

Tenth SDMX Expert Group Meeting (EGM), Virtually, January 25-28, 2021

SIS-CC .StatSuit Use Case of CAMBODIA's CamStat, National Reporting Platform

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National Indicator Reporting Platform

Search, visualise and share data...

search...

Browse by

Topic ^ Reference area v

Agriculture	Demography	Economy
Education	Employment	Environment
Gender	Governance	Health and Nutrition
Infrastructure	SDG indicators	Tourism

Activate Windows

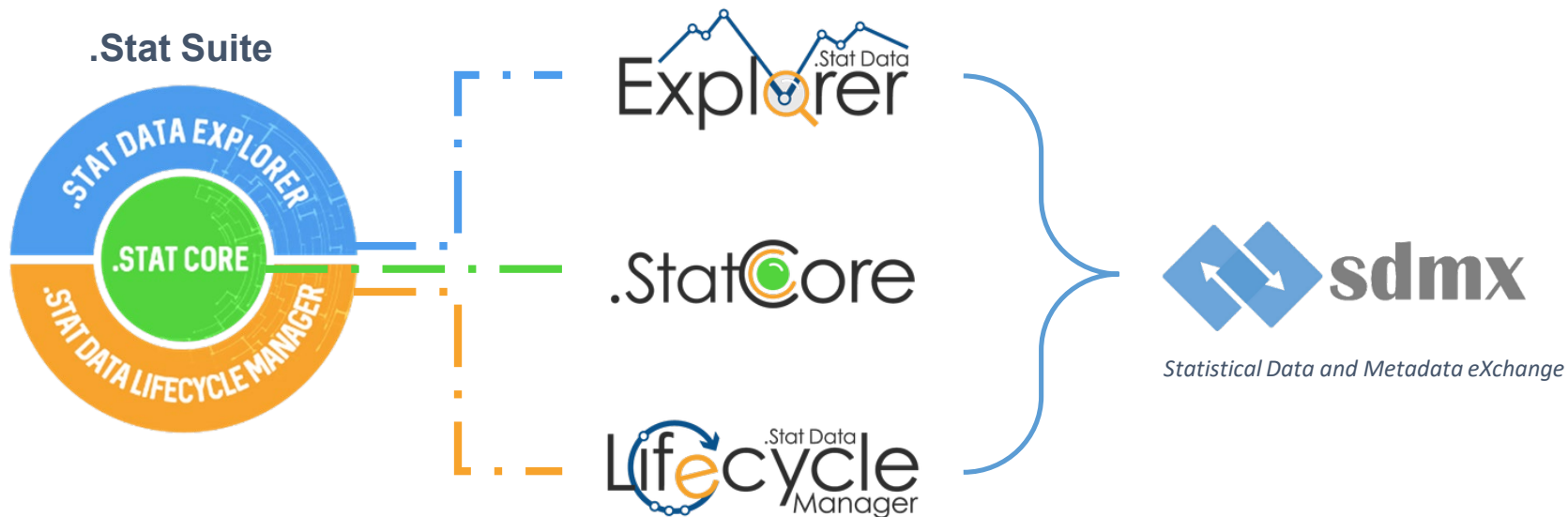
*Chan Samrith,
National Institute of Statistics, CAMBODIA*

Presentation Outline

- 1. The Implementation Experience**
- 2. The Key Output**
- 3. Lesson Learnt**
- 4. Current Update & Maintenance Exercise**
- 5. Next Step**

1 Implementation Experience

Stat Suite and SDMX/CAMSTAT



- Data modeling and SDMX Information Model,
- .Stat Data Explorer and DLM
- .Stat hosted at the UN Global Platform (UNGP) cloud environment

Migrating into CamStat Production



Pilot Exercise (2018-2019)

Flash Back to The Pilot Missions of OECD, UNICEF, PARIS21 and UNSD

Mar 2018

- Structured *SDG DSD*,
- *Structured Education Data*
- *Uploaded data to .Stat Suite*

Oct 2018

- . Structured *Demography Data* & uploaded data to .Stat Suite.
- . Built skills in **SDMX standards** and tools good practices

Dec 2018

- . Structured *Agriculture data* and upload to .Stat Suite
- . Deepened skills in data standards and tools good practices

May 2019

Full migration of CamInfo data, including NSDP and CSDG/SDG data.



Tool Used

- DSD Constructor
 - Create Concept Scheme
 - Create Code list
- Mapping Assistant
 - Mapping all data of CamInfo database
- SDMX Converter
 - Create data flow



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Key Output

- 898 indicators and about 170,000 data observations uploaded to CamStat using the .Stat Data Lifecycle Manager (DLM)
- CamStat running in the cloud and publicly available (<http://camstat.nis.gov.kh/#/>)
- Number of NIS Subject Matter staff/team trained on data standards and tools, .Stat DLM
- Training workshop on data sharing protocol and CamStat reporting platform, such as the fundamentals of data modeling, SDMX Information Model
- CamStat running on UNGP using AWS cloud services
- Data exchange has been established for SDG indicators with the SDG Global Platform

API query

- API query can be automatically generated based on SDMX standard

The screenshot shows a web browser window displaying the National Indicator Reporting Platform. The URL is camstat.nis.gov.kh/#/vis?locale=en&endpointId=disseminate&agencyId=KH_NIS&code=DF_SDG_KH&version=1.1&activeFilterId=S.... The page title is "National Indicator Reporting Platform".

The interface shows the following components:

- Used filters:** "SDG Series" and "6.1.1 Proportion of population using an improved drinking water source".
- Period:** A range selector set to "1970 - 2020" with markers for "2008" and "2018".
- Frequency of observation:** 0/9
- Reporting type:** 0/3
- SDG Series:** 1/146
- Search:** A search box containing "water" with a dropdown list of results, including "6.1.1 Proportion of population using a...".
- Show:** "Table" and "Chart" options.
- API queries:** A section with a "Click to copy" button and a text area containing the API query: `http://cambodia-statvm1.eastasia.cloudapp.azure.com/SeptemberDisseminateNSIService/rest/data/KH_NIS,DF_SDG_KH,1.1/..SH_H2O_SAFE.../?startPeriod=2008&endPeriod=2018&dimensionAtObservation=AllDimensions`.
- Structure query:** A section with a "Click to copy" button and a text area containing the structure query: `http://cambodia-statvm1.eastasia.cloudapp.azure.com/SeptemberDisseminateNSIService/rest/dataflow/KH_NIS/DF_SDG_KH/1.1/?references=all`.
- National SDG Indicators:** A section with the following details: Frequency of observation: Annual • Reporting type: National • SDG Series: 6.1.1 Proportion of population using an improved drinking water source • Reference area: Cambodia Percent.
- Table:** A table with columns for "Time period" and years from 2008 to 2017.

SDMX standard

```
Amadeus Itinerary Document x National Institute of Statistics x National Indicator Reporting Plat x cambodia-statvm1.eastasia.cloud x +
← → ↻ ⓘ Not secure | cambodia-statvm1.eastasia.cloudapp.azure.com/SeptemberDisseminateNSIService/rest/dataflow/KH_NIS/DF_SDG_KH/1.1/?referen... ☆ 🌐 🔍 📧 | Paused S ⋮

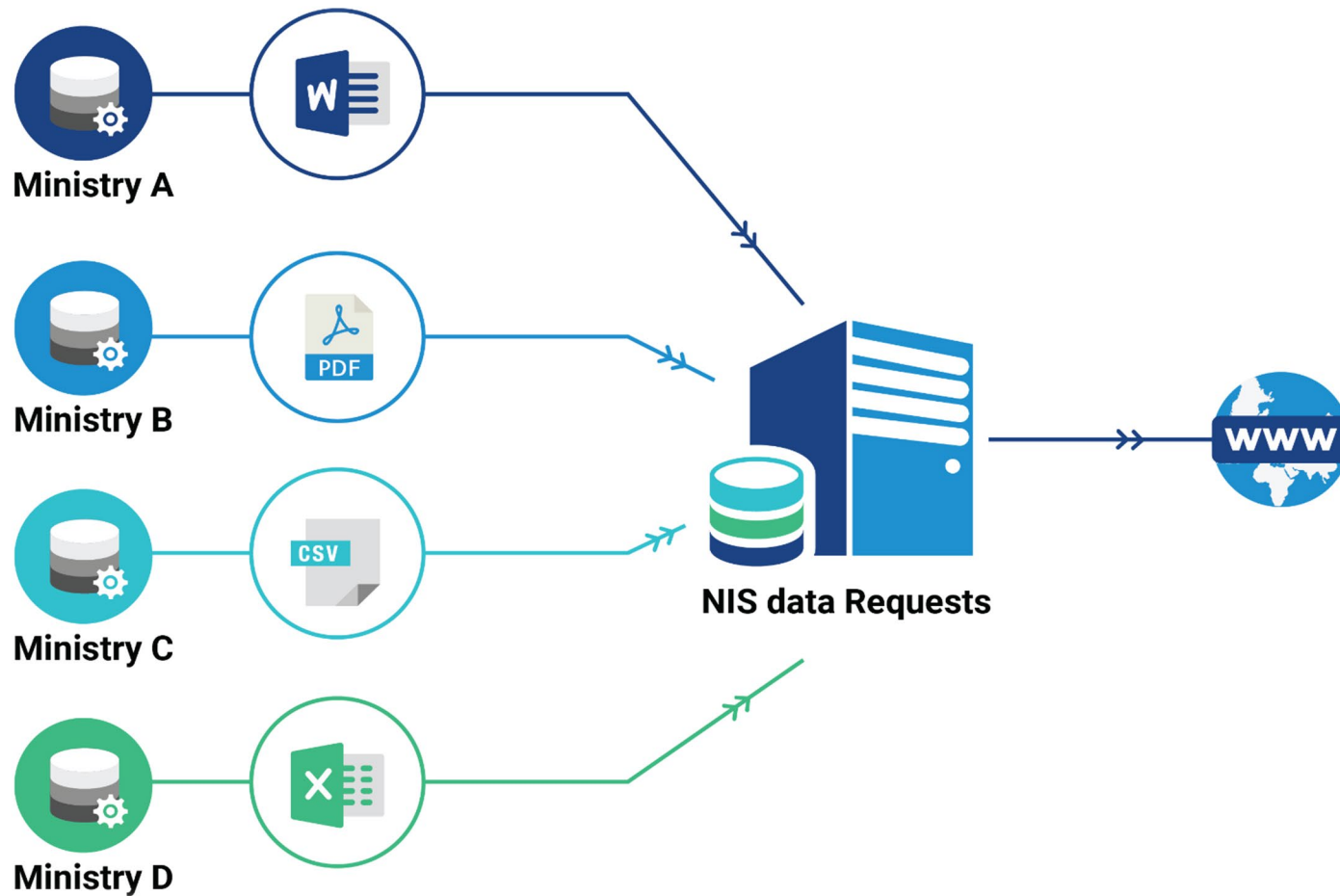
<!-- NSI Web Service v6.16.0 -->
<message:Structure xmlns:message="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/message" xmlns:structure="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/structure"
xmlns:common="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common">
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    <message:ID>IDREF5</message:ID>
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    <message:Receiver id="Unknown"/>
  </message:Header>
  <message:Structures>
    <structure:Dataflows>
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        </structure:Structure>
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        <common:Name xml:lang="en">Topic</common:Name>
        <common:Name xml:lang="km">ផ្នែកប្រធាន</common:Name>
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          <common:Name xml:lang="km">កសិកម្ម</common:Name>
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          </structure:Category>
        </structure:CategoryScheme>
      </structure:CategorySchemes>
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</message:Structure>
```

3

Lesson Learnt

- ✓ Much effort required on SDMX artefact maintenance and versioning
- ✓ Expert knowledge of SDMX required with current interface and tools to model, map and upload data structures and dataset
- ✓ Different requirements for dissemination vs reporting when using global Data Structure Definitions (DSDs)
 - **Code descriptions**
 - **Unused dimensions**
 - **National extensions**
- ✓ NIS will need further technical assistance to use and maintain CAMSTAT

Current general situation for reporting (LMs/LAs)



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Current Updating & Maintenance Exercise



Updating timeseries data from LMs,
Survey and census report



Prepare indicators template for
respective line ministry to be updated.



CamStat data have been reviewed (codelist
dimension, customization) adapt to new
feature of .StatSuite

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Current Updating & Mantaining Exercise

1. Prepare mapping file with inclusive parameter sheet
2. Using DSD Matrix Generator
 - *To add/edit the required code list*
 - *Or To upgrade the version (DSD, CL, DF...)*
3. SDMX converter
 - *Using the generated DSD*
 - *Using the mapped file*
4. Upload into DLM



Generate SDMX Artefacts			
1	Generate? 0=no, 1=yes	Action	Prerequisites
2	1	Generate Dataflows	Fill the Dataflows and DSD-Concept Matrix worksheets to create the Dataflow/DSD relationships
3	1	Generate Categorisations	Fill the category columns on the Dataflows worksheet for attaching the Dataflow to a Category
4	0	Generate Codelists	Fill the CL_ worksheets for all required codelists, following the CL_template
5	0	Generate Concept Scheme	Fill the Concept Scheme worksheet
6	0	Generate DSDs	Fill the DSDs worksheet
7	1	Generate Constraints	Fill the Constraints worksheet
8	0	Generate Dataset stub	Same as Generate Dataflows. Choose a Dataflow in the Parameters
9			
10			

Parameters for SDMX-ML Generation	
Output folder	C:\temp
Create separate files?	0
Filename prefix	SDG_NEW
XML app for opening file	C:\Program Files\Oxygen XML Editor 16\oxygen16.1.exe
Dataflow for Dataset stub	IAEG_SDGS@SDG

How to use	Generate SDMX & Actions	Concept Scheme	DSDs	Dataflows	DSD-Concept Matrix	ConstraintsSummary	CL_FREQ	CL_OBS_STA	...
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CamStat's Migration to UN Global Platform

- In 2020, CamStat was migrated from temporary hosting to the UN Global Platform with assistance from UNSD, OECD, UNESCAP, and UNICEF
 - it provided a home for CamStat in a robust cloud environment,
 - The complexity of .Stat installation and maintenance is addressed by the UNGP community.
- CamStat now running on UNGP using AWS cloud services

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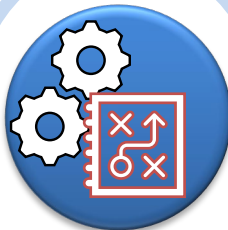
Next steps



CAMSTAT new version launching



Requested new data for updating time series data in CAMSTAT



Adapt flows throughout NSS to regularly update CAMSTAT (e.g. SDMX standard)



Need for continued technical support/capacity building (1-2 years), for example adopt/implementation MOU/data sharing tools to automate data reporting/exchanging



Continued technical support for .Stat on UNGP Cloud



Provide training on using Data Explorer to the NIS subject matter team and line ministries/other agencies to ensure sustainability over the long term

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Thank you!

