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EUROPEAN COMMISSION
STATISTICAL OFFICE OF THE EUROPEAN
UNION (EUROSTAT)

ORGANISATION FOR ECONOMIC COOPERATION
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Meeting on the Management of Statistical Information Systems (MSIS 2011)
(Luxembourg, 23-25 May 2011)

Topic (iv): International cooperation/collaboration

ESSnet CORE (COmmon Reference Environment) progress report

Supporting Paper

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I.   Introduction

1.   The purpose of this document is to illustrate the state of advancement of the COmmon Reference
Environment (CORE) Essnet at month 3 (April 2011). The paper is mainly based on Preliminary Report
(deliverable 1.1) sent last month to Eurostat.

2.   First, a brief description of the main activities and milestones of this period will be presented. Then, a
detailed state of advancement for each CORE work package (WP) will be described, followed by some
schema about "Dependencies among Workpackages"; in Appendix 1 and 2 you can find the minutes of
CORE meetings: kick-off in Luxembourg (January) and Lisbon Meeting (March)

II.   Progress Report

A.   Activities and Milestones of the Period

3.   The CORE Essnet kick-off meeting was held in Luxembourg on January 17th and 18th 2011.
Representatives of all CORE partners were present at the meeting. After a general introduction to the
project, each WP leader presented the due outcomes of the WP of his/her responsibility, as well as a
proposal for the work organization. The detailed minutes of the meeting are attached as Appendix 1.

4.   A *working wiki* for CORE was set up at the same address of the wiki previously set up for the CORA
project and hosted by Istat:

https://www.wiki.istat.it/doku.php/start?idx=essnet_cra
The wiki has general and WP dedicated sections. WP sections have been organized by each WP leader in order to support the collaborative work among WP participants.

5.   Besides the working wiki a space for CORE is also hosted at Eurostat site and will be possibly used as dissemination space (see minutes Appendix 2):
http://www.essnet-portal.eu/project-information/core

6.   A second CORE meeting was held in Lisbon on March 28th and March 29th 2011.
The state of advancement for each WP was presented.
The detailed minutes of the meeting are attached as Appendix 2, while a description of the status of advancement for each work package is presented in Section B.

B.   State of Advancement of Work Packages

7.   WP1: Project Management - During the period to which this document is referred, the work by different partners was monitored by both email exchanges and wiki consultation. The degree of participation and reaction of the partners has been very good. The objectives planned for the period were all achieved.
Both meetings held in the period, the kick-off and the Lisbon meeting were successful.
The deliverables due in the reference period, are (i) this preliminary report to which each partner has contributed and (ii) deliverable 2.1.
Among the activities that are ongoing for WP1, there are:
    1) Intermediate meeting organization to be held in month 6 (M6).
    2) Intermediate report to be delivered in month 6 (M6).

8.   WP2: Design of the Information Model according to GSBPM and alignment with NSIs
Activities concerning task 2.1a, task 2.1b and task 2.2a have started, particularly task 2.1a has ended. The work is progressing well with the active participation of all WP participating countries.
A first draft of the deliverable 2.1 has been delivered and the final version revised by all participants is going to be released.
Finally, a first draft of the information model will be ready by the end of month M4.

9.   WP3: Generic interface design for interconnecting GSBPM sub-processes
WP3 activities were planned to start at month 4, but they were actually activated at month 1. In particular, it was decided to start all the possible work as soon as possible in order to have the same declared effort distributed on a longer period.
The following activities were performed:
    1) Web conference on March 21st to discuss implementation issues (Istat, CBS, Univ. Camerino, and INSEE participating);
    2) Proposal of an implementation plan at Lisbon meeting;
    3) Setting up collaboration with SDMX Essnet .
Among the activities that are ongoing for WP3, there are:
    1) GUI specifics and Service Runtime definitions;
    2) Technical Environment Specifics vs1 (M6) ;
    3) Process scenario analysis.

10.   WP4: Research Workflow Solutions for Process Management

The objective of the WP4 is to search efficient tools to support sub-processes modelling, execution and monitoring. The first task accomplished is the study of different work-flow types of communication. The conclusion is that orchestration is the best way to link different statistical services, including event-driven architecture support if possible. The second task accomplished is the creation of a work-flow tools requirement list. According to this list we will now create an evaluation grid to evaluate different tools for .Net and Java technologies. We will then select a short list of tools to evaluate. These tools will be evaluated by implementing a simple scenario of a statistical process that remains to describe.

11.   WP5: Implementation library for generic interface and production chain in .NET
The activities of this WP are planned to start on month 6 (M6).

12.   WP6: Implementation library for generic interface and production chain in JAVA
The activities of this WP are planned to start on month 6 (M6).

13.   WP7: Project Dissemination and Integration Cost Reporting
Both activities of WP7 have started.
Concerning the task 7.1, it has been established and updated a CORE space in the Istat wiki . Moreover, a CORE logo as well as templates for PowerPoint and Word documents have been produced. The presentation of CORE results at international meetings has also been followed and, documentation presented at such meetings have been uploaded on the CORE wiki..
Concerning task 7.2, a section in the wiki has been created in order to gather requirements for the design of a template for cost reporting activity.

C. Dependencies among Workpackages

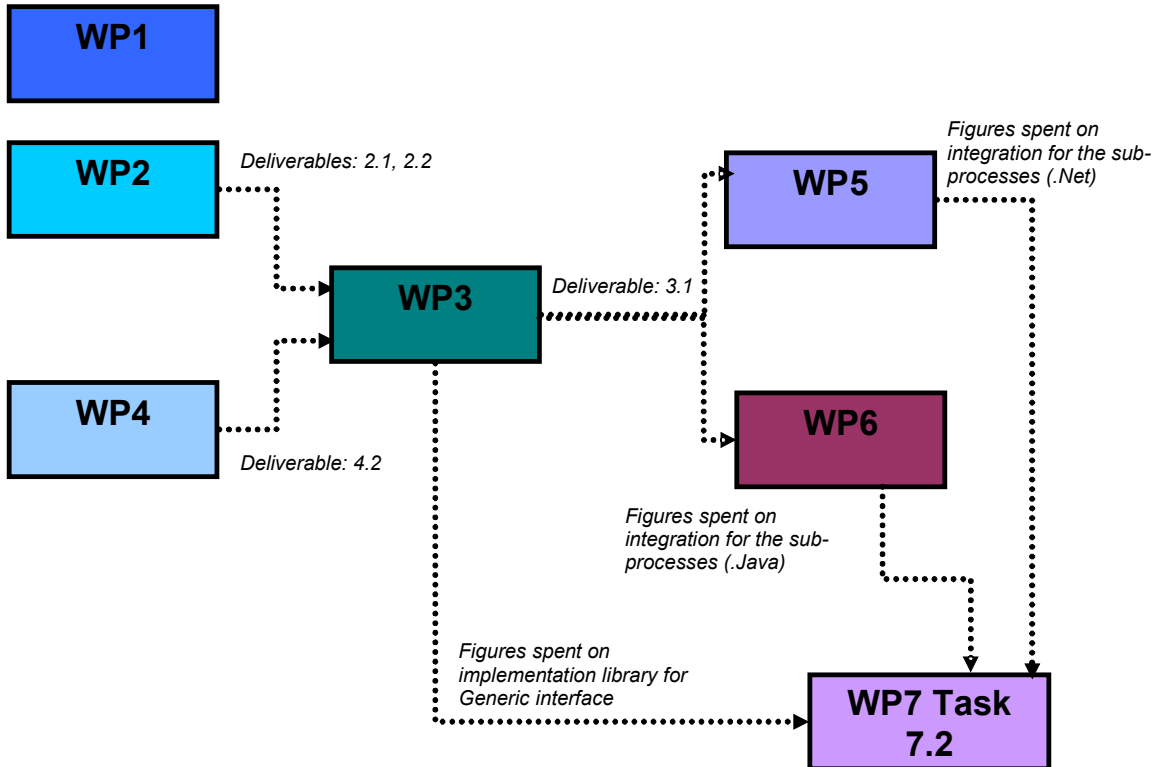14. In the following we show a Pert diagram and a Gantt diagram illustrating dependencies among WP activities.
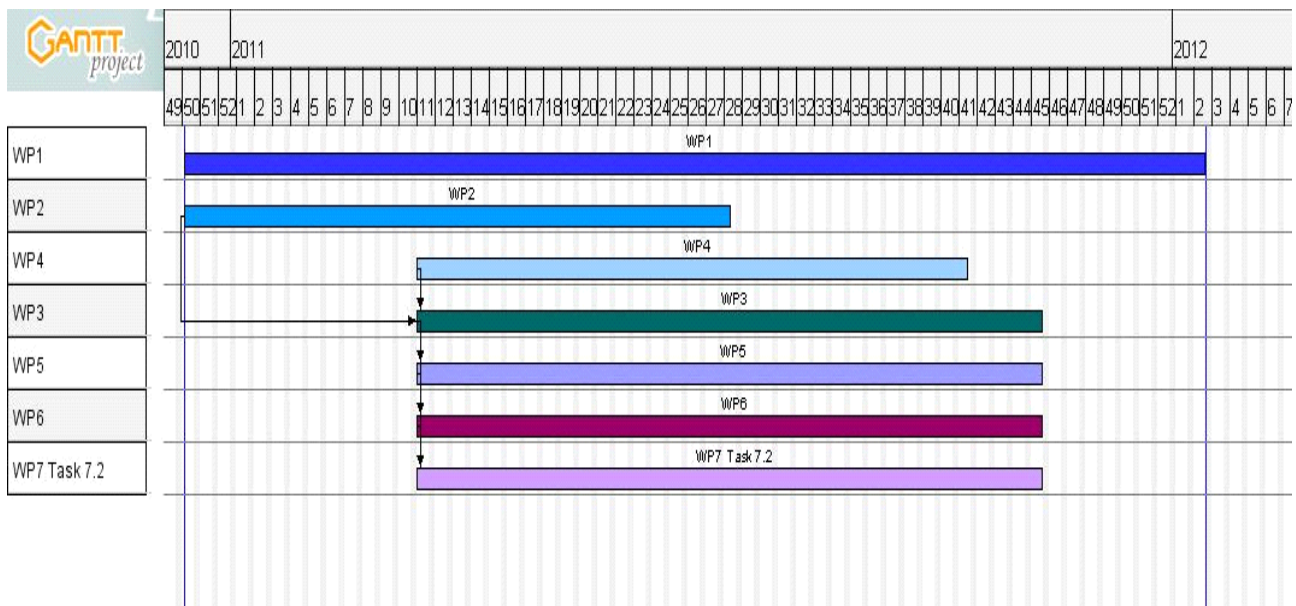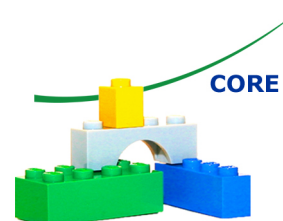

Figure 1. PERT Diagram

Figure 2. Gantt Diagram

Appendix 1

Core Kick-Off
Luxembourg January 17-18 2011

CORE

<u>Participants:</u>

Mauro Bruno, Istat
Monica Scannapieco, Istat
Carlo Vaccari, Istat
Giulia Vaste, Istat
Diego Zardetto, Istat
Daneau Mathias, Insee
Haralambos Papageorgiou, Univ. Athens
Maria Vardaki, Univ. Athens
Jakob Engdahl, SCB
Hans Irebäck, SCB
Peder Næs, SSB
Jenny Linnerud,SSB
Jean Pierre Kent, CBS
Tjalling Gelsema, CBS
Marton Vucsan, CBS
Joachim Machado, INE

Antonio Consoli, Eurostat
Georges Pongas, Eurostat
Christine Wirtz, Eurostat
Marco Pellegrino, Eurostat
Bengt-Ake Lindblad, Eurostat

<u>17 January 2011</u>

Georges Pongas opened the meeting by summarizing the structure of the project and the main objectives. Carlo Vaccari outlined the need for CORE to implement software starting from CORA specification. He then summarized the project organization in terms of work packages. Further arguments discussed: (i) university role, validation and state of the art input to the project; (ii) observers, Linnerud suggested Dan Gilman could be included as an observer, she will check his interest. Wirtz suggested Latvia too as a possible observer; (iii) coordination with SDMX ESSnet, Vaccari proposed shared meetings. Marco Pellegrino suggested the final SDMX meeting as an interesting event (30-31 of March in Lisbon). The role of SDMX was discussed: Vucsan highlighted the importance of producing an information model without mandatory constraints given by other

models, though recognizing the need of clarifying relationships; (iv) coordination with other groups OSOR, METIS, GSBPM, MSIS, HLG, SAB. Wronski also suggested SISAI.
Future meetings: proposal of meetings in conjunction with other events, namely M6 in Paris with SISAI, M9 in Luxembourg with ITDG.

Marton Vucsan introduced WP2 products. Participation is important, need to have representatives for each country. Then he also introduces WP5 products.
Jean Pierre Kent started discussing WP2 in detail. Focus on services not on web services. Pongas posed the problem of algorithms and data types to be encapsulated by services. Not all software are integrable. Then, Jean Pierre Kent pointed to the wiki section "Issues from the review process". By 27th January comments are expected on this.
Focus on which requirements must be collected:
- criticisms of CORA model: process dimension and how to position a service inside the grid;
- requirements of WP3.
Planning for requirements phase and model phase to be sent to partners.
Starting from a real scenario to limit the scope.

Monica Scannapieco presented WP3. There was a remark on the replacement of SDMX with SDMX/ML. Vucsan suggested to have as a first step services definition for "single execution" processes, later more generic definition (service definition for "generic" GSBPM process). Also, he highlighted we do not want a fully-automated process, but a correct communication between different statistical processes (including IT and human actions).

18 January 2011

Mathias Daneaus started describing WP4 objectives. Requirements collection is the first task. It's important to identify languages for specifying processes that possibly are linkable to visual modeling languages. Enghdal highlighted that he had unsuccessful experiences with automated translations. Kent will send a document to Daneaus on BPM tools. Discussion on the usage of one general process or one process per survey. The second alternative seems too complex to treat. Daneau will open a section on the wiki to further discuss on the requirements in order to have a draft ready for next meeting.

Jenny Linnerud presented WP7 objectives. Task 7.1 will establish web site and wiki. Task 7.2 is about integration cost reporting. Possible collaboration with OCMIMF that could review CORE work. Task 7.2 could also include a qualitative description about any difficulties with the integration. Question on the CORE web site about extending CORA or making a new one. Decision on a new site hosted by OSOR. Discussion on the usage of Eurostat wiki or Istat wiki. Linnerud will contact Pongas for the usage of Eurostat wiki. Discussion on internal communication: google chat, wiki, …Need to choose a platform for web conferencing.

To Do:

> WP1:
(a)   slides from everybody
(b)   meeting report (minutes)
(c)   next meeting (Lisbon meeting):
    4. Carlo mail to August, Adam, Marco with a proposal for Wednesday 30th March morning session shared with SDMX people
    5. Joaquim verifies if it's ok meeting from March 28th afternoon to March 30th morning

- ➤ WP2:
- (f)   Jean Pierre send within a week a template to all partner
- (g)   all partners have to respond within a week
- (h)   before January 27th all partners must have a look to CORA wiki for "2.2 Issues from the review process"
- (i)   Tjalling, Diego, Jakob, Monica, build a possible scenario for CORE requirements
- (j)   Jean Pierre send the document for review and feed-backs (one month for the requirements exercise)
- (k)   After review Tjalling (and others) defines the Information Model (5 cycles) within two months (WP3 can start after second cycle)

- ➤ WP3:
- (l)   preparatory activities:
  - 13. February: web-conference to show CORA prototype and brainstorming on architecture design
  - 14. March: web-conference to (starting from the WP2 Scenario) discuss on architecture design
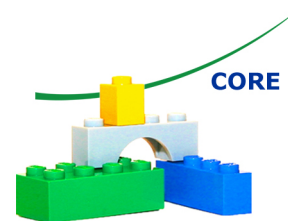
- ➤ WP4:
- (o)   preparatory activities:
  - 16. workflow solutions: unique wf?
  - 17. Session on the wiki for wf requirements discussion (Mathias prepare a kind of menu of requirements/functionalities/solutions present in current tools)
  - 18. Jean Pierre send Mathias (add to the wiki) the document on the state-of-the-art

- ➤ WP7:
  - Carlo present CORE to MSIS, Jakob-Monica to SISAI
  - Carlo verifies Metteg conference
  - George verifies ESSnet workshop date and location
  - Jenny suggests CORE logo (Lego USB?)
  - Eurostat helps us in Eurostat wiki setting
  - Global list of partners and mails (and phones) on the wiki

Appendix 2

Core Lisbon Meeting
Lisbon March 28-29 2011

Participants:

Georges Pongas, Eurostat
Bengt-Ake Lindblad, Eurostat
Christine Wirtz, Eurostat
Adam Wronski, Eurostat
Monica Scannapieco, Istat
Carlo Vaccari, Istat
Giulia Vaste, Istat
Antonino Virgillito, Istat
Diego Zardetto, Istat
Mathias Daneau, Insee
Franck Cotton, Insee
Jakob Engdahl, SCB
Jenny Linnerud,SSB
Jean Pierre Kent, CBS
Tjalling Gelsema, CBS
Marton Vucsan, CBS
Joachim Machado, INE
OBSERVER: Arofan Gregory , ABS

The following **Agenda** was planned for the meeting
March 28th 14:30-18:30

WP2 (CBS):
　　　Scenario for CORE requirements: discussion
　　　Information model requirement analysis: presentation and discussion

March 29th 9:30-13:00
WP3: (Istat)
　　　SDMX usage inside CORE
　　　Workplan for Development
WP4: (Insee)
　　　Workflow State-of-the-art
　　　Workflow usage in NSIs

March 29th 14:00-18:00
WP7: (SSB)
　　　CORA-CORE presentation in NTTS and Metteg
　　　Dissemination activities: wikis, logo, website
　　　General Discussion
　　　Detailed ToDo plan

First day: March 28th

Jean Pierre Kent started the afternoon section concerning CORE requirements. Tjalling Gelsema described the proposed process scenario. Control flow constructs emerged as a problem to be discussed. Several other issues were discussed, namely:

- what kind of statistical information must be exchanged

- scope of the information model (GSBPM or design)

- Etc.

There was a discussion about the frontier between GSIM (in phase of proposal, leading Australian Bureau of Statistics) and CORE information model.

Design paradigms were also discussed. Two principles were presented 1) design & generate vs. 2) design & build.

It was decided to have a "wrap-up" presentation summarizing the outcomes of the discussion for the following day.

Second day: March 29th

Marton Vucsan started with a summary of the decisions taken about the information model (see file "Agreement for the requirements on the Communication Interface Model" on the project wiki).

Carlo Vaccari presented some issues related to relationships between CORA model and. SDMX. He first outlined some recent initiatives related to the synchronization of the two networks (e.g. a coordinator meeting planned for the following day). Then, he showed that a possible interaction could regard: i) mapping of the information model and (ii) mapping of the metadata presentation/management. It was decided to have a concrete application showing SDMX usage within a CORA process.

Monica Scannapieco presented a work-plan for the implementation (WP3). She also showed a possible concrete scenario planned to be implemented in parallel to the software components realization.

Mathias Daneau presented an overview of workflow paradigms, i.e. (i) Orchestration, (ii) Choreography, and (iii) Event Driven Architecture (EDA).

In the afternoon, Mathias Daneau guided a discussion on workflow requirements.

Jenny Linnerud showed the advancement of WP7. In particular: a logo and a template for CORE were released. There was a discussion about the hosting of the CORE web site: OSOR vs. Eurostat. It was decided to have a unique access point for CORE material at Eurostat. With respect to integration cost reporting it was decided to have a template that implementation work packages could use for filling costs figures while realizing the implementation activity.

The rest of the afternoon was dedicated to a detailed to-do list, reported in the following.

Detailed To Do List

- WP1:
  - Paris meeting: June 20-21 (to be confirmed)
  - Preliminary Report (M3) with links between WPs

- WP2
  - Final requirements (with Scenario):
    comments before April 10
    final version April 15
  - CORE information model (del 2.2): near final (.99) version May 15 (for comments); Paris meeting final version
  - Mapping methodology (del. 2.3):

Template ASAP from CBS to partners
Case studies from partners May 30
Final version before Paris
Paris meeting: discussion on final version

- ➢ WP3
  - Technical Environment Specs vs1 before Paris (discuss) in connection with WP4 (WebConference?)
  - GUI specs and Service Runtime definitions
  - Control Flows constructs from/with WP2
- ➢ WP4
  - Final requirements Workflow April 15
  - Evaluation Grid April 30 for partners comments
  - Evaluation Grid final May 15 (Paris discuss)
  - Scenario for workflow (Insee+Istat) usage May 30
  - List of Workflow tools May 30 (to be contd)
- ➢ WP5/WP6
  - GUI analysis / interaction with WF tools (presentation in Paris)
- ➢ WP7
  - MSIS presentation (Istat)
  - SISAI presentation on SDMX issues inside CORE (SCB-Istat)
  - Start discussion on Cost Reporting on the wiki
  - Link from CORA website in OSOR to CORE one on Eurostat website
  - Eventually CORA contents to Eurostat website (Carlo)