INTERNATIONAL MONETARY FUND

Assessing the General Data Dissemination System (GDDS)—What Has Been Accomplished After Ten Years, and Where Do We Go from Here?

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ACRONYMS

1993 SNA System of National Accounts 1993

AFR African Department

APD Asia and Pacific Department ARC Advance Release Calendar

BPM5 Balance of Payments Manual, fifth edition

CPI Consumer price index

DQAF Data Quality Assessment Framework
DSBB Dissemination Standards Bulletin Board

EUR European Department

FSIs Financial Soundness Indicators

GDDS or

General System General Data Dissemination System

GDP Gross domestic product

GFSM 2001 Government Finance Statistics Manual, 2001

IIP International Investment Position
IMF International Monetary Fund

MCD Middle East and Central Asia Department

MDGs Millennium Development Goals

MFSM Monetary and Finance Statistics Manual, 2000

NSDP National Summary Data Page

Reserves template Data Template on International Reserves and Foreign Currency

Liquidity

ROSC Report on the Observance of Standards and Codes

SCI Statistical Capacity Indicators

SDDS or

Special Standard Special Data Dissemination Standard WHD Western Hemisphere Department

EXECUTIVE SUMMARY

International Monetary Fund (IMF) member countries have enthusiastically adopted the General Data Dissemination System (GDDS or General System); to date, the GDDS has had 96 participants. Approximately 81 percent of the membership now participates in the IMF's data initiatives—GDDS and Special Data Dissemination Standard (SDDS or Special Standard) combined. Judging by this metric, the data initiative has been highly effective. Financial market participants also clearly understand the merits of the data initiative, confirmed by evidence that countries can reduce borrowing costs significantly by subscribing to or participating in either the Special Standard or the General System.

Countries that have participated in the GDDS have met many of the developmental objectives, resulting in a material improvement in the comprehensiveness and quality of their statistical systems. While these achievements are significant, in some other respects the impact of the GDDS has been more modest. For instance, only six participants have progressed from the GDDS to the SDDS, and participants often have lagged behind the timetables they established for meeting particular developmental objectives.

This paper reviews the role of the GDDS in helping developing and emerging market countries improve the dissemination of macroeconomic and sociodemographic data. It considers whether the GDDS, in the way it was designed about a decade ago and enhanced along the way, has fulfilled its purpose. Further, it considers whether the GDDS remains relevant to its current and prospective members, given ongoing global integration, increasing emphasis on transparency and governance mechanisms, and increased reliance on the Internet and electronic data transmission.

The analysis provides a somewhat mixed assessment of the experience with the GDDS. On the positive side, participation has continued to grow, and the developmental aspects of the GDDS have been widely recognized. On the negative side, overall progress has been slower than envisaged. In part this reflects the scarcity of resources and the often low priority assigned to statistics in national development plans and priorities, as well as the fact that important changes in the world since the inception of the GDDS have yet to be reflected in the design and implementation of the GDDS. Moreover, after 10 years of experience with the GDDS, a marked improvement in data dissemination might have been expected, but as shown in this paper, data dissemination—particularly the periodicity and timeliness of data—remains weak.

The lack of progress in data dissemination seems due in part to the formulation of the GDDS, which gave more emphasis to the developmental process than to data dissemination practices. However, views on the importance of data dissemination have changed since the inception of the GDDS. It is now widely recognized that the dissemination of data creates its own demand for a higher quality of information and more extensive coverage of indicators. Data dissemination is likely to raise the profile and visibility of the statistical agencies and,

by creating a demand for more and better statistics, may lead to a higher priority being placed on statistics in a country's developmental plan and to more resources being allocated to the statistical agencies. The "time sensitivity" of users in many GDDS countries has increased, as evidenced by the significant number of market borrowers among them. Rising standards of governance and accountability have further increased the demand for timely data. The spread of the Internet and the increasing reliance on electronic publication as the best-practice first channel of dissemination has both "raised the bar" and reduced the cost of data dissemination but has yet to be reflected in the General System. All of the foregoing suggests a change in the philosophical underpinnings of the GDDS to place greater emphasis on data dissemination to the public and less emphasis on updating the description of the existing system in metadata.

Accordingly, staff has identified certain aspects of the GDDS that need to be reconsidered and fine-tuned in order to improve its performance and relevance. They recommend the following changes be made to the GDDS framework:

- The first set of changes staff recommends refers to the reorganization of the GDDS to strengthen the data dissemination aspect, and to assign a higher priority to the plans for improvement.
- The second refers to data categories included in the GDDS. The recommendation is to simplify and reformulate the data categories to more closely align them with those of the SDDS and the current data needs of different users.
- The third seeks to achieve a better regional balance by intensifying technical support for the data standards in Africa and the Middle East.

I. Introduction

- 1. This paper seeks to assess experience with the General Data Dissemination System (GDDS or General System) in helping developing and emerging market countries improve the dissemination of macroeconomic and sociodemographic data. It considers whether the GDDS, in the way it was designed about a decade ago and enhanced along the way, has fulfilled its purpose. Further, it considers whether the GDDS remains relevant to its current and prospective members, given ongoing global integration, increasing emphasis on transparency and governance mechanisms, and increased reliance on the Internet and electronic data transmission. Concluding that in some respects the impact of the GDDS has been more modest than might have been expected, and the GDDS needs strengthened emphasis on data dissemination, it is proposed to incorporate elements of the Special Data Dissemination Standard (SDDS or Special Standard) into the GDDS.
- 2. Ultimately, as might be inferred from the GDDS name, the objective of the GDDS is data **dissemination**. However, in the initial stages, the GDDS emphasized the **development** of national systems in an explicit medium-term framework, with attention to data dissemination coming only at a later stage. Indeed, participating countries are not required to make any formal commitments regarding data dissemination. The main premise underlying the GDDS is to give high priority to improvements in data quality, which "may need to precede improvement in dissemination practice."
- 3. IMF member countries enthusiastically adopted the GDDS; to date, the GDDS has had 96 participants. Approximately 81 percent of the membership now participates in the IMF's data initiatives—GDDS together with the SDDS. Judging by this metric, the data initiative has been highly effective. Financial market participants also clearly understand the merits of the data initiative, confirmed by evidence that countries can reduce borrowing costs significantly by subscribing to or participating in either the Special Standard or the General System. As shown in this paper, countries that have participated in the GDDS have met many of the developmental objectives, resulting in a material improvement in the comprehensiveness and quality of their statistical systems.
- 4. While these achievements are significant, in some other respects the impact of the GDDS has been more modest. One of the expectations for the GDDS was that it could act as a "stepping stone" for countries that wished to progress to the SDDS. However, only six participants have advanced from GDDS to SDDS status, and participants often have lagged behind the timetables they established for meeting particular developmental objectives. Moreover, after 10 years of experience with the GDDS, a marked improvement in data dissemination might have been expected, but as shown in this paper, data dissemination—particularly the periodicity and timeliness of data—remains weak.
- 5. Indeed, more emphasis on putting data into the public domain might well have helped countries progress more rapidly. Earlier experiences with the SDDS, for example, show that

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supply creates its own demand. By publishing data, even with some flaws, statistical agencies benefit from the input of users, including other government agencies. In addition, users' input constitutes an important motor force for data quality improvements. A strong case exists, therefore, for adjusting the GDDS to place substantially more emphasis on data dissemination. Adjusting the GDDS could achieve this, in part, by importing key dissemination elements of the SDDS and by bringing the data categories of the GDDS into closer conformity with that of the SDDS. In an important sense, the Special Standard would become a special case of the General System.

- 6. Going forward, it is proposed to recast the GDDS by incorporating elements of the SDDS, especially the National Summary Data Page (NSDP) and the Advance Release Calendar (ARC). Also, given that several GDDS countries are now borrowing in international capital markets and are subject to sovereign ratings, the GDDS would incorporate the relevant data categories specifically developed to better serve capital market needs, such as the International Reserves and Foreign Currency Liquidity Template (reserves template). At the same time, the GDDS would shed the somewhat complicated data structure.
- 7. The reformed GDDS would thus be more truly a general case of the Special Standard. It would include a larger number of data categories, owing to sociodemographic data categories, with recommended ranges of timeliness and periodicity rather than the prescriptiveness of the SDDS. While countries would have more options and more guidance on how to move to SDDS subscription, participating countries would still choose their own pace of development.
- 8. The remainder of the paper is organized as follows. Section II provides background to the data standards initiative and describes its current membership in terms of regional patterns of participation. Section III, addressing the performance of GDDS to date, (1) analyzes GDDS data and metadata **compilation**, discussing methodologies for compiling the GDDS, countries' plans for improvement, and sociodemographic data and (2) analyzes GDDS data **dissemination** (particularly timeliness and periodicity of data), reviewing GDDS participants' statistical practices against the GDDS, comparing data dissemination practices of GDDS participants with dissemination goals set out by the GDDS and SDDS, respectively, and highlighting key areas of weaknesses as perceived by GDDS countries. Section IV discusses capital market access of GDDS countries, and Section V examines the success the GDDS has had in guiding countries to progress to SDDS. Finally, Section VI provides an overall assessment of the GDDS, Section VII proposes specific changes to the GDDS, and Section VIII includes suggested issues for discussion.

¹ Most of the analysis is conducted for 55 countries, selected on the basis that they are likely to be representative of the group of 90 GDDS participants. Appendix I describes the selection of countries and contains a list of the countries included.

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II. BACKGROUND AND MEMBERSHIP

A. Background

- 9. The IMF introduced the data dissemination initiative in 1995, in the aftermath of the 1994–95 international financial crisis. The intention was to establish a basis to guide members in disseminating their economic and financial data to the public. It comprises two tiers: the GDDS, which applies to all IMF members, and the SDDS, which applies to those member countries having or seeking access to international capital markets. The ultimate objective of the two tiers of the data dissemination initiative was to enhance the availability of timely and comprehensive statistics, thereby contributing to the conduct of sound macroeconomic policies, as well as the improved functioning of financial markets. The IMF Executive Board approved the SDDS in March 1996 and the GDDS in December 1997. Countries elect to join the data initiative on a voluntary basis.² They can participate in one of the initiatives but not in both.
- 10. The IMF designed the GDDS as a general framework to guide countries in developing sound statistical systems as the basis for dissemination of data to the public. Participation requires that countries appoint a national coordinator, prepare metadata, describe their current practices on data production and dissemination, develop their plans for improvement in the short and medium term, and identify associated needs for assistance in implementing these plans. Participating countries also voluntarily commit to revising their metadata at least annually to accurately reflect their data compilation and dissemination activities. The GDDS contains a **data dimension** identifying periodicity and timeliness goals for key datasets (paralleling, to a degree, the data dissemination standards in the SDDS). Also, an overarching goal of the GDDS is to focus on developing and disseminating a full range of economic and financial data. However, there is no requirement for GDDS participants actually to disseminate data; nor does the IMF monitor participants' data dissemination practices.
- 11. The design and implementation of the GDDS have benefited from close collaboration with member countries and other international organizations, notably the World Bank with regard to sociodemographic data. The GDDS has been implemented in two phases. The first phase focused on education and training through regional seminars for country officials and preparation of pilot metadata for several countries. The second phase started in May 2000 when the first metadata for countries participating in the GDDS were posted on the IMF's Dissemination Standards Bulletin Board (DSBB).

² Although subscription to the SDDS is voluntary, observance of the standard by subscribers is mandatory, and the IMF monitors observance.

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B. Participation

12. A first visible success of the initiative was the rapid increase in participation. As shown in Table 1, 39 participants joined the GDDS during its first two years, followed by a steady expansion in the following three years. To date, the GDDS has had 96 participants, six of whom now subscribe to the SDDS, resulting in 90 current GDDS participants.

Table 1. New General Data Dissemination System Participants by Year and by Region, 2000–2007 (In number of countries)

Regions*	2000	2001	2002	2003	2004	2005	2006	2007	Total
Africa	5	7	10	8	6	2	1	0	39
Asia Pacific	3	2	2	1	3	0	1	1	13
Middle East and Central Asia	3	4	1	3	2	1	3	1	18
Europe	3	1	0	1	1	0	0	0	6
Western Hemisphere	8	3	0	2	3	2	2	0	20
Total	22	17	13	15	15	5	7	2	96
Graduated to SDDS	-	-	-	3	1	1	1	0	6
Cumulative Total (Net)	22	39	52	64	78	82	88	90	-

Source: IMF Statistics Department (see http://dsbb.imf.org/Applications/web/getpage/?pagename = gddshistorydates).

- 13. Figure 1 refers to the combined membership in the GDDS and SDDS and shows how close each region is to universal membership. Overall, in 2007, participation is near 80 percent of the IMF membership, but participation is not evenly distributed across regions. Africa, Europe, and Western Hemisphere have achieved about 90 percent representation in the two initiatives. The representation of African countries has increased sharply during 2000–04, as compared with other regions, but only one country (South Africa) subscribes to the SDDS.
- 14. About 65 percent of countries in the Asia Pacific region participate in the data standards initiative (the participation rate is 82 percent, excluding seven small island economies not participating). The Middle East and Central Asia region is represented by 63 percent of its countries, making it the least represented region in data standards. Within this region, participation is lowest among Middle East countries, while Central Asian countries are well represented.

^{*} Regional classification follows the structure of IMF area departments.

100.0 90.0 80.0 70.0 60.0 **AFR** 50.0 APD 40.0 - MCD 30.0 • EUR 20.0 10.0 - - WHD 0.0 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007

Figure 1: Regional Representation in the GDDS and SDDS Combined (In percent of IMF member countries)

Source: IMF Statistics Department (see http://dsbb.imf.org/Applications/web/getpage/?pagename = gddshistorydates).

15. As already noted, participation in the GDDS requires appointing a national coordinator, responsible for coordinating metadata and plans for improvement among statistical agencies and for communicating with the IMF. GDDS countries often assign this task to senior-level managers from the national statistics offices or from central banks (see Tables 1 and 2 of Appendix II). Senior-level managers that are defined as head or deputy head of agency account for 56 percent of total GDDS coordinators, and coordinators from the statistical office account for 52 percent of total GDDS coordinators. Thus, the GDDS is given a relatively high priority and visibility in participating countries—another indication of the overall acceptance of the data standards initiative.

III. PERFORMANCE OF THE GDDS

- 16. This section assesses the performance of GDDS from the perspective of commitments of GDDS members. The results also illuminate why some GDDS countries do not meet the SDDS requirements of timeliness and periodicity of data and also identify existing gaps.
- 17. Previous assessments of the performance of GDDS have been relatively broad. Recognizing the developmental nature of the GDDS, regular reviews of the Data Standards

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by the Executive Board³ have focused on the growing participation of countries and the fact that countries and the donor community "broadly recognize the GDDS as the core framework for statistical capacity building" (Sixth Review, para. 26) as measures of the extent to which the GDDS has met its objectives. The Fifth Review of the Fund's Data Standards Initiatives took a similar tack.

- 18. Looking more specifically at the commitments of GDDS members, however, the approach taken in this paper is to assess experience with the GDDS by analyzing metadata and methodologies, plans for improvement against developmental needs, and sociodemographic data. Ten years after the inception of the GDDS, it is also appropriate to assess data dissemination practices⁴—identifying areas of weakness in meeting GDDS requirements of timeliness and periodicity of data.
- 19. In assessing experience with the GDDS, staff considered practices of **compilation** separately from **dissemination**. The statistical methodologies currently used by GDDS participants were used as the key criterion for assessing the compilation of practices. For example, metadata may specify that a country prepares government finance statistics using *A Manual on Government Finance Statistics*, 1986 (GFSM 1986) methodology or the adoption of the current best-practice manual, the *Government Finance Statistics Manual*, 2001 (GFSM 2001). Countries' GDDS plans for improvement are examined. For sociodemographic data, which are recommended by the GDDS but not included in the SDDS, time-series data on statistical capacity indicators prepared by the World Bank are analyzed.
- 20. Thereafter, staff seeks to place more emphasis on the data dimension, including the dissemination aspects of the system. Progress against the data dissemination "targets" contained in the GDDS is assessed by looking both at the observance of periodicity and timeliness of data dissemination.
- 21. This step is carried further by comparing dissemination by countries against the tougher standards of the SDDS. In doing so, staff explicitly recognizes that graduation to SDDS was never established as a goal for GDDS participants and cannot, therefore, strictly be used as a test of success or failure of the GDDS. The SDDS, however, is useful as a benchmark that can emphasize the distance that countries must yet travel before they can be presumed to meet international best practice, the importance assigned to data **dissemination**, and the areas where technical assistance is most needed.

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³ For all regular reviews of the Data Standards by the Executive Board, see http://www.imf.org/external/np/sta/dsbb/list.htm.

⁴ The 1997 paper that led to the adoption of the standard by the Executive Board placed some emphasis on the importance of **data dissemination** and in supporting "data improvements needed by users, including investors, and for progressing toward the SDDS for countries interested in doing so."

22. Finally, the results of this analysis of progress are used to assess why some GDDS countries do not meet the SDDS requirements of timeliness and periodicity of data and to identify areas in need of most improvement.

A. Analyzing GDDS Metadata and Data Compilation

23. In analyzing GDDS metadata and data compilation, staff considers (1) the methodologies GDDS participants use for compiling comprehensive frameworks, (2) countries' GDDS plans for improvement, and (3) sociodemographic data. It is concluded that participants have significantly progressed in adopting methodologies, although in some countries, progress has been slow; and participants assign data dissemination issues and the update of sociodemographic data a relatively low priority.

Methodologies for compiling GDDS comprehensive frameworks

- 24. The macroeconomic data that member countries compile are broadly based on internationally accepted methodologies that the IMF and other international organizations have developed. For example, for real sector statistics, the best-practice methodology is contained in the *System of National Accounts 1993 (1993 SNA)*. The first version of the United Nations System of National Accounts dates to 1953 and has been updated twice since then, in 1968 and in 1993. For fiscal sector statistics, the IMF has prepared the *Government Finance Statistics Manual*, first published in 1986 and revised in 2001. With respect to monetary and financial statistics, the IMF published a *Monetary and Financial Statistics Manual*, 2000 (MFSM), replacing the 1984 Guide to Money and Banking Statistics. For balance of payments statistics, Balance of Payments Manual, fifth edition (BPM5) is the current methodology.
- 25. The extent to which GDDS participants have adopted these methodologies could be viewed as a measure of the extent to which GDDS participation has led to quality improvements in participants' statistical systems.
- 26. It should be noted that the extent of adoption of new methodologies varies from one country to another, and several countries have implemented them only partially. What is important is that a country broadly follows the recommendations of the new methodology or follows a path toward its implementation. Table 2 shows the adoption of new methodologies by region as of 2007, according to the information contained in the selected countries' metadata and mission reports. According to this table, the rate of adoption of the *BPM5* at 91 percent was the highest for all regions, followed by that of the *1993 SNA* (64 percent), the *MFSM* (56 percent), and the *GFSM 2001* (13 percent).
- Table 2 shows that, excluding *GFSM 2001* and *MFSM* in AFR and APD, the adoption rates of new methodologies are well above 50 percent in all regions for selected countries. The rate of adoption of *BPM5* is highest in all regions. For this methodology, APD had the highest adoption rate (100 percent), followed by MCD (92 percent), AFR (91 percent), and

WHD (85 percent). The *1993 SNA* shows the next highest adoption rate with adoption rates of 75 percent in MCD, 63 and 62 percent for APD and WHD, respectively, and 59 percent for AFR. AFR and APD still lag behind in the adoption of *MFSM*, with just 50 percent for AFR and only 25 percent for APD. WHD (85 percent) and MCD (58 percent) are the two regions where this methodology has been widely adopted.

Table 2. GDDS Participating Countries' Adoption of New Methodologies by Region*

(Number of Countries and Percentages)

Region	1993 SNA	GFSM 2001	MFSM	ВРМ 5
	(Number of count	ries)		
AFR	13	3	11	20
APD	5	0	2	8
MCD	9	2	7	11
WHD	8	2	11	11
Total all regions	35	7	31	50
(Percent	age of all countries	in the group)		
AFR	59	14	50	91
APD	63	0	25	100
MCD	75	17	58	92
WHD	62	15	85	85
All regions	64	13	56	91

Source: IMF Statistics Department.

- 28. The adoption of *GFSM 2001* is the lowest of the four methodologies in all regions. MCD leads all regions with 17 percent of countries adopting this methodology, followed by WHD and AFR with 15 and 14 percent, respectively. None of the APD countries in the group has adopted this methodology to date.
- 29. The availability of resources also plays an important role in adopting and implementing new methodologies. Financial resources are needed to conduct more demanding surveys in terms of the expanded coverage, and the compensation for additional staff. Technical expertise is needed to guide the countries in implementing these methodologies.
- 30. Overall, it may be concluded that GDDS participants have made significant progress in adopting and implementing current best-practice statistical methodologies. At the same time, however, it must be acknowledged that, for many reasons, progress in some countries has been slow, and some distance remains to be traveled.

^{*} For a group of 55 GDDS participants.

Countries' GDDS plans for improvement

- 31. Plans for improvement are central to the GDDS. Initial plans are elaborated during technical assistance missions in collaboration with the countries' authorities, and are expected to be updated once a year. These plans reflect the actions that the country needs to take to meet at least the GDDS recommendations. Countries are encouraged to determine a time frame for the implementation of the plans, as well as the financing and technical assistance needed for implementation.
- 32. In this section, the plans for improvement by dataset are analyzed for each sector and by region. To facilitate the analysis, the plans were categorized using the IMF's Data Quality Assessment Framework (DQAF). Tables 3, 4, and 5 illustrate the analysis, leading to the conclusion that data dissemination issues are assigned a relatively low priority.
- 33. Table 3 summarizes the results for any issues mentioned by the 55 countries in the group. For all countries, common issues reflected in the plans for improvement are ranked in the table.

Table 3. Number of Times an Issue Related to a DQAF Element Is Mentioned in the Plans for Improvement

Rank	DQAF Dimensions and Elements	All Regions	Percent
1	3.1 Source data	512	24
2	2.2 Scope	302	14
3	0.2 Resources	220	10
4	3.3 Statistical techniques	218	10
5	5.1 Data accessibility	178	8
6	2.1 Concepts and definitions	176	8
7	4.1 Periodicity and Timeliness	118	6
8	2.3 Classification/sectorization	105	5
9	5.2 Metadata accessibility	70	3
10	0.1 Legal and institutional environment	57	3
11	4.2 Consistency	46	2
12	2.4 Basis for recording	37	2
13	3.4 Assessment and validation of intermediate data		
	and statistical outputs	20	1
14	0.4 Other quality management	19	1
15	4.3 Revision Policy and Practice	15	1
16	All Other	25	1
	Total	2,118	100

Source: IMF Statistics Department (see http://dsbb.imf.org/Applications/web/gdds/gddscountrylist/).

34. The countries' plans for improvement are not always fully comprehensive. For example, in one section of the metadata, a country may refer to the need to improve timeliness and periodicity while the plans for improvement do not take up this point. Thus,

the findings of this analysis may not represent the full extent of existing weaknesses. Plans for improvement may reflect the authorities' priorities.

35. Table 4 shows a breakdown of major issues cited in the GDDS plans for improvement by the six data categories evaluated in Report on the Observance of Standards and Codes (ROSC) reports. This table shows the share of issues (DQAF dimensions and elements) for each category. According to this table, the category of accuracy and reliability, of which an element is source data, is the most important issue the countries list in their plans for improvement with respect to national accounts, prices, and balance of payments. Methodological soundness, comprising concepts and definitions, scope, classification and sectorization, is a major issue for the government operations and the depository corporations survey. The prerequisites for quality, comprising resources, are a major concern in compiling government debt. Independently conducted data ROSC assessments tend to confirm the pattern of weaknesses that countries identify in their metadata.

Table 4. Major Issues by Data Category
(In percent of total major issues)

	National Accounts	Prices	Govern- ment Operations	Govern- ment Debt	Depository Corporations Survey	Balance of Payments	All Datasets
DQAF Dimensions and Elements							
Prerequisites of quality	6	9	18	36	11	12	14
1. Integrity		0	0	1	0	0	0
2. Methodological soundness	28	25	43	13	39	26	29
3. Accuracy and reliability	48	54	17	15	27	47	36
4. Serviceability	10	1	10	10	9	9	8
4.1 Periodicity and timeliness	5	1	7	7	7	6	6
4.2 Consistency	4	0	2	3	1	2	2
4.3 Revision policy and practice	1	0	1	0	0	1	1
5. Accessibility	8	11	13	25	14	5	12
Total (percent)	100	100	100	100	100	100	100
Total (number of issues)	529	267	333	287	294	408	2,118

Source: IMF Statistics Department (see http://dsbb.imf.org/Applications/web/gdds/gddscountrylist/).

36. Table 5 provides a regional analysis of the GDDS plans for improvement. It shows that in Africa, major constraints to data dissemination comprise source data, inadequate resources, scope, and statistical techniques. In the Asia Pacific region, source data, scope, and statistical techniques are mentioned most often as a major issue. In the Middle East and Central Asia region, source data are most often mentioned, followed by statistical techniques, and scope. In the Western Hemisphere region, the major issues are scope and source data, followed by data accessibility and statistical techniques.

Table 5. Regional Differences in the Major Issues Identified in the GDDS

Plans for Improvement

(In percent of total major issues)

DQAF Element	AFR	APD	MCD	WHD
3.1 Source data	25	28	23	21
2.2 Scope	11	14	13	22
0.2 Resources	16	9	5	3
3.3 Statistical techniques	9	10	14	11
5.1 Data accessibility	7	8	9	12
2.1 Concepts and definitions	7	9	12	8
4.1 Periodicity and Timeliness	5	5	5	7
2.3 Classification/sectorization	5	6	5	4
5.2 Metadata accessibility	4	3	3	2
0.1 Legal and institutional environment	4	2	1	2
4.2 Consistency	2	1	3	2
2.4 Basis for recording	1	2	2	3
Other	5	2	4	3
Total (percent)	100	100	100	100
Total (number of issues)	989	354	348	427

Source: IMF Statistics Department (see http://dsbb.imf.org/Applications/web/gdds/gddscountrylist/).

37. Nevertheless, source data, scope, resources, statistical techniques, data accessibility, and concepts and definitions are the major issues facing all regions. Significantly, data dissemination issues consistently are assigned a relatively low priority. This reflects the current orientation and emphasis in the GDDS. Going forward, if the IMF focused more on the dissemination aspect of the GDDS, periodicity and timeliness of data would become more prominent in the plans for improvement.

Sociodemographic data

- 38. This section of the paper examines the developments in sociodemographic data over the last seven years, concluding that participants assign the upgrade of sociodemographic data a relatively low priority. To analyze these developments, the staff has used the Statistical Capacity Indicators (SCI) of the World Bank as a proxy. Although these indicators measure overall statistical capacity, the measurement is biased toward sociodemographic data. More than 70 percent of the criteria included in the dimensions are sociodemographic data.
- 39. From Table 6, it is clear that the SCI increased substantially since 1999 in all regions (see also Appendix III). For the GDDS countries as a group, the SCI increased by 24 percent over the seven years, with the highest increase of 34.9 percent in APD and the lowest increase of 13.7 percent in Africa. The increase in the SCI of the GDDS countries did, however, slow down significantly over the last two years. The SCI increased by only

4.3 percent for all the countries as a group, with the highest increase recorded in MCD countries and the lowest in WHD.

Table 6. Statistical Capacity Indicators

	1999	2004	2005	2006	Perc	entage Ch	nange	Number of Countries Which
		Average	Score ¹		1999 to 2004	2004 to 2006	1999 to 2006	Included MDGs in Metadata
AFR	47.6	52.5	52.1	54.1	10.3	3.1	13.7	3
APD	54.1	68.9	72.3	73.0	27.4	6.0	34.8	0
MCD	53.1	65.5	70.1	70.5	23.4	7.6	32.7	1
WHD	56.5	71.4	71.5	72.8	26.4	1.9	28.8	1
Total	51.3	61.1	62.3	63.7	19.1	4.3	24.0	5

Source: World Bank.

- 40. The strong improvement in the SCI between 1999 and 2004 is likely most attributable to the commitment made by countries in 2000—the United Nations Millennium Declaration—and the subsequent development of statistics to track the eight Millennium Development Goals (MDGs).
- 41. Although the GDDS was amended to explicitly recognize the United Nations' MDG indicators and the development of appropriate statistical monitoring systems in late 2003, only 9.1 percent of the GDDS participants in the group have adjusted their sociodemographic metadata to include the MDGs. This may indicate that the GDDS participants do not regard updating the GDDS sociodemographic metadata to include data on the MDGs as a priority, because extensive data on the sociodemographic data categories and the MDGs are available on the websites of the World Bank and the United Nations.

B. Analyzing GDDS Data Dissemination, Particularly Timeliness and Periodicity of Data

42. How well have GDDS countries managed to achieve the data dissemination goals set out in the GDDS? To what extent have countries been able to move beyond the GDDS and achieve the more stringent requirements for the SDDS? These questions are addressed in the following sections. First, the dissemination practices of timeliness and periodicity of data of GDDS participants are compared with those recommended as good practice by the GDDS. Second, dissemination is compared against the tougher standards of the SDDS, and third, the reasons why many GDDS countries do not meet SDDS requirements are summarized.

¹Scale of 0–100. A score of 100 indicates that a region meets all the criteria.

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GDDS participants' statistical practices against GDDS

- 43. GDDS countries on average are able to meet some of the periodicity and timeliness recommendations for the comprehensive framework⁵ of the GDDS, as shown in Table 7. For example, close to 73 percent of GDDS countries meet the GDDS recommendation for periodicity and timeliness for the comprehensive framework for national accounts and 89 percent for the depository corporations survey. Only 64 percent meet the recommendation for government operations, and only about 69 percent for balance of payments. For GDDS, the periodicity of the comprehensive frameworks is annual, except for the depository corporations survey where a monthly periodicity is recommended.
- 44. In addition, many countries experience problems meeting the dissemination recommendations with respect to short-term or tracking indicators, especially for those data categories in the real sector, with the least of the problems experienced in the financial sector, followed by the fiscal sector. Except for consumer price index (CPI), less than 50 percent of the countries in Africa and Asia and the Pacific compile and disseminate these real sector data categories meeting both the GDDS periodicity and timeliness recommendations. Averaged over all datasets, about 62 percent of requirements are met by GDDS participants.
- 45. Table 7a shows performance relative to just the periodicity indicator. The overall averages are higher by more than 10 percentage points. Almost universal observance exists for national accounts, CPI, and both the financial and external sectors. This suggests that an important constraint that countries face to meet GDDS recommendations is timeliness. It would be useful to further investigate the reasons for this: whether it is due to a lack of policy focus on timely dissemination or whether there are tangible hurdles, perhaps related to resource constraints or for other reasons (e.g., hard-copy publications, which take time to produce). Timeliness is also a factor for some of the other datasets, for instance, for employment data, where close to 70 percent of countries meet periodicity, but only about 55 percent are able to meet the timeliness recommendations as well. These results are relevant for technical assistance priorities, both in terms of subject areas and of the focus within topics.

⁵ GDDS and SDDS datasets are organized into "comprehensive framework" (e.g., national accounts) and "tracking indicators" (e.g., production index).

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Table 7. GDDS Participants Meeting the GDDS Recommendations (Timeliness and Periodicity) by Data Category

Data Catogory	1000		낕	In Percent		
Data Category	0000	All	AFR	APD	MCD	WHD
National accounts	Real sector	72.7	63.6	77.8	72.7	84.6
Production index	Real sector	30.9	9.1	55.6	45.5	38.5
Unemployment	Real sector	40.0	4.5	44.4	72.7	69.2
Wages/earnings	Real sector	45.5	31.8	44.4	63.6	53.8
Employment	Real sector	54.5	31.8	55.6	81.8	69.2
Producer price index	Real sector	20.0	4.5	33.3	45.5	15.4
Consumer price index	Real sector	92.7	100.0	88.9	6.06	84.6
Government operations	Fiscal sector	63.6	63.6	44.4	72.7	69.2
Central govt. debt	Fiscal sector	0.09	59.1	33.3	54.5	84.6
Central bank	Financial sector	83.6	81.8	77.8	81.8	92.3
Banking survey	Financial sector	89.1	81.8	88.9	6.06	100.0
Official reserves	External sector	34.5	31.8	55.6	27.3	30.8
Balance of payments	External sector	69.1	59.1	77.8	81.8	69.2
Merchandise trade	External sector	58.2	40.9	2.99	72.7	69.2
Simple average	All sectors	58.2	47.4	60.3	68.2	66.5
Population	Sociodemographic sector	43.6	13.6	44.4	63.6	6.97

Source: IMF Statistics Department (see http://dsbb.imf.org/Applications/web/gdds/gdds/gddscountrylist/).

Table 7a. GDDS Participants Meeting the GDDS Recommendations for Periodicity by Data Category

0	3000		- u	In Percent		
Data Category	Sector	All	AFR	APD	MCD	WHD
National accounts	Real sector	98.2	100.0	88.9	100.0	100.0
Production index	Real sector	38.2	18.2	55.6	54.5	46.2
Unemployment	Real sector	45.5	9.1	55.6	81.8	69.2
Wages/earnings	Real sector	54.5	36.4	55.6	81.8	61.5
Employment	Real sector	69.1	54.5	2.99	6.06	76.9
Producer price index	Real sector	25.5	9.1	33.3	54.5	23.1
Consumer price index	Real sector	94.5	100.0	88.9	90.9	92.3
Government operations	Fiscal sector	69.1	72.7	55.6	72.7	69.2
Central govt. debt	Fiscal sector	92.7	100.0	8.77	81.8	100.0
Central bank	Financial sector	94.5	100.0	77.8	100.0	92.3
Banking survey	Financial sector	94.5	6.06	88.9	100.0	100.0
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Official reserves	External sector	74.5	81.8	77.8	81.8	53.8
Balance of payments	External sector	100.0	100.0	100.0	100.0	100.0
Merchandise trade	External sector	63.6	50.0	2.99	72.7	76.9
Simple average	All sectors	72.5	62.9	9.02	83.1	75.8
Population	Sociodemographic sector	47.3	18.2	55.6	63.6	76.9

Source: IMF Statistics Department (see http://dsbb.imf.org/Applications/web/gdds/gddscountrylist/).

Comparing data dissemination practices against the SDDS "benchmark"

- 46. This section compares the current dissemination practices of GDDS participants with those required by the SDDS and analyzes existing gaps on a regional basis, in order to assess the extent to which GDDS participants might be capable of progressing to the SDDS. It concludes that it could be desirable to consider expanding the GDDS to include all SDDS data categories.
- 47. As shown in Tables 8 and 9, most GDDS countries are not able to meet the SDDS requirements. Table 8 shows the extent to which GDDS participants achieve both periodicity and timeliness for the various data categories. Setting the bar relatively high, the SDDS requires, for example, quarterly gross domestic product (GDP) with timeliness of one quarter, while GDDS recommends annual data for GDP with generously defined timeliness of 6–9 months. Table 9 considers just periodicity requirements—less difficult to meet.
- 48. Of the GDDS countries included in the group, about 32 percent are able to meet both SDDS periodicity and timeliness requirements (Table 8), but if only the periodicity requirements are considered, 53 percent of these countries meet the requirements. This suggests that an important constraint is the ability to disseminate data in a timely manner. (Some reasons for this are further discussed below.)
- 49. Countries experience the most serious problems in the real sector, excluding the CPI. They experience the least in the financial sector, where the major problems are countries' ability to comply with the SDDS timeliness requirement. For GDDS countries as a group, less than 26 percent met the SDDS requirements for any real sector data category. However, this percentage increased somewhat to 40 percent if compared only with the SDDS periodicity requirement. In the case of the financial sector, less than 37 percent of the group met the SDDS requirements for both data categories, but close to 95 percent of the group met the periodicity requirements for both data categories.
- 50. To meet SDDS data requirements, it would be necessary for countries to compile and disseminate data on the reserves template, general government sector, external debt, and the international investment position (IIP). The reserves template is not included in the GDDS, and the latter three data categories are included as encouraged extensions; therefore, no comprehensive data are available for analysis. The GDDS could be revised to include all SDDS data categories. This would help define the path for countries in graduating to the SDDS.
- 51. Looking at the overall results across regions again suggests that Asia and the Pacific and Middle East and Central Asia are able to meet about 43 percent of the SDDS requirements, followed by Western Hemisphere countries, reaching about 28 percent, and Africa, accomplishing just 24 percent of the periodicity and timeliness requirements.

Table 8. Percent of GDDS Participants Meeting SDDS Requirements (Periodicity and Timeliness) by Data Category

Data Catodory	30,000		lul	In Percent		
Data Category	0000	All	AFR	APD	MCD	WHD
National accounts	Real sector	10.9	0.0	33.3	18.2	7.7
Production index	Real sector	25.5	4.5	55.6	36.4	30.8
Unemployment	Real sector	16.4	0.0	33.3	45.5	7.7
Wages/earnings	Real sector	18.2	4.5	33.3	36.4	15.4
Employment	Real sector	20.0	0.0	4.44	45.5	15.4
Producer price index	Real sector	16.4	4.5	22.2	45.5	7.7
Consumer price index	Real sector	89.1	100.0	88.9	81.8	76.9
Government operations	Fiscal sector	21.8	18.2	22.2	27.3	23.1
Central govt. debt	Fiscal sector	43.6	54.5	22.2	45.5	38.5
Central bank	Financial sector	23.6	18.2	33.3	18.2	30.8
Banking survey	Financial sector	36.4	31.8	33.3	45.5	38.5
Official reserves	External sector	34.5	31.8	55.6	27.3	30.8
Balance of payments	External sector	40.0	27.3	55.6	63.6	30.8
Merchandise trade	External sector	47.3	36.4	66.7	63.6	38.5
Simple average	All sectors	31.7	23.7	42.9	42.9	28.0
Population	Sociodemographic sector	43.6	13.6	44.4	63.6	6.92
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Source: IMF Statistics Department (see http://dsbb.imf.org/Applications/web/gdds/gddscountrylist/.

Table 9. Percentage of GDDS Participants Meeting the SDDS Periodicity Requirements by Data Category

Data Category	Sector	Percentage
National accounts	Real	20.0
Production index	Real	38.2
Unemployment	Real	21.8
Wages/earnings	Real	23.6
Employment	Real	27.3
Producer price index	Real	25.5
Consumer price index	Real	94.5
Government operations	Fiscal	47.3
Central govt. debt	Fiscal	65.5
Central bank	Financial	94.5
Banking survey	Financial	94.5
Official reserves	External	74.5
Balance of payments	External	52.7
Merchandise trade	External	63.3
Simple average		53.1
Population	Sociodemographic	47.3

Source: IMF Statistics Department (see http://dsbb.imf.org/Applications/web/gdds/gddscountrylist/).

Reasons why GDDS countries do not meet SDDS requirements

- 52. Most GDDS participants do not meet the SDDS requirements for periodicity and timeliness for most SDDS-prescribed data categories. However, the percentage of countries meeting the SDDS periodicity-only requirements for the prescribed data categories is markedly higher and the reasons are varied.
- 53. From the above tables, it is clear that the real sector, except for the CPI, is the main area in which countries are experiencing the most problems. Countries experience not only problems in meeting the SDDS timeliness requirements for real sector data but also in compiling data meeting the SDDS periodicity requirements. From the regional analysis, it appears that the problems are more pronounced in Africa and the Western Hemisphere. These two regions are the farthest from the SDDS requirements (timeliness and periodicity) in the areas of real and external sector data.

- 54. Possible reasons why countries find it particularly difficult to meet timeliness requirements may be as follows:
 - (1) SDDS timeliness requirements, stringent to meet capital market needs, are considerably tougher than those of the GDDS recommendations, particularly for GDP, labor market, central government operations, and balance of payments statistics. In this respect, GDDS participation, in itself, does not prepare countries to move to the SDDS requirements.
 - (2) GDDS countries may not be giving a high priority to improving timeliness of dissemination. Reasons could be the absence of demand for such data. Another reason may simply be that timeliness is not emphasized in technical assistance programs. Yet another explanation could be that data are mainly prepared for internal government access and for interested parties, while dissemination to the general public is a lower priority.
 - (3) The first data release is a hard-copy publication, which takes more time (even if subsequently posted on the Internet).
- 55. The relatively large lags for real sector and external sector data may simply reflect the fact that these rely on expensive and resource-intensive source data. The regional deviation in compliance with the SDDS requirements could be the result of the differences in the availability of resources to absorb capacity-building technical assistance.

IV. CAPITAL MARKET ACCESS

- 56. The GDDS was developed for a broad group of countries not necessarily with access to capital markets and more likely recipients of official development financing and technical assistance from a variety of donors. The SDDS was developed against the background of informational failures affecting capital markets. Virtually all SDDS subscribers are active borrowers in capital markets. However, Tables 10 and 11 show why the assumption about GDDS countries is no longer fully justified.
- 57. Table 10 lists GDDS countries that have received commercial ratings. The table shows that 36 GDDS countries included in the group (65 percent) have sovereign ratings by international rating agencies. Obviously, the rating agencies have not been deterred by possible data shortcomings in GDDS countries and at the same time have had sufficient data at their disposal when assigning sovereign ratings. This means that GDDS countries in many cases are incurring the costs of compiling the information that credit rating agencies require but are not reaping the benefit of public dissemination. Moreover, these GDDS countries

Table 10. GDDS Countries with Sovereign Bond Ratings, by Region (as of November 1, 2007)*

Region/Country		Rating Agency				
Region/Country	S&P	Moody's	Fitch			
AFR						
Seychelles	X					
Mauritius		X				
Botswana	X	X				
Namibia			Χ			
Nigeria	X		Χ			
Senegal	X					
Kenya	X					
Mozambique	X		Χ			
The Gambia			Χ			
Uganda			Х			
Madagascar	X					
Rwanda			Х			
Malawi			X			
APD						
China	Х	Х	Х			
Sri Lanka	X		Χ			
Mongolia	X	X	Χ			
Vietnam	X	X	Χ			
Cambodia	X	X				
MCD						
Qatar	Х	Х				
Kuwait	Χ	X	Χ			
Oman	X	X				
Macedonia	X		Χ			
Albania		X				
Jordan	X	X				
Azerbaijan		X	Χ			
Georgia	X		Х			
Pakistan	X	X				
WHD						
Trinidad and Tobago	Х	Х				
Venezuela	X	X	Χ			
Panama	X	X	Χ			
Grenada	X					
Belize	X	X				
Guatemala	X	X	Х			
Honduras	,,	X	,,			
Bolivia	X	X	Х			
Nicaragua	^	X	^			

Sources: IMF Statistics Department (see http://dsbb.imf.org/Applications/web/getpage/?pagename=gddshistorydates), Fitch Ratings, Standard and Poor's, and Moody's Investors Service.

^{*} Countries in the selected group of 55 with sovereign ratings.

Table 11. Data Categories Used by Moody's Rating Agency for Sovereign Bond Ratings (That are not fully covered by GDDS/SDDS*)

-	Indicators Not Covered GDDS SDDS								
<u>I.</u>		Real sector	Real sector						
1.	Economic structure and performance								
	GDP per capita (PPP basis)	No	No						
	Gross Investment/GDP (%)	Partially	Partially						
	Nominal and real exports and imports of goods and services (% change)	Partially	Partially						
	Net exports of goods and services/GDP (%)	Partially	Partially						
	Openness of the economy (exports + imports of goods and services/GDP) (%)	Partially	Partially						
II.	Government finance	Fiscal sector	Fiscal sector						
	General government revenue/GDP, expenditure/GDP, and financial balance/GDP (%)	Encouraged	Yes						
	General government primary balance/GDP	No	Encouraged						
	General government debt/GDP (%) and general government debt/general government revenue (%)	No	Partially						
	General government interest payments/general government revenue (%)	No	Encouraged						
III.	External payments and debt	External sector	External sector						
	Real effective exchange rate (% change)	No	No						
	Relative unit labor costs (index)	Partially	Partially						
	External debt (US dollars) and external debt/GDP (%)	Partially	Yes						
	External debt/current account receipts (%)	Partially	Yes						
	Net foreign direct investment/GDP (%)	Partially	Yes						
	Net IIP/GDP (%)	Encouraged	Yes						
IV.	Monetary, vulnerability, and liquidity indicators	Financial sector	Financial sector						
	Debt-service ratio (interest+current year principal/current account	Partially (ext.	Encouraged						
	receipts) (%)	sector)	(ext. sector)						
	Dollarization ratio (total foreign currency deposits in domestic banks/total deposits in domestic banks) (%)	Partially	Partially						
	Dollarization vulnerability indicator (foreign currency deposits in domestic banks/official foreign exchange reserves+foreign assets in domestic banks) (%)	Partially	Partially						
	Financial Soundness Indicators								
	External vulnerability indicator	No	Partially (res. template)						
	Liquidity ratio (liabilities to BIS banks within one year/total assets held in BIS banks)	No	No						
Nıı	mber/percent of data categories covered (fully, partially, or encouraged) from								
	selected indicators (30 in total)	22 (73.3%)	26 (86.7%)						

^{*} Source: Moody's Rating Methodology Handbook, SDDS Guide, GDDS Guide.

have also forgone a benefit that could be reaped with SDDS subscription, given the empirical evidence that SDDS subscription lowers borrowing costs for its subscribers. With access to capital markets, the SDDS would be the relevant standard of data dissemination for these countries, and GDDS membership should therefore spell out the transition to the SDDS.

- Regarding Table 11, a related question is whether and to what extent the GDDS datasets are relevant for the analysis performed by rating agencies. Table 11 lists those data considered by a major rating agency for sovereign ratings that are not fully covered in the data categories required for GDDS (see Appendix V for the complete table).
- 59. Table 11 also makes the same comparison for SDDS to confirm that the datasets are in line with the requirements of capital market analysts. The table shows that both GDDS and SDDS broadly cover Moody's data requirements, although the SDDS is a closer match for some fiscal and external sector statistics (covers 86.7 percent of data categories). Also, the GDDS does not require data dissemination of these data categories but recommends that countries develop these datasets.
- 60. Neither the GDDS nor SDDS covers the financial soundness indicators (FSIs) required by Moody's. Given that the 36 countries are accessing capital markets, they would benefit from aligning their data dissemination programs closely with the requirements of the SDDS and including some FSIs. Readers should also note that the data requirements as expressed in Moody's reports are not explicit on timeliness and periodicity requirements (for instance, they do not mention the need for quarterly national accounts, as required by the SDDS, or whether annual national accounts are sufficient as recommended by the GDDS).

V. How Successful Was the GDDS in Guiding Countries to Progress to SDDS?

- 61. What progress have GDDS participants made and how successful has the GDDS been in guiding countries to meet the SDDS requirements? To answer these questions, the staff assessed five GDDS participants from different regions. They are Botswana (AFR), Cambodia (APD), Jordan (MCD), Mauritius (AFR), and Panama (WHD). Some countries made more progress than others; more focused plans for improvement and data dissemination aspects would have accelerated progress.
- 62. The assessment is based on the following four aspects of data compilation and dissemination practices: (1) new data categories compiled/disseminated (from the list of GDDS and SDDS macroeconomic data categories); (2) improvements in coverage,

⁶ See Cady, J., 2005, "Does SDDS Subscription Reduce Borrowing Costs for Emerging Market Economies?" *IMF Staff Papers*, Vol. 52, No. 3, pp. 503–17,

http://www.imf.org/External/Pubs/FT/staffp/2005/04/pdf/cady.pdf and Cady, J., and A. Pellechio, 2006, "Sovereign Borrowing Cost and the IMF's Data Standards Initiatives," IMF Working Paper 06/78, http://www.imf.org/external/pubs/ft/wp/2006/wp0678.pdf.

- (3) improvements in periodicity, and (4) improvements in timeliness. To do so, the staff first compared the current compilation and dissemination practices of the five GDDS participants with those at the time of GDDS participation (based on available data ROSCs, SDDS assessment mission reports, or metadata) and highlighted improvements. Second, they compared the current compilation and dissemination practices with SDDS requirements and identified shortcomings in the above-mentioned four aspects. The average assessment time frame is about five years.
- 63. The assessment of the statistical compilation and dissemination practices reveals that all five countries have made some progress in developing statistical compilation and dissemination practices in about five years, especially with regard to timeliness. As shown in Table 12, Cambodia, Jordan, and Mauritius made significant improvements while, on the other hand, Botswana and Panama made relatively less progress.

Table 12. Progress Made Under the GDDS Framework—Selected Countries*

	Assess- ment	onumber of data categories improved)					Improvements Needed for Meeting SDDS		
Country	Time Frame (year)	New Data Compiled	Improve- ments in Coverage		Improve- ments in Timeliness	Data Categories Improved (total)	New Data	Cove- rage	Period. and/or Timeli- ness
Botswana	5	None	1	1	2	4	3	1	11
Mauritius	5.5	None	2	9	11	14	1	3	9
Cambodia	4.5	2	5	2	5	10	8	3	2
Jordan	5.5	4	3	None	9	15	0	4	6
Panama	5	2	2	3	2	8	2	1	10
Total/ average	5.1	8	13	15	29	51	14	12	38

Source: IMF Statistics Department.

64. Although three countries made significant progress, the pace has been slow. For example, according to the 2002 data ROSC mission, Jordan should have been able to meet all the SDDS requirements in February 2005, and according to the 2001 data ROSC mission, Mauritius should have been able to subscribe to the SDDS by July 2004. Of course, a user needs to interpret the ROSC missions' assessments with caution, because the possible SDDS subscription time frames are obviously attached to a number of prerequisites, chief among them being available resources and commitment of the authorities.

^{*} Botswana—as of November 2006 compared to October 2001; Mauritius—as of November 2006 compared to July 2001; Cambodia—as of March 2002 compared to June-July 2006; Jordan—as of July 2007 compared to February 2002; Panama—as of February 2006 compared to December 2000.

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65. It is clear that the progress made under GDDS participation in any given country greatly depends on the authorities' commitment to data dissemination standards and statistical development in general, as well as resources made available for both sustaining and developing statistical practices. While the level of commitment and available resources for statistics in the countries may vary to a certain extent, the overall assessment of progress points to the conclusion that more focused plans for improvement on meeting SDDS requirements, and more focus on data dissemination aspects, would have accelerated the progress significantly.

VI. OVERALL ASSESSMENT

- 66. In view of the medium-term developmental objectives of the GDDS and the specific commitments that participants were asked to make, the effectiveness of the GDDS can be judged most directly by observing the extent of countries' participation in the system and by examining their metadata, including plans for improvement, against developmental needs. At the same time, following 10 years of experience in using the General System, it would seem essential to judge effectiveness against the ultimate objective of improving data dissemination. The extent to which the GDDS has supported data improvements needed for progressing toward the SDDS "for countries interested in doing so" would also be germane.
- 67. The analysis presented in this paper provides a somewhat mixed assessment of the experience with the GDDS. On the positive side of the ledger, participation has continued to grow—the combined participation/subscription in the GDDS/SDDS now covers five sixths of the IMF membership—and the developmental aspects of the GDDS have been widely recognized. On the negative side, overall progress has been slower than envisaged. In part this reflects the scarcity of resources and the often low priority assigned to statistics in national development plans and priorities. However, slow progress appears also to suggest a need to review basic elements of the GDDS.

How well has the GDDS performed?

68. It will be recalled that promoting the production and dissemination of economic and financial data are the ultimate objectives of the GDDS. Unlike the Special Standard, which commits its subscribing countries to observe a specific list of statistical practices, the General System commits its participating countries only to making more qualitative improvements in their statistical systems. The initial focus of the General System was placed on the **development** of national systems in an explicit medium-term framework, with attention to the production and **dissemination** of economic and financial data coming at a later stage. Reflecting these priorities, participating countries commit only to (1) use the GDDS as a

⁷ See Kibuka, R., 2007, "Mainstreaming Statistics in the Poverty Reduction Strategy Approach to Provide for More Effective Technical Assistance: Some Experience at the IMF," IMF Working Paper WP/07/255, http://www.imf.org/External/Pubs/FT/staffp/2007/, Section V, page 21–26 for a detailed discussion of the effects of low priorities and constrained resources. These factors also severely weaken the effectiveness of technical assistance.

developmental framework, (2) designate a country coordinator, and (3) provide metadata that (a) describes current statistical practices and (b) plans for improvement. There is **no commitment** to data dissemination per se. Indeed, a premise that underlies the GDDS is that improvements in data quality need to be given a high priority and "**may need to precede** improvement in dissemination practice."

- 69. As expected, metadata and plans for improvement generally confirm the existence of the sorts of weaknesses in statistical frameworks that justified the emphasis in the initial design of the General System on implementing comprehensive statistical frameworks. The most common problems, classified according to DQAF categories, comprise source data, scope, resources, statistical techniques, and concepts and definitions. Plans for improving data dissemination do not figure very prominently, possibly reflecting the initial focus of the GDDS, even though serious deficiencies exist in data dissemination, and some "low-hanging fruit" remain to be picked.
- 70. In hindsight, success in adopting comprehensive statistical frameworks has been quite mixed, ranging from 91 percent of GDDS participants having adopted *BPM5*, to 13 percent having adopted *GFSM 2001*. Resource constraints in particular countries and the availability of technical assistance (or lack thereof) appear to have been important factors in determining the speed of adoption. Also, pronounced regional differences indicate the extent to which particular methodologies have been implemented.
- 71. Further, overall progress in strengthening statistical systems most likely has been slower than envisaged when the GDDS was established. The case studies point to the fact that countries with an interest in progressing toward the SDDS consistently failed to do so within the time frames judged feasible by IMF staff. It is disappointing, too, that only six countries have managed to progress from the GDDS subscribing to the more demanding SDDS (all of them transition countries mostly with a strong tradition and infrastructure in statistics). Although a substantial improvement was observed in sociodemographic data since 1999, member countries did not respond by updating their sociodemographic metadata to include the MDGs. This may indicate that the GDDS participants do not regard updating the GDDS sociodemographic metadata to include data on the MDGs a priority, given that extensive data on the sociodemographic data categories and the MDGs are available on the websites of the World Bank and the United Nations.
- 72. Moreover, GDDS participants generally still have a long way to go in meeting the ultimate objective of strengthening data **dissemination**. As to the periodicity and timeliness objectives of the GDDS comprehensive frameworks, about 60 percent of participants meet both objectives. Whereas almost three quarters of participants meet the periodicity goals, fewer than one half meet the timeliness objective. When judged against the more demanding standards of the SDDS, slightly more than one half of GDDS participants meet periodicity standards and about one third meet timeliness standards. Certain GDDS participants have obtained a credit rating and have become market borrowers but are still some distance from meeting SDDS subscription requirements—the standard for countries with market access.

This distance may be related in part to weaknesses in data dissemination. Meeting the SDDS subscription requirements would, however, result in a significant reduction in borrowing costs for these countries.

- 73. Finally, important changes in the world since the inception of the GDDS have yet to be reflected in the design and implementation of the GDDS. These changes include ongoing globalization with increasing reliance on open capital and product markets, heightened emphasis on transparency and good governance, and technical developments associated with the spread of the Internet and growing reliance on electronic forms of disseminating information.
- 74. The foregoing assessment provides a basis to reconsider and fine-tune certain aspects of the GDDS in order to improve its performance and relevance.

VII. RECASTING THE GDDS

75. In order to strengthen the emphasis on data dissemination, five actions would bolster the performance of the GDDS: strengthening the emphasis on data dissemination; realigning the data categories; strengthening plans for improvement; strengthening the emphasis on graduation to the SDDS; and achieving better regional balance. These measures could be implemented without additional cost to the IMF, but would entail some additional costs for participants.

Strengthening the emphasis on data dissemination

- 76. A reformulation of the General System should give more emphasis to data dissemination to the public and less to generating and updating metadata descriptions of existing statistical practice. The original formulation gave more emphasis to developmental processes than to data dissemination for two reasons: (1) quality deficiencies could undermine the usefulness of any data that might be disseminated; and (2) data users' needs in nonmarket borrowing countries were less time-sensitive than in SDDS countries. A consequence of this emphasis is that GDDS participants have generally disseminated fewer data series and particularly in a less timely way than they might otherwise have done.
- Moreover, views on the importance of data dissemination have changed since the inception of the GDDS. It is now widely recognized that the dissemination of data creates its own demand for higher information quality and more extensive coverage of indicators. Data dissemination is likely to raise the profile and visibility of the statistical agencies and, by creating a demand for more and better statistics, may lead to a higher priority being placed on statistics in a country's developmental plan and to more resources being allocated to the statistical agencies. The "time sensitivity" of users in many GDDS countries has increased, as evidenced by the significant number of market borrowers among them. Rising standards of governance and accountability have further increased the demand for timely data. The spread of the Internet and the increasing reliance on electronic publication as the best-practice first

channel of dissemination has both "raised the bar" and reduced the cost of data dissemination but has yet to be reflected in the General System.

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- 78. Cost reductions and technological change make it feasible to adopt key aspects of the Special Standard. Staff proposes that GDDS participants be expected to establish a centralized NSDP and disseminate their GDDS data on it. Similarly, establishing an advance release calendar listing data releases for the year ahead, and posting it on the DSBB and in domestic publications, would become an expectation for the GDDS. Hyperlinks among the DSBB, the NSDP, and the ARC would be encouraged, but not required.
- 79. As part of their GDDS obligations, countries should be asked to make a good faith commitment to achieving the dissemination objectives, although it is not proposed that the GDDS become a monitored standard like the SDDS.

Realigning the data categories

- 80. A GDDS recasting should simplify and reformulate the data categories to more closely approximate the SDDS. The difficulties that many countries (e.g., Botswana, Jordan, Mauritius) have had in making the jump from GDDS to SDDS underscores the value of beginning to compile certain data categories as part of the GDDS, such as the reserves template, general government statistics, the IIP, and external debt.
- 81. The experience of many GDDS countries as market borrowers and their need to provide many of these data to credit rating agencies further reinforces the desirability of realigning GDDS data categories with that of the SDDS (because it meets most requirements of the credit rating agencies). Countries in many cases are incurring the costs of compiling the information that credit rating agencies require but are not reaping the benefit of public dissemination. Staff proposes, therefore, to expand and bring GDDS data categories into conformance with the SDDS, albeit with less demanding requirements for periodicity and timeliness (see Table 13).
- 82. In the present formulation, the datasets comprise comprehensive frameworks (one for each macroeconomic sector), as well as other data categories for each sector. In the new formulation, staff proposes to give greater emphasis to the indicator series that are part of the other data categories, streamline the data components of the comprehensive frameworks, and combine them with some of the other data categories (see Table 14). The proposed changes would eliminate redundancies as well as the distinction between comprehensive and other datasets. When combined with an explicit SDDS end-goal, these changes would be characterized as providing a "capital market track" for the General System.

⁸ Participants also would be encouraged to provide hyperlinks to any additional national websites that have more comprehensive data series and/or historical time series for specific data categories in the GDDS.

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Table 13. Proposed Changes in the GDDS Data (Only changes are shown)

	Current GDDS	Proposed Changes			
Comprehensive Frameworks and Data Categories	Recommended Components	Recommended Components			
Real Sector					
Comprehensive Framework—National accounts	Full range of national accounts aggregates and balancing items in nominal and real terms—GDP, GNI, GDI, Consumption, Saving, Capital Formation, and Net Lending/Net Borrowing. Sectoral accounts and national and sectoral balance sheets, as relevant.	-GDP in current prices and GDP volume by production approach, with disaggregated components; or -GDP in current prices and GDP volume by expenditure category, with disaggregated components.			
Data category— National accounts aggregates	GDP (nominal and real)	-			
Production index/indices	Manufacturing or industrial indices;	Industrial, primary commodity, or sector, coverage as relevant.			
	Primary commodity, agricultural, or other indices, as relevant.	-			
Fiscal Sector					
Comprehensive Framework—Central government operations	Comprehensive data on transactions and debt, emphasizing (1) coverage of all central government units; (2) use of appropriate analytical framework; and (3) development of a full range of detailed classifications (tax and nontax revenue, current and capital expenditure, domestic and foreign financing) with breakdowns (debt holder, instrument, currency), as relevant.	Revenue, expenditure, balance, and financing with breakdowns (debt holder, instrument, currency), as relevant.			
Data category—Central government aggregates	Revenue, expenditure, balance, and financing with breakdowns (debt holder, instrument, currency), as relevant.	-			

Table 13. Proposed Changes in the GDDS Data (Only changes are shown) (continued)

(Current GDDS	Proposed Changes
Comprehensive Frameworks and Data Categories	Recommended Components	Recommended Components
Financial Sector		-
Comprehensive Framework—Depository corporations survey	Producing and disseminating comprehensive data emphasizing (1) coverage of all depository corporations (banking and other deposit-taking institutions); (2) use of an appropriate analytical framework; and (3) development of classifications of external assets and liabilities, domestic credit by sector, and components of money (liquidity) and nonmonetary liabilities.	-Broad money (for example, M3); -Domestic claims: (1a) net claims on general government; or (1b) claims on nonfinancial public sector; and (2) claims on other resident sectors; and -Net foreign assets.
Data category—Broad money and credit aggregates	Net external position, domestic credit, broad or narrow money.	-
External Sector		-
Comprehensive Framework—Balance of payments	Producing and disseminating comprehensive data on the main aggregates and balances of the balance of payments, including e.g., imports and exports of goods and services, trade balance, income and current transfers, current account balance, reserves and other financial transactions, and overall balance, with detailed components, as relevant.	-Current account: (1) Goods; (2) Services; (3) Income; (4) Current transfersCapital accountFinancial account: (1) direct investment; (2) portfolio investment; (3) other investment; and (4) reserve assetsNet errors and omissions.
Data category— Balance of payments aggregates	Imports and exports of goods and services, current account balance, reserves, overall balance.	-
Comprehensive Framework— International Investment Position	Encouraged	Assets and liabilities, disaggregated by: -direct investment; -portfolio investment: equity securities; debt securities; -other investment; and reserve assets (only assets).
International reserves	Gross official reserves expressed in U.S. dollars	Gross official reserve assets
	Reserve related liabilities (encouraged)	Reserve related liabilities (encouraged)
		Reserves template (encouraged)

Table 13. Proposed Changes in the GDDS Data (Only changes are shown) (concluded)

Current GDDS		Proposed Changes		
Comprehensive Frameworks and Data Categories	Recommended Components	Recommended Components		
External debt and debt service schedule	Public and publicly guaranteed external debt, broken down by	Public and publicly guaranteed external debt, broken down by maturity		
	maturity Public and publicly guaranteed	Public and publicly guaranteed external debt service schedule		
	external debt service schedule Private external debt not publicly guaranteed, and debt service schedule (encouraged)	Private external debt not publicly guaranteed		

Strengthening plans for improvement

- 83. Streamlining the data categories will have the effect of reducing the metadata burden for participants. In line with increasing the emphasis on data dissemination while containing overall costs, staff proposes to drop the requirement for annual updates of the metadata and permit updating on either a "best effort" or "when merited" basis.
- 84. However, the developmental aspect of the General System would remain as a priority element. Plans for improvement would continue to be an important feature of the GDDS. The existing expectation that these plans be updated regularly and be comprehensive, would be retained. In addition, plans for improvement would assign higher priority and give greater prominence to the periodicity and timeliness objectives in the GDDS.
- 85. More comprehensive and timely plans for improvement could potentially be a basis for interagency coordination of technical assistance and training. Such coordination would assist in implementing the GDDS, particularly because the IMF does not provide certain types of technical support, for example, in helping countries develop household, general government, and enterprise source data.

Strengthening the emphasis on graduation to the SDDS

86. New emphasis on data dissemination should have the ancillary effect of making it easier and more natural for GDDS countries to progress to the SDDS. The streamlining and close realignment of the SDDS and GDDS categories, introduction of the NSDP, and renewed emphasis on the ARC should have this effect. There may be merit in adopting the eventual progression to the SDDS as a presumptive end-goal for GDDS participants.

Table 14. Proposed Alignment of GDDS and SDDS Data and Dissemination Dimensions¹ (Summary)

CDDCD + C + 2	CDDC D + C +		dicity	Tir	neliness
GDDS Data Category ²	SDDS Data Category	GDDS ²	SDDS	GDDS ²	SDDS
Real Sector					
National accounts (GDP)	National accounts (GDP)	A (Q enc.) ³	Q	6-9M ⁴	1Q
Production index	Production index	M	M	6-12W	6W (M enc.)
Labor market: Employment Unemployment Wages/Earnings	Labor market: Employment Unemployment Wages/Earnings	A	Q	6-9M	1Q
Price index: Consumer prices	Price index: Consumer prices	M	M	1-2M	1M
Price index: Producer prices (encouraged)	Price index: Producer prices	M	M	1-2M	1M
Fiscal Sector		I.	l .		-1
General government or public sector operations (encouraged)	General government or public sector operations	A	A (Q enc.)	6-9M	2Q
Central government operations	Central government operations	Q	M	1Q	1M
Central government debt	Central government debt	Q	Q	1-2Q	1Q
Financial Sector		I.	l		-1
Depository corporations survey	Depository corporations survey	M	M	1-3M	1M
Central bank survey	Central bank survey	M	M (W enc.)	1-2M	2W (W enc.)
Interest rates	Interest rates	M	D	NA	NA
Stock market: Share price index (encouraged)	Stock market: Share price index	M	D	NA	NA
External Sector		I.	l .		-1
Balance of payments	Balance of payments	A (Q enc.)	Q	6M	1Q
International investment position	International investment position	A	A (Q enc.)	6-9M	3Q (Q enc.)
Official reserve assets	Official reserve assets	M	M (W enc.)	1-4W	1W
Template on international reserves and foreign currency liquidity (encouraged)	Template on international reserves and foreign currency liquidity	М	M (W enc.)	1-3M	1M (W enc.)
Merchandise trade	Merchandise trade	М	M	8-12W	8W (4-6W enc.)
External debt Public and publicly guaranteed external debt	External debt	Q	Q	1-2Q	1Q
Debt-service schedule Private external debt		SA A		3-6M 6-9M	
Exchange rates	Exchange rates	D	D	NA	NA
Sociodemographic data			1		
Population	Population	A	A	3-6M	NA
Education	-	A	-	6-12M	-
Health	-	A	-	3-6M	-
Poverty	-	A	-	6-12M	-

Access by the public dimension—data dissemination							
GDDS (not monitored) SDDS (monitored) GDDS SDDS GDDS SDDS							
Advance release calendar (ARC)	Advance release calendar (ARC)	A	As relevant	As relevant	4 mos. ahead ⁵		
National Summary Data Page (NSDP)	National Summary Data Page (NSDP)	As per data	As per data	As per data	As per data		

Dedaily; W=weekly; M=monthly; Q=quarterly; A=annual; SA=semiannual; NA= not applicable; NLT = not later than.

² Proposed for GDDS

³ Entries in italics for all—data categories, periodicity, and timeliness—refer to encouraged indicators. Not all encouraged indicators for both the GDDS and SDDS are shown in this table.

⁴ Entries in bold for both the GDDS periodicity and timeliness indicate that these correspond to the former GDDS data category and not the comprehensive framework. Also, indicates periodicity and timeliness of the new data categories.

⁵ Releases for the current month and for next three months.

87. Consistent with the voluntary nature of the data standards, it is proposed that countries be free to choose whether or not they "sign up" to the SDDS goal.

Achieving better regional balance

88. The General System should remain as a source of guidance for *all* member countries. However, it needs to be recognized that, for a variety of reasons, membership has increased more slowly in some regions and rates of progress have differed markedly by region. Staff proposes that one strategic goal should be to increase participation in Middle Eastern countries. Another should be to intensify work in the African region with countries that have expressed an interest in moving to the SDDS. With at present only one SDDS subscriber in the region (South Africa), an increase in the number of SDDS subscribers in Africa would generate "success stories" that could serve as a spur to statistical capacity-building efforts in other countries in the region.

Costs and benefits of the proposed changes to the GDDS

- 89. The strengthening of the data dissemination aspect of the GDDS is not foreseen to add additional cost to STA but it would require a reformulation of STA's technical assistance priorities to accommodate the need for more data transparency. In particular, it is likely that many GDDS participants would require some technical assistance to establish a centralized NSDP and an ARC. It is envisioned that this assistance would be provided in the context of the existing technical assistance program. Data dissemination issues would be added to the terms of reference of technical assistance missions, and some regional outreach missions or regional workshops would be conducted to help countries develop dissemination practices.
- 90. Some costs would arise for GDDS participants, including some initial startup costs to set up the NSDP and ARC and some ongoing costs to maintain them. The setup cost will differ from country to country depending on whether a web server already exists. Best estimates are that the *one-time cost* for implementation would take between 4–12 person weeks, involving mainly technological (IT) skills and some efforts by the GDDS coordinator to bring the data from the various agencies together. For the ongoing maintenance, the main responsibilities lie with the GDDS coordinator, who might use about 10–15 percent of his/her time to update the NSDP and ARC. However, there are also benefits to the authorities, in the form of a central data page with timely data available to all policymakers. To the extent that the authorities currently publish these data in various paper-based publications, the NSDP and ARC may also produce savings, which could potentially offset or even exceed the additional costs.
- 91. The streamlined approach to metadata would reduce the time spent to update these metadata but more emphasis on up-to-date plans for improvement would add to the efforts needed. However, more focused plans for improvement could give more emphasis to results-

based management. It would help policymakers keep track of priorities and implementation and would help policymakers in their negotiations with donors.

VIII. ISSUES FOR DISCUSSION

- 92. The options and directions that have been proposed in this review would—if implemented—result in important changes that would have implications for both current and prospective GDDS participants. While they would not, in the staff's view, result in a fundamental change in the objectives of the GDDS, they go far beyond what has been proposed during any previous review of the Data Standards Initiative. Staff believes that such changes should be considered in the context of a consultative process involving staff. The consultations with Executive Directors and participating countries would include an appropriate procedure for transition, as was the case when the data standards were first formulated and adopted. The informal seminar provides staff with the first opportunity to seek the views of Executive Directors. If Executive Directors are supportive of the broad thrust of the analysis and recommendations, staff would next seek to consult more broadly with the membership, and then bring formal recommendations to the Board at the time of the Seventh Review of the Data Standards, presently scheduled for the fall of 2008.
- 93. Staff would particularly welcome Executive Directors' views, advice, and guidance on the following matters before it begins to consult with member countries:
 - Recasting the GDDS to emphasize data dissemination
 - Do Directors agree with staff's overarching proposal to reorganize the GDDS to place more emphasis on data dissemination to the public?
 - Should plans for improvement emphasize periodicity and timeliness of data?
 - Strengthening the data dissemination aspect of the GDDS
 - Do Directors agree that GDDS participants should be expected to establish a centralized NSDP and an ARC, as in the SDDS?
 - ➤ Do Directors agree that participants that have developed ARCs and NSDPs should post hyperlinks to these websites on the DSBB?
 - Realigning the GDDS data categories
 - Do Directors support simplifying the structure of GDDS data by streamlining the data components of the comprehensive frameworks and combining the comprehensive frameworks with some of the data categories (i.e., to simplify and reformulate the data categories to more closely approximate that of the SDDS and to eliminate the somewhat complicated structure)?

- Strengthening plans for improvement
 - Do Directors support the staff's view that a higher priority should be assigned to the plans for improvement in the metadata and less to updating the description of the existing system in the metadata?
- Strengthening the emphasis on GDDS participants' graduation to SDDS
 - ➤ Do Directors agree that emphasis on graduation to SDDS should be strengthened?
- Achieving better regional balance
 - ➤ Do Directors agree with the staff's suggestion to continue with its efforts to obtain a better regional balance in the participation in the GDDS?

Appendix I. Selection Criteria and List of Countries in the Group

- 1. The staff analyzed GDDS participants' performance and progress in data dissemination practices on the basis of a representative group to have adequate regional and economic representation and to focus on countries that actually used the GDDS as a development tool. The 88 GDDS participants (as of February 2007) were grouped by region following the Fund's area departments: African (AFR), Asia and Pacific (APD), Middle East and Central Asia (MCD), and Western Hemisphere (WHD). The two European countries in the group—Albania and Macedonia, FYR—were included in MCD, the closest region to Europe.
- 2. From these 88 countries, 12 countries that have not updated their metadata in the last four years (48 months) were excluded and can thus be considered as not actively using the GDDS. This also ensures that the information used for the analysis is current, since the analysis is done entirely based on countries' metadata. About 70 percent of the frame (76 countries) was chosen in the group, which therefore includes 55 countries.
- 3. The 55 countries in the group were distributed among four regions (using proportions based on the 76 countries in the sample frame). The resulting breakdown of GDDS participants in the group is as follows: Africa—22, Asia and Pacific—8, Middle East and Central Asia—12, and Western Hemisphere—13 (see Table 2). Finally, the list of 76 participants was grouped by region and ordered alphabetically. GDDS participants were then randomly selected from each region to be included in the group, using a systematic random sampling method.

Appendix Table I.1. Selection of GDDS Participants Drawn by Region*

Regions	AFR	APD	MCD/ EUR	WHD	Total
Total GDDS participants	39.0	12.0	17.0	20.0	88
Percent in total	44.3	13.6	19.3	22.7	100
Metadata updated within 48 months	29.0	12.0	17.0	18.0	76
Percent in total	38.2	15.8	22.4	23.7	100
GDDS Participants in the group	22.0	8.0	12.0**	13.0	55
Percent in total	40.0	14.5	21.8	23.6	100

^{*} The sum of percent shares may not exactly equal to 100 percent due to rounding.

^{**} Includes Albania and Macedonia.

Appendix Table I.2. GDDS Participants Included in the Group of Selected Countries by Region¹

	AFR	APD	MCD	WHD
1.	Angola	1. Bangladesh	1. Albania	Antigua and Barbuda
2.	Botswana	2. Cambodia	2. Afghanistan	2. Belize
3.	Central African Republic	3. China	3. Azerbaijan	3. Bolivia
4.	Congo, Dem Rep. of	4. Kiribati	4. Georgia	4. Dominica
5.	Congo, Rep. of	5. Mongolia	5. Jordan	5. Grenada
6.	Ethiopia	6. Nepal	6. Kuwait	6. Guatemala
7.	Gambia, The	7. Sri Lanka	7. Macedonia, FYR	7. Honduras
8.	Kenya	8. Vietnam	8. Oman	8. Nicaragua
9.	Liberia		9. Pakistan	9. Panama
10.	Madagascar		10. Qatar	10. St. Kitts and Nevis
11.	Malawi		11. Tajikistan	11. St. Lucia
12.	Mauritius		12. West Bank and Gaza	12. Trinidad and Tobago
13.	Mozambique			13. Venezuela
14.	Namibia			
15.	Nigeria			
16.	Rwanda			
17.	Senegal			
18.	Seychelles			
19.	Sierra Leone			
20.	Tanzania			
21.	Uganda			
22.	Zambia			

¹By IMF area departments.

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Appendix II. The GDDS and SDDS Coordinators Appointed by Countries¹

- 1. Participation in both the GDDS and the SDDS requires that a country appoint a national coordinator. Participation in the GDDS also constitutes a commitment by the country authorities to updating metadata and plans for improvement at least once a year. GDDS countries appoint GDDS coordinators as part of their participation, and coordinators are responsible for updating the metadata. GDDS coordinators thus can play an important role in moving the reform agenda ahead. SDDS coordinators have considerably more day-to-day responsibilities because data are posted on the website on an ongoing basis, and metadata are certified every quarter. On the other hand, SDDS coordinators generally do not have a role to play in their country's reform agenda. The SDDS coordinator role is thus more technical and less strategic than that of the GDDS coordinator.
- 2. An analysis of the GDDS coordinators by rank and by agency suggests that GDDS countries most often assign this task to senior-level managers from national statistics offices or central banks (Appendix Table 1). Senior-level managers (defined as head or deputy head of agency) account for 56 percent of total GDDS coordinators, and coordinators from the statistical office account for 52 percent of total GDDS coordinators. Senior level managers are predominant in the African, Middle East and Central Asian, and Western Hemisphere regions.² While managers with different ranks are appointed evenly for both the European and the Asian and Pacific regions.
- 3. This contrasts somewhat with the practice of SDDS countries, where advanced economies appoint mainly mid-level managers (defined as head or deputy head of departments or divisions) in central banks and statistics offices to coordinate the dissemination of data and other levels. The rank distribution in all regions is the same. The different practices likely reflect the perception that the GDDS coordinator is mainly a strategic planner while SDDS coordinators are responsible for the day-to-day operation of providing data and metadata updates for their countries.

¹ This section draws on a study prepared by Phebby Kufa.

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² Regional classification follows the structure of IMF area departments.

Appendix Table II.1. Ranks of GDDS Country Coordinators

(In percent of total number of GDDS coordinators as of February 2007)

	Total	Senior 1/	Middle 2	Other
Total number of GDDS coordinators	100	56	25	19
By department				
AFR	44	31	8	6
APD	14	5	5	5
EUR	3	1	2	0
MCD	16	9	6	1
WHD	23	10	5	8
By institution				
Central bank	23	8	13	2
Ministry of finance	25	13	5	8
Statistics office	52	35	8	9

Source: Country authorities and Fund staff.

Appendix Table II.2. Ranks of SDDS Country Coordinators (In percent of total number of SDDS coordinators as of February 2007)

	Total	Senior 1/	Middle 2	Other
Total number of SDDS coordinators	100	28	34	38
By department				
AFR	2	0	0	2
APD	16	5	8	3
EUR	55	16	17	22
MCD	9	3	5	2
WHD	19	5	5	9
By Institution				
Central bank	44	8	16	20
Ministry of finance	16	6	5	5
Statistics office	41	14	14	13

Source: Country authorities and Fund staff.

^{1/} Senior management refers to head or deputy head of agency.

^{2/} Middle management refers to head and deputy head of departments or divisions.

^{1/} Senior management refers to head or deputy head of agency.

^{2/} Middle management refers to head and deputy head of departments or divisions.

Appendix III. Statistical Capacity Indicators

	1999	1999 2004 2005 2006 Percentage Change					MDGs Included
		Score 1/			1999-2006 2004-2006		in Metadata
AFR							
Senegal	70	75	75	75	7.1	0.0	
Uganda	52	60	67	73	40.4	21.7	
Mozambique	62	63	68	68	9.7	7.9	
Madagascar	62	62	53	63	1.6	1.6	X
Malawi	52	67	60	63			
Mauritius	60	63	63	63			
Kenya	65	65	53	62			
Tanzania	65	65	65	62			
Ethiopia	58	63	63	60			
Rwanda	43	53	53	60			
Gambia	38	60	53	53			
Nigeria	53	40	52	52			
Republic of Congo	25	40	40	50			
Namibia	50	53	52	50			
Botswana	53	65	58	47			X
Sierra Leone	22	27	37	47			
Democratic Republic of Congo	42	38	38	43			
Central African Republic	40 27	40 33	38 37	38 35			Х
Angola Liberia	13	33 17	37 17	18			
	47.6	52.5	52.1	54.1			
AFR average APD	41.0	52.5	52.1	34.	13.7	3.1	
Bangladesh	60	73	78	80	33.3	9.6	
Mongolia	60	70	80	80			
Nepal	57	65	73	77		18.5	
Vietnam	50	75	75	75			
Sri Lanka	55	78	72	72	30.9		
Cambodia	32	58	63	65	103.1	12.1	
China	65	63	65	62	-4.6	-1.6	
APD average	54.1	68.9	72.3	73	34.8	6.0	
MCD							
Albania	63	80	80	83	31.7	3.8	
Pakistan	63	73	80	80	27.0	9.6	X
Azerbaijan	50	75	77	77	54.0	2.7	
Macedonia	67	73	77	75			
Tajikistan	45	63	72	75		19.0	
Georgia	50	72	73	73			
Jordan	77	73	77	73			
Afghanistan	10	15	25	28			
MCD average	53.1	65.5	70.1	70.5	32.7	7.6	
WHD	40	00	00	0.0			
Guatemala	43	83	80	80			
Bolivia	63	68 75	70	77			
Venezuela	58 52	75	77 70	77 76			
Nicaragua Panama	52 58	82 75	78 75	75 75			
Panama Trinidad		75 59	75 67	75 70			
Honduras	58 60	58 62	55	70 65			
Honduras Dominica	60	62 68	55 70	63			
WHD average	56.5	71.4	71.5	72.8			
TITLE GVETAGE	30.5	/ 1.4	71.3	12.0	20.0	1.3	
Total	51.3	61.1	62.3	63.7	24.0	4.3	5
Ι ΟιαΙ	51.3	01.1	02.3	03.7	24.0	4.3	ິນ

Source: World Bank.

^{1/} Scale of 0–100. A score of 100 indicates that a country meets all the criteria.