



PP VERSUS 2 Phase7

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Task list - Overview

PP VERSION 03.09.2014

- Task 0:** Help Desk, Refinements VERSUS code
- Task 1:** Refinement of functionalities
- Task 2:** Imp. of functionality to ingest/manage GRIB2
- Task 3:** Imp. of station based forecast verification
- Task 4:** Introduction of additional statistical techniques
- Task 5:** Final Implementation of FF in VERSUS

Modular tasks not dependent on each other.

Not performing or deleting any task has no impact with the others.



Task 0: Help Desk, Ref. VERSUS code

TASK 0.a Help Desk: introduction of a first level support: (RHM) and a second level support: (PL TEAM).

Task 0.b Documentation updates User Manual and Technical Manual: (HNMS- PL TEAM)

Task 0.c New VERSUS releases: (PL TEAM)

Task 0.d Test of each New VERSUS (0.02 FTE each performer) **TBD**

Task 0.e Test for the VERSUS 3.2 extra: (IMGW)

Task 0.f *Test for the concurrent use of VERSUS by more than one user.*

The system allows to be used by more than one user simultaneously. The limitation, derived from R software, has been solved in the Phase 6. A deeper test on this issue is needed (0.05 FTE) **TBD**

Task 0.g Feasibility Study to increase the loading performance: The PL TEAM will investigate the mode to increase the performances in the loading phase in VERSUS with the MCH collaboration: (MCH-PL TEAM)





Task 1: Refinement of Functionalities

- **Confidence Interval integration:** (RHM - PL TEAM)
- **EPS refinements:** the needs showed during the CUS in March have been processed or a common agreement was found. This means that just one development is still present in that list. During the WG5/WG7 session must be specified that this is a necessary development for all partners TBD
- **Automatization for stability:** (PL TEAM)
 - Check the correct Installation- An automatic control to check that the system is installed in a right way
 - Automatic delete device - script to delete any data older than a definable date



Task 2: Ingest/ manage GRIB2

VERSUS needs to be adapted in order to accept GRIB2 as input for fcs. The system is already designed for GRIB2 as it uses Grib_API as library for decoding, but Tables containing FCS data have to be updated accordingly.

Main activities: (PL TEAM)

- Creation of new tables for GRIB2
- Connection with existing Tables GRIB1
- Gui Adjustment
- Loader Module implementation
- Test phase (0.05 FTE)

TBD



Task 3 : Implementation of Station Based Forecasts Verification Activities

In Phase 6 (Task 6) a complete feasibility study was performed together with the setup of a standard XML file format (that can be provided by Fieldextra) for post-processed station based forecasts. Now, in Phase 7, such a functionality will be implemented.

Main activities:

- Implementation of Front-End and related verification activities for ingestion of XML files of post-processed forecasts into VERSUS: (IMS - PL TEAM)
- Test phase (0.02 FTE) TBD



Task 4: Introduction of Additional Statistical Techniques in VERSUS

COSMO funds get used for one year long contract with University of Turin in order this Task (VAST Project) to be implemented. The next year PL TEAM will coordinate this project in all its steps.

Task 4 extra LIBSIM SOFTWARE TEST: During the VERSUS 2 Phase 6, the extra software has been released for performing upscaling-based verification in Versus. In this actual Phase 7 a test on this software is needed: (0.05 FTE for each participant)

TBD



Task 5: Final Implementation of Feedback Files in VERSUS (delay of previous phase)

VERSUS is not able to read NETCDF files. The record patch was expected to be provided by the partners but no one was able to supply it. PL TEAM started this implementation by themselves. This decision has caused a further delay in the conclusion of this task. PL TEAM need more time to acquire all necessary knowledge about this issue.

It has been necessary to plan a new task : "Task 5.a: Development of new VERSUS library able to read Feedback Files in NETCDF" (milestone).

END DATE : End of November

A TEST Phase coordination with DWD is required

To be coordinated



Task 5: Task 2 (Phase 6) - Implementation of FF

Task 2a: Re-Analysis and DB Creation: **DONE**

NEW EXTRA TASK: Development of a software to read Feedback Files in NETCDF: **In Progress**

In the Document "ff_versus_library.docx " all technical details are described.

Task 2b: Implementation of Loader Module for FF in VERSUS: **DELAY**

Task 2c: Creation of new Web GUI for FF and improvement of graphics for upper air: **DELAY**

Task 2d: Dedicated testing phase for FF tool implementation and FF functionalities in VERSUS: **DELAY**

This task accomplishment is scheduled at the end of November 2014.



VERSUS 2

Crucial points

- This is the last year in VERSUS 2 planned development life cycle. Further maintenance activity to be discussed within the WG .
- A really active mutual cooperation from every partner is encouraged.
- VUS - In this COSMO-year CNMCA will be affected by remarkable difficulties in VUS organization. PL TEAM will try to involve other Italian Organizations in logistical support supplying.





Phase 7 - Open ISSUES

In conclusion, some TEST activities still have to be assigned, as it follows:

Task 0.d Test of each New VERSUS

Task 0.f Test for the concurrent use of VERSUS by more than one user (0.05 FTE) = anybody

Task 1.b EPS Refinements TBD = ?

Task 2.e GRIB2 functionalities Test phase (0.05 FTE) = to be defined

Task 3.b Station based forecast verifications Test phase (0.02 FTE) = MCH

Task 4 extra LIBSIM Software Test (0.05 FTE for more participants) = ARPA Piemonte

Task 5.d FF tool implementation/functionalities in VERSUS Test phase (DWD-: 0.05 FTE) = ?



Gantt VERSUS Phase7 2014/15



| | 9/2014 | 10/2014 | 11/2014 | 12/2014 | 1/2015 | 2/2015 |
|---------------|--------------|---------|---------|---------|---------|--------|
| Help Desk | RHM/ PL TEAM | | | | | |
| Manual Update | | HNMS | | | | |
| Task 1.a | | PL TEAM | | | | |
| Task 1.c | | TBD | | | | |
| Task 1.b | | PL TEAM | | | | |
| Task 5.a | PL TEAM | | | | | |
| Task 5.b | | PL TEAM | | | | |
| Task 5.c | | | PL TEAM | | | |
| Task 5.d | | | | TBD | | |
| TASK 3 | | | | | PL TEAM | |
| | | | | IMS | | |





Gantt VERSUS Phase7 2014/15

| | 01-02 2015 | 03 -04 2015 | 05 – 06 2015 | 07 08- 2015 |
|--------------|---------------|----------------|--------------|----------------|
| TASK 4 | | | | |
| Task 4 extra | | | | |
| Task 2.a | | | | |
| Task 2.b | | | | |
| Task 2.c | | | | |
| Task 2.d | | | | |





Thank you all
for your
attention and your cooperation!!!