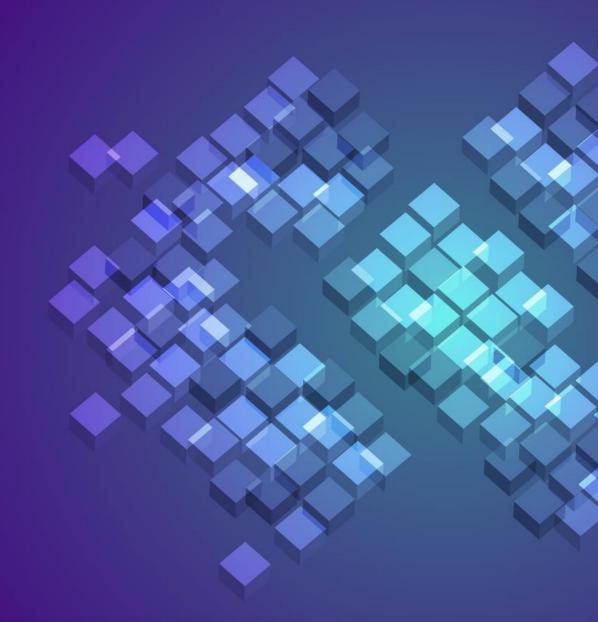
9th SDMX Global Conference

Empowering Data Communities

Migrating to a fully SDMX compliant platform

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SDMX Global Conference 2023 | Kingdom of Bahrain



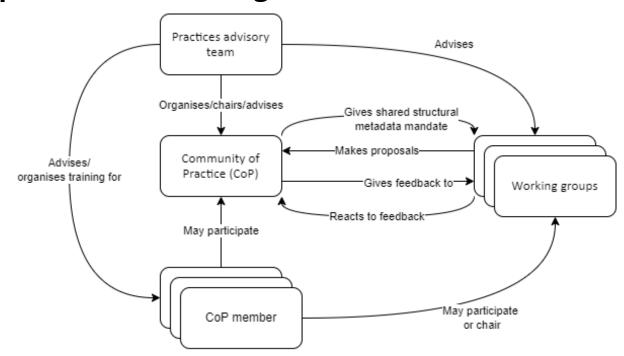
Advantages of moving to a fully SDMX compliant platform

- SDMX is a great standard for disseminating aggregated statistical data
 - Standard annotations have been a huge addition for dissemination
- Good base to build on: SDMX has been implemented worldwide
- Future-proofed with SDMX 3.0, active SDMX community
- Many tools exist for integration. All open-source or free
- Tried-and-tested methodology. Reusable, cross-domain structural metadata
- Many users already skilled in SDMX



Data migration planning and management process

- Management should endorse the migration to secure top-down support
 - Vision, methods, responsibilities
- Essential to decide the governance for structural metadata
- Design a project plan for data managers to follow from their side





Building institutional SDMX knowledge: Migration team

- Know SDMX and Dimension modelling methodology and how to apply it
 - SDMX Information model, Content-oriented guidelines
 - Some content-matter, e.g. understand Account-based systems
- Know the legacy and target platforms
- The more institutional knowledge the better
 - How the agency is structured; Reporting lines and data managers
- Communication skills
 - Know how to present and convince data managers that new methods are better than legacy
- Adaptability and how to <u>develop</u> methodology
- Coaching
 - How to train others to be migrators, to spread the knowledge and load



Building institutional SDMX knowledge: Users



Free!

Not restricted to .Stat Suite!

Not restricted to SIS-CC community!



An introduction to SDMX for data producers

In this course, you will learn about the Statistical Data and Metadata eXchange standard and how it is applied in the .Stat Suite context.



David Barraclough



SDMX vocabulary for beginners

In this course, you will learn about routine SDMX vocabulary to describe and define statistical data tables.





An introduction to SDMX structural modelling for data producers

In this course, you will learn about the Statistical Data and Metadata eXchange data modelling and how to practically apply it in the .Stat ...



David Barraclough



SDMX vocabulary for data managers

In this course, you will further extend your understanding of basic SDMX terms for general data related processes.



Guide for data managers to successfully migrate

Initiate migration

Scope your data to migrate:

- data to migrate to v8
 - restructure data
- data to archive
 - no restructure, frozen
- Resource planning (who will work on the migration in your team)
- Migration training for team members
- **Meeting** with SDPS migration team

Design

- Design structural model in SDMX Matrix Generator
- Reuse/extend existing codelists
- Design mappings between .Stat v7 and .Stat Suite data structures
- Decide the category of the data (Jobs, Health, Economy, etc.)
- Validate model with SDPS migration team

Build

- Create the data structures in Stat Suite Design space
- **Create the mappings** between .Stat v7 and .Stat Suite
- Transform the data using the mappings
- Migrate **reference metadata** to .Stat Suite

Disseminate

- Agree and finalise the .Stat Suite structures
- Transfer structures and data from Design space to Disseminate-staging (public) space
- Migration complete
- Invite users to learn more about the changes

Support from SDD SDPS Migration Team



Tools for migration success (OECD example)













.Stat Suite

- Data warehouse
- Manage data
- Data browser

SDMX Matrix Generator

- Design phase
- Redesign data structures
- View dependencies
- SDMX structural generation

Sharepoint

- Communication
- Review/approval

Gitlab

- Issue tracking
- Best practices
- Content collaboration
- Automating data processing with Pipelines

FMR

- Mapping authoring
- Data transformation

Python

- Scripting for
- Automation
- One-off tasks



Collaboration and communicating decisions

- Migration Community of Practice (CoP)
 - Use a content-management system to share knowledge with data managers
 - Mandate and promote shared structural metadata
- Git repositories for collaboration on:
 - Structural models for bilateral work
 - Shared codelists, concepts
 - Best practices
- Bilateral work with migration team and data managers
 - Ensure data managers complete basic training before migration team meeting
 - Certification-based interactive training is perfect for this (can check if they passed ©)
- Quality control
 - Ensure the modelling rules are clear, accessible, communicated, and mandated
 - Both sides must agree on the structures before finalisation and publication



Keeping the data owners motivated



- Migration is a massive opportunity to improve data and user experience
- Stat Academy self-teaching with certification can be rewarding, e.g. for trainee's CVs
- Migration team always available for support (technical and motivational ②)
- Regular communication
- Fresh material on CoP site and quarterly meetings



- Top-down support, communication and mandates help in making decisions
- **Deadlines,** e.g. to retire the legacy system clarify the timeline and priorities
- Draft an annual objective for data manager reviews



When starting a migration...

- Ensure that the migration team is formed, trained and can commit
- Identify capacity building for data managers, promote and insist on it
- Decide structural metadata governance early
- Don't make SDMX shortcuts, e.g. Respect SDMX versioning.
 - It's there to honour compatibility and data contracts. End users will thank you
- Make effective use of maintenance agencies for editing permissions, roles
- Decide a communication plan for data managers early
- Implement tools and processes for collaboration and communication



Finally, some lessons learnt

- Identify and motivate data modelling/SDMX evangelists and use them
- Avoid giving bilateral basic training to every statistician
 - Use self-training material such as .Stat Academy
 - Insist that users complete training before meeting migration team -> massive time saver
- Be ready to adapt your initial best practices may have to change
- A repository such as Git-based is essential for effective collaboration
- Be prepared for
 - sharp rise in demand on the migration team nearer the deadline
 - some resistance to migration, especially based on legacy arguments



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Thank you for your attention!

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