 30, the data will be of limited use for country planning, projections, and reporting purposes.

Conclusion: Opportunities and Recommendations

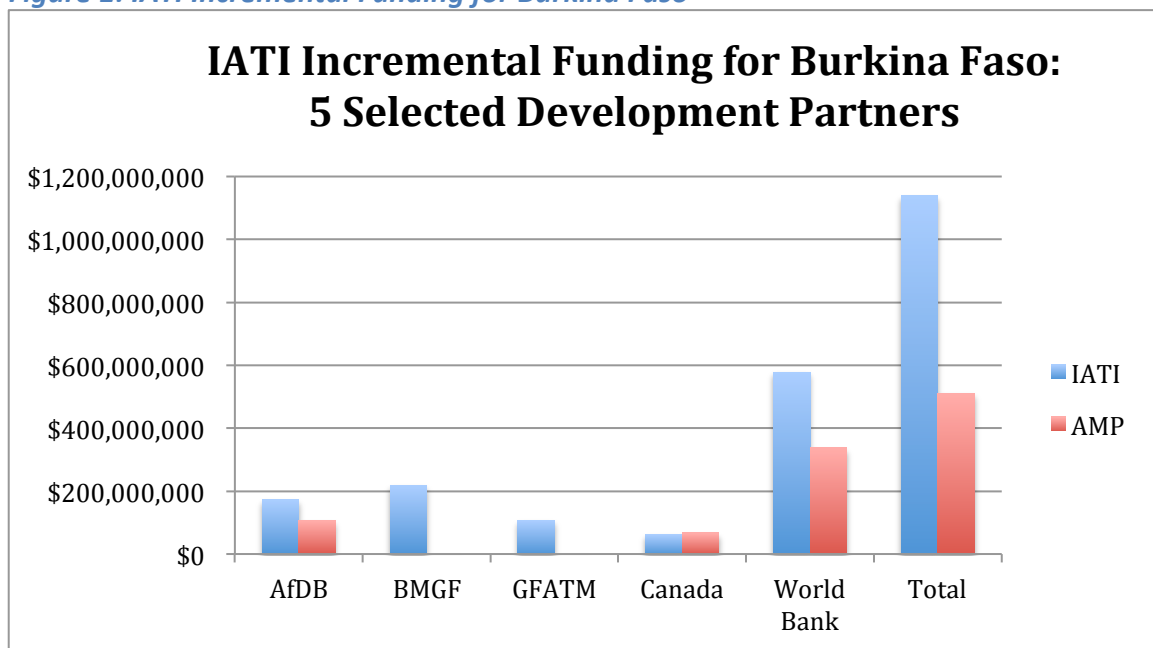
Opportunities

IATI is indeed reaching a critical inflection point in its history. **Beyond the five countries participating in this activity, several other countries are planning or implementing integrations of IATI data during 2015.** These countries include AMP countries (Malawi, Kosovo, and the Democratic Republic of Congo), and non-AMP countries (Rwanda). In initial consultations and during the IATI Secretariat's Regional Data Use workshop in Accra, the following opportunities were frequently cited as key motivations for creating sustainable IATI integrations.

Increased coverage of development assistance providers

Using IATI may, in many cases, provide government AIMS teams with greater coverage of funding amounts by improving the transaction data of development partners who are not providing accurate, timely information directly to the AIMS. Typical examples cited (many of which will be included in the upcoming in-country implementation phase of this program) include the Bill and Melinda Gates Foundation, the GFATM, GAVI, and others. **In many cases, this can represent the addition of \$100 millions per year (see Burkina Faso example below)** – a significant improvement for aid management and coordination actors.

Figure 1: IATI Incremental Funding for Burkina Faso



Reduced level of effort over time

For publishers with particularly high-quality data, and with some potential enhancements to the IATI standard (see “Key Recommendations” below), substituting IATI import processes for more manual in-country reporting could be a possibility. Over time, this could significantly reduce the data collection costs of

government AIMS staff, enabling them to dedicate more time to data analysis, planning, and use. For most publishers, there is a long way to go to ensure that publication from DP headquarters aligns with country definitions and timelines, but the **creation by partner countries of clear data quality metrics for IATI import** and the demonstration effect of early adopters could motivate increased investment by publishers for these improvements to take place.

Recommendations

For the IATI Standard

During the course of the analysis and initial consultation phase, several potential opportunities for enhancement of the IATI standard have been identified. They are outlined below, and in some cases have been submitted for consideration in the 2015 Technical Advisory Group (TAG) and Steering Committee (SC) meetings.

On/off budget status of activity

This field could be a binary field (on/off) or a more complex field identifying whether an activity is on- or off-budget, as well as whether funds are channeled directly through the Treasury. This field is required in most AIMS implementations with which DG is familiar, and was highlighted in conversations with the Madagascar AMP team, in particular.

Consider Inclusion of National Planning Objectives

This could be an optional sector field, in which publishers could specify which pillars of the national development plan are being addressed by the activity, and which National Planning period objectives are used. This field is typically required in most AIMS implementations with which DG is familiar, and would require a value mapping from sector classification to national planning objective classification, if not included.

Mandatory use of OECD DAC sector codes

Requiring all publishers to use the OECD DAC sector codes would ensure that government staff would need to create, at most, one sector mapping. As many AIMS use DAC sector codes natively, this could eliminate the need for sector mapping in many countries.

Figure 2: Example of use of DAC codes, English sector description

```
<sector vocabulary="DAC" code="31110">  
  <narrative>Agriculture and Rural Development</narrative>  
</sector>
```

Addition of sub-sector field

Many countries require multiple levels of sector classification, while the IATI standard currently allows only primary sector. Creating a sub-sector classification would enable more detailed tracking, and could assist with other ongoing initiatives such as the <http://aidonbudget.org/> effort.

Mandatory use of local language in all IATI publication

It is notable that this initiative took place in 5 Francophone countries. However, while many activity titles were available in French, many of the other fields were routinely reported only in English. The standard should enforce mandatory use of local language, to ensure that government staff are able to understand, analyze, and create correct mappings of IATI-AIMS data. On occasion, even when the XML language is defined as French, the narrative information is still reported in English (see below). This challenge could be partially offset by the use of numeric codes for sectors and other classifications, although this is dependent upon each publisher relying upon the same codelists uniformly.

Figure 3: Example of language disagreement in XML

```
<description type="2"><narrative xml:lang="fr">The specific objective of the project is to increase the income of the smallholders in the project area in a sustainable was.</narrative>
```

For Countries Using IATI

Create repeatable classifications and workflows

It is important for countries to be systematic in their adoption of data from the IATI registry. The use of strong tools like the IATI-AIMS Import Tool being developed should allow country governments to easily store field and value mapping configurations to ensure standardization across publishers and over time. IATI import should also be treated as part of the government's broader data management plan (DMP), with clear roles and responsibilities, deadlines for import and validation, and quality standards for data inclusion in AIMS. As we embark on the in-country phase of this activity, we will go into greater detail in the second working paper, informed by country feedback and learning.

Proper team composition, including IT and data skills

XML is a technical language, with which many government AIMS staff do not have prior experience. To sustainably evaluate and use IATI data, including the addition of more publishers over time as data quality continue to improve, the proper team composition will be critical. Strong data analysts, with experience in reviewing datasets for quality and completeness, and IT staff with the capability of parsing XML are both needed to ensure sustainable IATI data use, without becoming unnecessarily reliant upon AIMS providers for ongoing support. In the second working paper, we will propose a potential AIMS team composition for future IATI work, based upon feedback from 5+ countries on what is feasible and desirable. If resource constraints make this team composition unlikely, we will suggest possible interventions from the IATI community to support.

For Publisher Community

Data quality must continue to improve

While positive progress exists, it is notable that identification of 5 large IATI publishers with high quality data for each country was a significant effort for DG staff. This paper identifies key areas of focus for data quality, including those outlined below, upon which the publisher community should place particular emphasis.

Publication timeliness: quarterly publication as a minimum standard

In-line with the Secretariat's guidance to IATI publishers, quarterly publication should be further emphasized by publishers as a minimum standard. Infrequent publication poses a significant challenge to country uptake of IATI data, as data are frequently used in quarterly reports and annual budget preparation. Given that many countries operate on different fiscal calendars than their development partners, quarterly publication is particularly crucial to ensuring that data are timely for budget preparation.

Inclusion of sub-national data (using 2.01 standard)

Most AIMS implementations require some sub-national data for activities that are not national in scope (e.g. budget support, technical assistance). Sub-national data are increasingly becoming the expectation not just of governments, but of civil society as well. However, very few publishers include any sub-national data, less so comprehensive data, in their IATI XML files. This should be a strong point of emphasis from the publisher community.

Figure 4: Example of location data (AfDB) in 2.01 standard

```
<activity-scope code="4"/><recipient-country code="CM"/>
<location>
  <location-id vocabulary="G1" code="2221788"/>
  <name>
    <narrative>South-West Region</narrative>
  </name>
  <point srsName="http://www.opengis.net/def/crs/EPSSG/0/4326">
    <pos>5.41667 9.33333</pos>
  </point>
  <exactness code="2"/>
  <location-class code="1"/>
  <feature-designation code="Administrative Region"/>
</location>
```

Focus on high quality in a small set of key fields

The fields identified in Table 1 above may not represent an exhaustive list for each AIMS country. However, our experience has shown that these represent a minimum set for the majority of countries. Failure to include accurate and comprehensive data for these fields significantly diminishes the likelihood of sustained country uptake of IATI data for a given publisher. By focusing on a sub-set of fields in the short term, rather than attempting for broad coverage of the entire standard, the IATI community can foster more immediate uptake upon which future efforts can build.

Accurate and comprehensive transaction data

The transaction data represent the keystone of AIMS reporting. Evaluating results, preparing budgets, creating quarterly reports, and other activities are impossible without accurate information on how much funding is being disbursed to the country and when those disbursements take place. Uniform publication of the key transaction fields detailed in Table 1 are crucial to the uptake of IATI data in country systems.

Annex 1: Upcoming Activities for Country IATI-AIMS Integrations

Country Program Goals

1. Identify DPs that are publishing high-quality and timely data to the IATI registry, which could (i) improve data quality/coverage in AMP, or (ii) decrease the level of effort needed to sustain current data quality. These DPs will serve as the import data for creating IATI data integrations in the five countries.
2. Equip government partners with the tools and skills to evaluate and validate IATI data for the selected DPs and automatically exchange information between AMP and IATI registry.
3. Update the governments' data management plans to (i) indicate where IATI data for select DPs will be used moving forward, in lieu of data collection from country offices; (ii) document which field(s) should be manually updated, if missing from IATI feeds (e.g. sub-national locations, national planning objectives, sub-sectors, etc.); (iii) identify who is responsible for manual field updates.
4. Establish standards and guidelines that the government can share with all partners. These standards would document data quality improvements that, once made, could lead to "default" IATI use (instead of direct reporting).

Timeline

As the IATI-AIMS Import Tool approaches production, the DG team has begun to plan for country trips to work closely with government and DP staff on the initial import and preparations for sustainable IATI-AIMS integration. The anticipated schedule (subject to change based upon government and DP availability) is listed in table 3.

Table 6: Anticipated Country Scheduling

| Country | Expected Implementation Date |
|---------------|------------------------------|
| Burkina Faso | Beginning July |
| Chad | September |
| Cote d'Ivoire | September |
| Madagascar | End June |
| Senegal | End July |

Activities

Training on IATI Data Quality Assessment and DP Selection

The DG team will demonstrate how IATI data can be explored, using various open tools (e.g. d-portal, IATI Data Store, IATI Registry) and how government staff can perform similar data quality assessments, according to the methodology outlined above. Multiple training sessions will walk through the process of identifying, downloading, and interrogating IATI datasets with the goal of selecting high-quality data for import into AMPs.

Upgrade of AMP to latest version and configuration of IATI-AIMS Import Tool

DG technical staff will perform an upgrade of the AMP to the latest available version, including necessary REST API endpoints for integration with the IATI-AIMS integration tool. All documentation will be provided to Ministry IT staff.

Perform Initial Import

Based upon the findings of the initial data quality assessment phase detailed above, the DG team will assist government staff in performing field and value mappings between IATI-AMP, providing training on IATI-AIMS Import Tool and gathering feedback for future enhancements (to be made in a public GitHub repository). During the initial trip, IATI data for each of the five identified publishers will be imported into AMP, with configurations stored for future (quarterly, semi-annual, or annual) imports.

Text Box 2: Data Reconciliation Process

- The data reconciliation and import preparation process aims to i) map field names from IATI-AMP (e.g. IATI “Sector” to AMP “Primary Sector”), and ii) to map individual values within fields from IATI to AMP.
- Value mappings can prove to be challenging with many reporters using unstandardized values.
 - Madagascar’s AMP uses 25 unique sectors, while IATI data for Madagascar from 2012-2015 **contain 137 sectors**.
 - Many sectors are reported only in English, making value mapping for Francophone staff particularly difficult.
- Mappings in the IATI-to-AIMS import tool enables users to save mapping configurations, creating a repeatable process for government officials to use in future imports, requiring mappings of only new values in subsequent imports.

Update Country Data Management Plan

The DG team will provide assistance to government staff in updating the Data Management Plan to reflect processes for importing IATI data for selected DPs. The DMP will detail steps (with full user documentation provided by DG) for IATI import, rules for defining which IATI data are of sufficiently high quality for import, and timing of subsequent imports (e.g. quarterly).

Interviews with Government Staff

The DG team will work closely with government staff to understand which elements of the program are most useful, and how subsequent IATI-AIMS programs can improve. Additional questions will discuss possible improvements to the IATI standard, IATI data, or the IATI-AIMS import tool to facilitate easier, and more useful integration of IATI data within country systems.

Remote Support for Subsequent Imports

After the initial import, the DG team will make itself available through the end of the program to provide support to government staff in performing subsequent imports. Support could include videoconferencing, troubleshooting individual data questions by email, or ad-hoc data quality analysis and validation. The goal of this support is to ensure that government staff have all of the requisite tools to sustain and scale IATI-AIMS import processes independent of long-term DG support.

IATI Working Paper #2 on Country Learning

Based upon the phase II activities detailed above, DG will draft a second working paper, targeted to both partner country governments and IATI publishers. The second working paper will focus on lessons learned in creating sustainable, high-impact IATI-AIMS integrations, providing feedback to all stakeholders on how IATI data can create a lasting impact in aid transparency, DP coordination, and resource management for improving development results.

Annex 2: Ongoing Open Source Tool Development (June 15 Completion)

Prior AMP Import Tool Development and Lessons Learned

In 2010, Development Gateway, in partnership with Development Initiatives and the Government of DRC, developed a prototype IATI import tool. The primary purpose of the tool and exercise was to demonstrate that the data structure of the IATI standard was compatible with AIMS classifications, indicating that imports would be feasible. However, multiple factors, including the continued evolution of the IATI standard, the prototype architecture of the tool, and the incomplete understanding of the challenges and necessary workflow features led to the decision that a new IATI import tool would be developed as part of this program.

Creation of Updated IATI Import Tool

The tool requirements were developed based upon feedback directly from the GoDRC and included close consultation with DG's Aid Management Fellow who worked for 6 months in Kinshasa within the **Ministry of Planning** with the AMP team, including extensively on IATI import and training processes. The initial requirements have been adapted through an iterative agile process during the development process based on feedback from DG team members and Government officials. DG is preparing to perform strict usability testing, wherein users will be asked to perform import tasks with little-to-no guidance. Testing sessions will be recorded and users were asked to talk through their thought process and provide feedback as they progressed through the workflow. Further, throughout the in-country implementation process, feedback from staff working with the AMP will be sought out and integrated into future versions of the Tool, with all changes made publicly accessible on GitHub.

The tool is built using open source components and will be made available as an open source application for use with AIMS in mid-June. The tool can be integrated via REST API end points with any AIMS. The GitHub page will include documentation specifying which endpoints should be available from the AIMS in order to integrate with the IATI-AIMS Import Tool, as well as user documentation on the features and workflow for importing IATI data.

The Import Tool developed by DG has as an objective to provide a flexible platform from which to import and adapt to the changing versions of the IATI standard, as well as opening the possibility to integrate any source data with any destination system. This is achieved through an architecture where the source data and metadata is processed into an intermediate data model, mapped to destination metadata and data, and sent to the destination system.

Description of Technical Architecture and User Workflow

This architecture will allow a common customizable platform to adapt to virtually any source and destination. The process consists basically of four steps:

Step 1: Source Input

The source data (in our case IATI 1.05 or 2.01 xml files) is uploaded to the system and processed. Currently we support those formats, but this can be expanded to any source file.

Step 2: Filtering

The source activity/project information is then parsed and processed and the user can select the criteria of inclusion in the import process in a list of known fields, like “Status”, “Recipient Country”

Step 3: Mapping Projects, Fields and Values

The tool retrieves the lists of projects in the source and destination, the fields and their possible values and the user can map and store these mapping for future imports.

Figure 5: Fields Mapping

The screenshot shows the 'IATI Import Tool' interface. The top navigation bar includes 'Home', 'Import Process', 'Reports', 'Administration', 'User', and 'Language'. The main section is titled 'Import Process IATI 1.05'. On the left, a sidebar contains buttons for 'Upload File(s)', 'Filter Data', 'Choose Projects', 'Choose Fields' (highlighted), 'Map Values', and 'Review and Import'. The main content area is titled 'Choose and Map Fields' and features a table with columns 'Import/Update', 'Source Field', and 'Destination Field'. The table has four rows: 'Activity Status' (checked), 'Project Name', 'Description', and 'Contacts'. A dropdown menu is open for the 'Project Name' row, showing options: 'Project Status', 'Project Title', 'Description', 'Sectors', 'Contacts', 'Location', 'Disbursements', and 'Commitments'. At the bottom of the table are 'Save' and 'Next >>' buttons. The footer text reads 'Developed by Development Gateway, Inc - 2015'.

| Import/Update | Source Field | Destination Field |
|-------------------------------------|-----------------|---|
| <input checked="" type="checkbox"/> | Activity Status | Project Status |
| <input type="checkbox"/> | Project Name | Project Status Project Title Description Sectors Contacts Location Disbursements Commitments |
| <input type="checkbox"/> | Description | |
| <input type="checkbox"/> | Contacts | |

Step 4: Importing

Once the source files are processed, filtered, and their projects, fields and values are mapped the destination system is contacted through a series of REST Endpoints with the now and/or updated project information.

Figure 6: Final Validation and Import

IATI Import Tool [Home](#) [Import Process](#) [Reports](#) [Administration](#) [User](#) [Language](#)

Import Process IATI 1.05

[Upload File\(s\)](#) **Done**
[Filter Data](#) **Done**
[Choose Projects](#)
[Choose Fields](#)
[Map Values](#)
[Review and Import](#)

Review and Import

Files Uploaded ✓

Data Filtered ✓

Projects Selected ✓

Fields Selected ✓

Values Mapped ✓

[Cancel](#) [Proceed with Import](#)

Developed by Development Gateway, Inc - 2015

Figure 7: Flow chart for the Import Tool process

