

# National adaptation of GSBPM and its application in the development of a process metadata model

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**David Salgado** - Statistics Spain (INE)  
[david.salgado.fernandez@ine.es](mailto:david.salgado.fernandez@ine.es)

Ana I. Sánchez-Luengo - Statistics Spain (INE)  
[anaisabel.sanchez.luengo@ine.es](mailto:anaisabel.sanchez.luengo@ine.es)



# Goals



**INE's commitment**



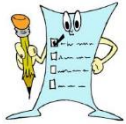
**Institutional sustainability**



**Standardised production model**



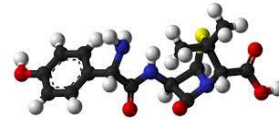
# Pilot Experience



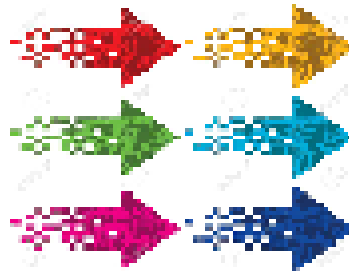
7 statistical operations

Collect	Process	Analyse	Distribute
4.1 Create forms & send online	5.1 Identify data	6.1 Prepare data tables	7.1 Update & report systems
4.2 Set up collection	5.2 Check & code	6.2 Merge tables	7.2 Produce dissemination products
4.3 Set up collection	5.3 Review & adjust	6.3 Produce & export tables	7.3 Manage release of dissemination products
4.4 Create collection	5.4 Set & update	6.4 Analyse & produce reports	7.4 Produce dissemination products
4.5 Create collection	5.5 Prepare reports	6.5 Manage user support	
4.6 Calculate weights			
4.7 Calculate regressions			
4.8 Produce data files			

GSBPM phases 4-7 described at level 2



No detailed information



Documentation to an extremely diverse degree of detail



Impossible to have comparable GSBPM level-2 processes



## Pilot Experience

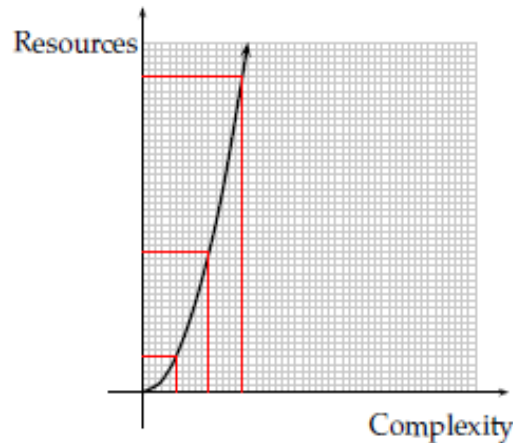
We put in place **level 3 (tasks)** for the GSBPM adapted to our needs.



# General principles

## Premise:

An official statistical production system is a **complex system**



## Approach:

Computer system design principles → **Functional modularity**



# The standard

## ✓ Tasks

Quality Management / Metodología Management							
Specify Needs	Design	Build	Collect	Process	Analyze	Disseminate	Evaluate
1.1 Identify needs	2.1 Requirements	3.1 Build software architecture	4.1 Create data & data sources	5.1 Analyze data	6.1 Prepare data outputs	7.1 Create output reports	8.1 Define evaluation reports
1.2 Create software needs	2.2 Design software architecture	3.2 Build software architecture	4.2 Create data	5.2 Analyze software	6.2 Prepare dissemination products	7.2 Disseminate evaluation products	8.2 Conduct evaluation
1.3 Identify output objectives	2.3 Design software architecture	3.3 Build software architecture	4.3 Create data	5.3 Analyze software	6.3 Prepare dissemination products	7.3 Disseminate evaluation products	8.3 Define evaluation products
<b>Level 3</b>							
1.4 Identify needs	2.4 Design software architecture	3.4 Build software architecture	4.4 Create data	5.4 Analyze software	6.4 Prepare dissemination products	7.4 Disseminate evaluation products	8.4 Define evaluation products
1.5 Create software needs	2.5 Design software architecture	3.5 Build software architecture	4.5 Create data	5.5 Analyze software	6.5 Prepare dissemination products	7.5 Disseminate evaluation products	8.5 Define evaluation products
1.6 Prepare software needs	2.6 Design software architecture	3.6 Build software architecture	4.6 Create data	5.6 Analyze software	6.6 Prepare dissemination products	7.6 Disseminate evaluation products	8.6 Define evaluation products
		3.7 Prepare dissemination products			6.7 Prepare dissemination products		
					6.8 Prepare dissemination products		

- ❖ 246 tasks
- ❖ Modularised
- ❖ Integration

## ✓ Documentation

- ❖ Input
- ❖ Output
- ❖ Throughput
- ❖ Tools
- ❖ Documentation
- ❖ Responsible unit(s)

## ✓ Workflow

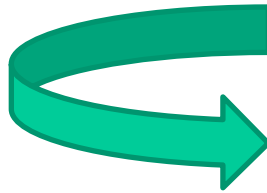


BPMN v2.0

<http://www.ine.es/ss/Satellite?c=Page&p=1254735839296&pagename=MetodologiaYEstandares%2FI NELayout&cid=1254735839296&L=1#>



# Some details



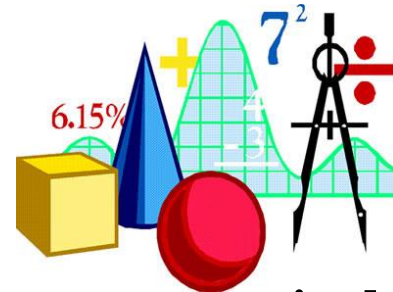
Identify population;  
Design questionnaire

Controlled vocabulary

## Some details



Data collection management  
application =  
(((variables) + questionnaire) +  
collection instrument) + paradata



modular **parameterised activities**  
SubstituteVar(VarName, InFile,  
FromFile)



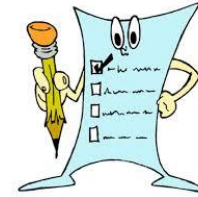
**Cross-sectional** tools documented separately





# Implementation

**Internal working group**



**5 initial statistical operations to test the standard**



**User-oriented documentation + internal briefings**



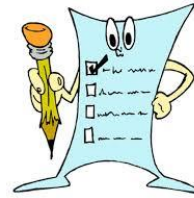
**Internal use**



**Computer application**



# Implementation



30 statistical operations



11 statistical operations



9 statistical operations



**Internal use**



10 statistical operations



# Some conclusions



- ✓ A modern metadata system is a **must for modernising production**



- ✓ **Cultural resistance to change:** limited conception of metadata



- ✓ **Lack of human resources**



- ✓ **Dipolar situation between statistics and computer science**



**Thanks for your attention!!!**

