

Workshop on the Implementation of a National Quality Assurance Framework for Official Statistics in countries of the Eastern-Europe / Central Asia Region Belgrade, Serbia, 10-13 December 2019

Session 3.2: Quality assurance across different statistical domains: Use of GSBPM and other relevant practices

Slides by M. Guerrero / S Vale



What is the GSBPM?

- Flexible model that *describes* and *defines* the *set of business processes* needed to *produce official statistics*
- Standard framework and harmonised terminology helps to:
 - Modernise statistical production processes
 - Share methods and components
 - Improve communication

Overarching Processes											
Specify Needs	Design	Build	Collect	Process	Analyse	Disseminate	Evaluate				
1.1 Identify needs	2.1 Design outputs	3.1 Reuse or Build collection instrument	4.1 Create frame & select sample	5.1 Integrate data	6.1 Prepare draft outputs	7.1 Update output systems	8.1 Gather evaluation inputs				
1.2 Consult & confirm needs	2.2 Design variable descriptions	3.2 Reuse or Build processing & analysis components	4.2 Set up collection	5.2 Classify and code	6.2 Validate outputs	7.2 Produce dissemination products	8.2 Conduct evaluation				
1.3 Establish output objectives	2.3 Design Collection	3.3 Reuse or build dissemination components	4.3 Run collection	5.3 Review and validate	6.3 Interpret & explain outputs	7.3 Manage release of dissemination products	8.3 Agree on an action plan				
1.4 Identify concepts	2.4 Design frame & sample	3.4 Configure workflows	4.4 Finalise collection	5.4 Edit & impute	6.4 Apply disclosure control	7.4 Promote dissemination products					
1.5 Check data availability	2.5 Design processing & analysis	3.5 Test production system		5.5 Derive new variables & units	6.5 Finalise outputs	7.5 Manage user support					
1.6 Prepare and submit business case	2.6 Design production systems & workflow	3.6 Test statistical business		5.6 Calculate weights	GSB	PM Versio	on 5.1				
				5.7 Calculate aggregates	Ja	anuary 20	19				
		system		5.8 Finalise data files		Slides by M.	Guerrero				



Structure

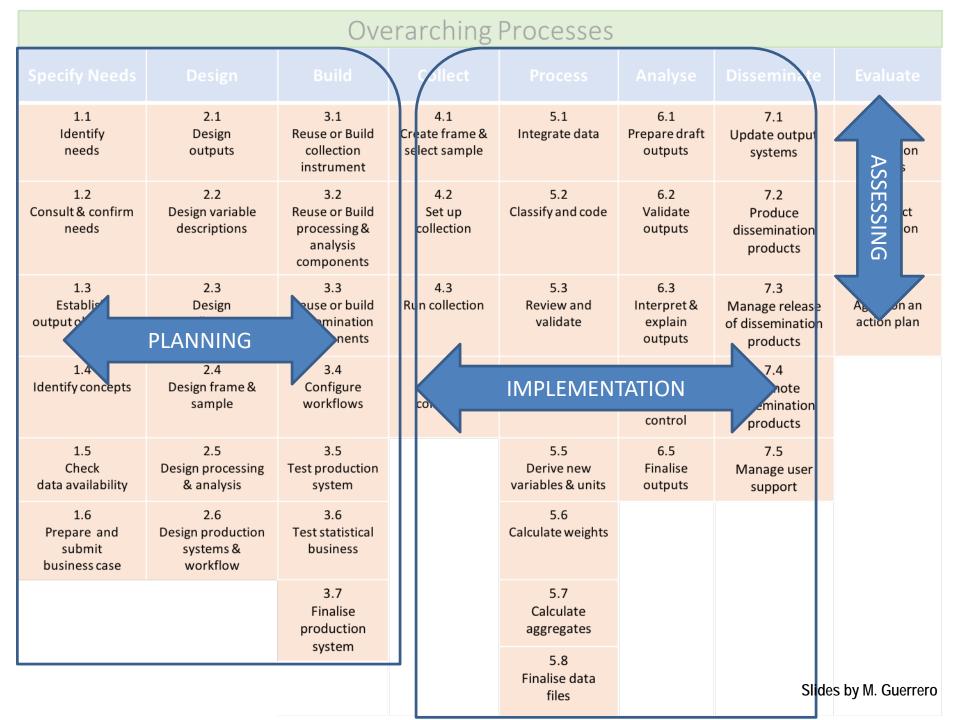
Process

Phases

Subprocesses

(Detailed descriptions)

Specify Needs	Design	Build	Collect	Process	Analyse	Disseminate	Evaluate
1.1 Identify needs	2.1 Design outputs	3.1 Build collection instrument	4.1 Create frame & select sample	5.1 Integrate data	6.1 Prepare draft outputs	7.1 Update output systems	8.1 Gather evaluation inputs
1.2 Consult & confirm needs	2.2 Design variable descriptions	3.2 Build or enhance process components	4.2 Set up collection	5.2 Classify & code	6.2 Validate outputs	7.2 Produce dissemination products	8.2 Conduct evaluation
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		3.7 Finalise production system		5.7 Calculate aggregates			
				5.8 Finalise data files			



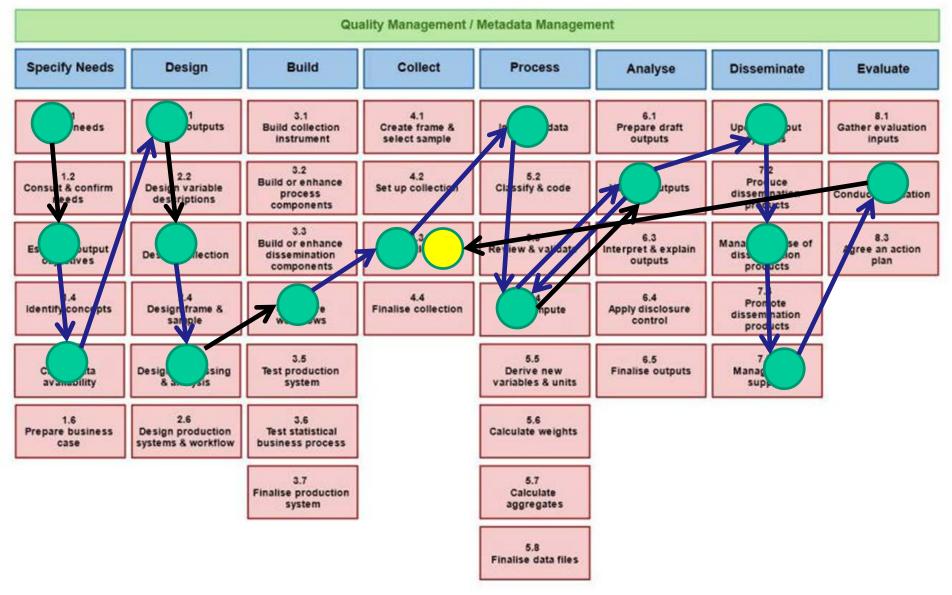
Key features



Not a linear model

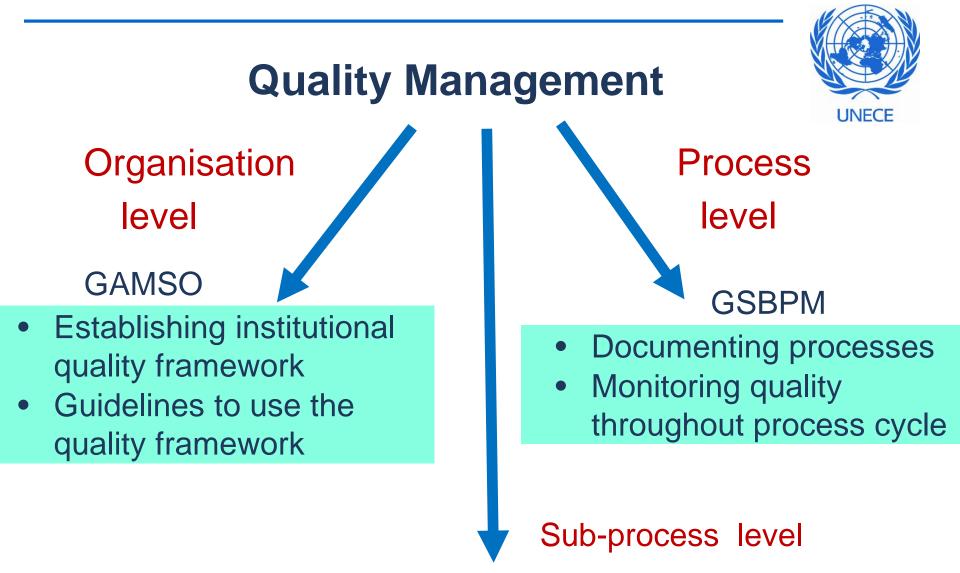
- Sub-processes are not followed in a strict order
- It is a matrix, through which there are many possible paths





Applies to ...

- All activities undertaken by producers of official statistics which result in data outputs
- All statistical *domains*
- National and international statistical organisations



GSBPM Quality Indicators

Managing quality at each step of the process

What is the GAMSO?



- Generic Activity Model for Statistical Organisations
- Covers all activities of statistical organisations

Strategy and leadership

Capability development Corporate support

Production

Corporate support





Manage data suppliers	Manage finances	Manage human resources	Manage IT	Manage buildings & physical space
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				S	trate	gy &	Lead	ershi	р						
	Govern & lead					Manage strategic collaboration & cooperation									
Capab	oility D	evelo		Corporate Support											
Plan capability improvement s	Develop capability improvement s	apability capability of capability provement improvem improvements		b pe	Manage ousiness offormance legislation	Manage statistical methodol ogy	Manage quality Manage informatio n & knowledge			Manage data sumers supplier		Manage finance S	finance human		Manage buildings & phy sical space
I									<u> </u>						
Specify Need	pecify Needs Design		Build		Collect		Process			Analyse		Disseminate		Evaluate	
1.1 Identify needs			3.1 Build collection Instrument	uild collection		4.1 Create frame & select sample		5.1 Integrate data		6.1 Prepare draft outputs		7.1 Update output systems		8.1 Gather evaluation inputs	
1.2 Consult & confirm needs	Consult & confirm Design variable		3.2 Build or enhance process components		4.2 Set up collection		5.2 Classify & code		6.2 Validate outputs		puts	7.2 Produce dissemination products		8.2 Conduct evaluation	
1.3 Establish output objectives	Establish output		3.3 Build or enhance dissemination components		4.3 Run collection		5.3 Review & validate		6.3 Interpret & explain outputs		xplain	7.3 Manage release of dissemination products		8.3 Agree an action plan	
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1.5 Check data availability	Check data Design processing Test pro		3.5 Test productio system	'n			Deriv	.5 e new es & units	Fin	6.5 alise ou	tputs	7.5 Manage suppo			
1.6 Prepare busines: case	Prepare business Design production Test statis		3.6 Test statistica business proce					i.6 e weights							
			3.7 Finalise produc system	tion			Calc	.7 ulate egates							pa
								.8 data files							



The production part of GAMSO is the GSBPM

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Standardisation

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- Benchmarking
- « Quality reporting

GSBPM Quality Indicators



- Generic indicators were proposed in order to reflect the nature of the GSBPM
- Consistency with existing frameworks links to:
 - UN National Quality Assurance Framework
 - ESS Code of Practice
- No formulas but explanations are provided
- Quantitative indicators used where possible
- Qualitative indicators in the form of yes/no or high/medium/low

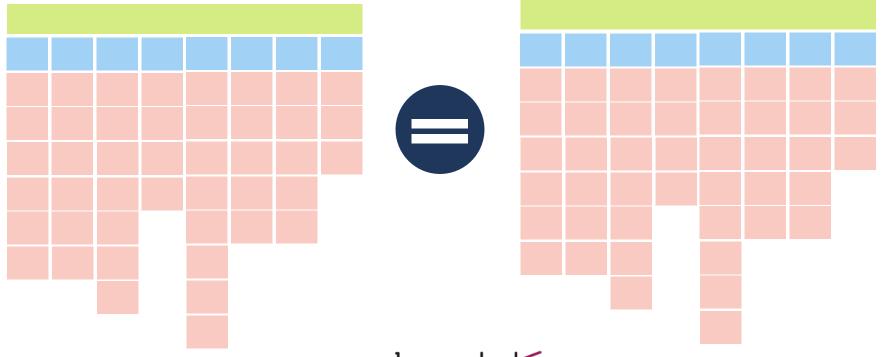
EX													
				Specify Needs									
	1.1 Identify needs					1.3 Establish output objectives	1.4 Identify concepts		1.5 Check data availability			1.6 Prepare and submit business case	
	Qເ Dim	ualit ensi	-	Indicator									
	Relevance			 To what extent have stakeholders been identified and included in discussions about statistical needs? 									
				 To what extent has relevant supporting documentation been gathered? 									



No structural change

GSBPM v5.0

GSBPM v5.1







Some sub-processes were re-named:

GSBPM v5.0

1.6 Prepare business case GSBPM v5.1 1.6

Prepare and submit business case

3.1 Build collection instruments 3.1 Reuse or build collection instruments

...also 3.2 and 3.3



Descriptions updated and expanded to make GSBPM more applicable for different data sources, e.g.

•2.3 Design collection - Design mechanism for quality monitoring for third party provider

•4.1. Create frame and select sample - Use administrative data for sample design

•2.5 Design processing and analysis - Consider data integration from multiple sources



Overarching processes removed, except those directly related to statistical production

- Quality management
- Metadata management
- Data management
- Process data management
- Knowledge management
- Provider management



THANK YOU