# Work Package 4: Programming and Testing Cloud Computing in Logistics





# **WP4** Objective

Launch of a beta-version of data clouds for the four participation logistic hubs, test phase and identification of needs for improvement of the cloud computing tools





>4.1 Creation of virtual clouds

Ongoing activity – to be finalized ASAP

➤ 4.2 Location-specific programming

Ongoing activity – to be finalized ASAP

→ 4.3 Trial of the Beta-Version

Delayed activity – to be planned and started ASAP

→ 4.4 Test Phase Evaluation

Delayed activity – to be planned and started ASAP





#### The following activities:

- 4.1 Creation of virtual clouds
- 4.2 Location-specific programming

are ongoing.

All the 4 hubs (and the other partners) are asked to bring and register users in the LOGICAL cloud.





#### The activity:

4.3 Trial of the Beta-Version

has not started its core activities.

The demonstrators description/definition needs to be completed both in terms of business scenarios and of technical support (from the LOGICAL cloud side).

Without real business running the solution selected by a demonstrator cannot be implemented and tested.

Without the testing phase, the benefits (and weaknesses) deriving from the LOGICAL cloud cannot be evaluated.





#### The activity:

4.4 Test Phase Evaluation

has not started its core activities.

Some initial ideas have been exchanged in relation to the evaluation, mainly in terms of methodology and KPIs to be measured during the test phase.

The KPIs will be defined at platform level and at demos level; each demonstrator has to identify some/few KPIs to be measured.

All the partners must contribute in the elaboration of the evaluation report, based on the available resources.





The Evaluation Report is strictly related to the test phase, thus it is strongly dependent on the demonstrators that will test the LOGICAL cloud.

The main topics that the report should include are:

- potentials of cloud computing,
- companies targeted by Logical,
- strengths and weaknesses of the LOGICAL cloud (both at a technical and business level measured by the demonstrators)
- functioning of the data cloud,
- potentials for the optimization of intermodal interoperability of players in logistics





The KPIs already identified for the evaluation of the Logical cloud are platform oriented:

- 1. registered users
- 2. log in per month
- 3. number of "calls" per service
- 4. usage of storage capacity

The 4 demonstrator, based on each business scenario, have to define a small set/panel of targeted KPIs, to evaluate the benefits deriving of the introduction of the Logical cloud. (AS IS vs TO BE)





## **WP4 Management**

- The actions undertaken in the last 2 months in relation to WP4 had the specific objectives to structure and coordinate the actions of the partners involved and to recover the delays faced.
- We have tried to organize a targeted technical meeting, with the scope to create a common understanding among the partners involved and to plan the remaining activities (without success).
- We have set a recovery plan, thus, based on bilateral teleconferences with the partners responsible of the demonstrators, discussing and coordinating the demos one by one.





## **WP4 Management**

Based on the scope of the demonstrators, that is to:

- identify a real business scenario with specific needs;
- implement/introduce the Logical cloud and its services that can serve the identified needs;
- Test the Logical cloud in the identified scenario;
- Measure and evaluate the benefits/improvements brought by the Logical cloud.
- a first round of teleconferences has been done with all the partners involved (apart form PP3), focused on the business case reports, in terms of "what is going to be" each demo idea in the test phase.
- The results of this first phase is presented in the following slides:





#### **WP4 Demonstrators**

**4 Demonstrators**, in total, should be proposed in order to test and validate the Logical cloud platform and its services (test phase).

The partners responsible for the four demonstrators are:

- PP 2 / PP3 for Leipzig
- PP 8 for Zahony
- PP12 for Bologna
- PP 16 for Koper





#### **WP4 Demonstrators**

Each demonstrator should have produced a report describing:

- the current business scenario,
- the main needs/issues to be addressed by Logical,
- the future situation (with the introduction of Logical cloud),
- the technical specs and requirements,
- the business/commercial benefits of the proposed scenario.





#### **WP4 Demonstrators**

Ideally, based on the Technical Annex requirements, the demonstrators must have the following characteristics:

- ✓ Transport/Logistics value.
- ✓ Transnational dimension.
- ✓ Involvement of 2 or more hubs partners of the project (and related stakeholders).
- ✓ Multimodality, with particular focus to the transport modes characterizing each hub.

All the solutions proposed in the demonstrators must show the benefits deriving from the Logical cloud and from the integration with the platform.





## **Leipzig Demonstrator**

- 2 complete reports have been produced related to two different business cases:
  - ERP solution for SMEs
  - Creation of a collaborative business environment

Even though the demo characteristics are not addressed (only one), both cases can be valid.

The business ideas behind are ok, but the reports are described and built on "virtual/ideal" business scenarios: it seems there is no real business operating or business needs to be addressed.





## **Leipzig Demonstrator**

#### Main issues:

The business ideas behind can be ok, but the reports are described and built on "virtual/ideal" business scenarios: it seems there is no real business operating or business needs to be addressed, but it's just an hypothesis.

In order to have tests and evaluation, the responsible partners should find real business scenarios and actors to be involved.

The role of the airport (and the airfreight) is missing.





#### **Koper Demonstrator**

1 report have been produced based on the eContainer solution.

The focus of the bc is on the implementation of this solution that gives the possibility to monitor the cargo inside the port terminal and, thanks to the integration (via ws) with the other stakeholders along the chain, to extend the cargo monitoring to the whole chain.

Even though the business case idea is valid and, potentially, addresses some demo characteristics, as it is described it doesn't show clearly the benefits of the Logical cloud.





#### **Koper Demonstrator**

#### Main issues:

- A more complete business scenario is needed to test and show the functionalities of the eContainer solution.
- Clear description of the AS IS and TO BE situation, highlighting the benefits deriving from the integration with the Logical cloud.
- In order to have tests and evaluation, the responsible partners should find real business and actors to be involved.

The new description of the case has not been provided yet.





## **Zahony Demonstrator**

1 report have been produced.

After a discussion with the responsible partner, he promised a new business case, replacing the current one.

The new business case should involve a Hungarian rail/road transport company that has its own IT system for assets and transport management.

The system will be integrated with the Logical cloud, expanding its potentiality.





## **Zahony Demonstrator**

#### Main issues:

The new business case has not be described yet.

It is important to finalize it and assure the involvement of the rail/road transport company.





#### **Bologna Demonstrator**

1 report have been produced.

The case is based on a transnational multimodal transport scenario, involving Bologna and Leipzig.

It includes almost all the main demo characteristics and bring significant value to the project.

The Cospam solution and its integration with the Logical cloud will bring significant benefits to the transport scenario identified.





#### **Bologna Demonstrator**

#### Main issues:

The technical details and specs related to the integration of the Cospam with the Logical cloud must be clearly defined; we have opened a dialogue with the PP16 in order to agree on and finalized the process.





#### WP4 – Issues for discussion

- The more the cloud will become "operational" in terms of services, the more will be easy to involve and register users
- We need more integration among all the partners and structure activities and communications.
- Even though we have discussed together with the partners and sent several requests/reminders, we have received no reply.
- We must conclude the Demos description and further proceed to the "implementation/design" with the technical experts (PP16 will be involved).





#### WP4 – Issues for discussion

- All the demonstrators should be ready for the running/test by beginning 2014, thus all the descriptions and technical specs/details related, must be defined/finalized by mid December (before the Christmas break).
- Creation of a Task Force for the pilot implementation and collaboration.
- Creation of a shared time plan for the finalization of the demo activities.
- Contribution from all the partners to the evaluation methodology (specific requests will be sent).





# **Budget Allocation**

	WP 0	WP 1	WP 2	WP 3	WP 4	WP 5	WP 6
Aufbauwerk Region Leipzig		88.174,50 €	69.574,50 €	15.775,00 €	13.387,00€	16.613,00€	19.250,00€
Leipzig/Halle Airport		36.400,00 €	34.200,00 €	17.400,00 €	48.000,00€	8.000,00€	23.000,00€
Logistics network Leipzig-F	1	34.762,50 €	59.637,50 €	32.400,00 €	27.875,00 €	6.875,00€	60.750,00 €
University of Economics		28.350,00 €	35.850,00 €	65.500,00 €	28.850,00 €	26.000,00€	30.700,00 €
KIUT Regional Developmen	t	6.824,32 €	0,00€	0,00 €	0,00€	0,00€	0,00€
CL Consulting & Logistics L	t	29.850,00 €	29.610,00€	37.900,00 €	1.600,00€	60.250,00€	38.050,00 €
Bay Zoltan Foundation for	A	5.871,76 €	159,49 €	3.089,39 €	0,00€	0,00€	0,00€
Bay Zoltán Nonprofit Ltd.		39.078,24€	34.445,51 €	63.164,29 €	83.750,00 €	51.000,00€	58.100,00 €
Misdolin Plusz 2006 Kft.		34.990,00 €	47.520,00 €	41.250,00 €	31.000,00€	43.750,00€	67.750,00 €
Interporto Bologna S.p.a.		12.766,80 €	4.009,10 €	21.932,84 €	0,00€	0,00€	0,00€
Province of Bologna		41.750,00 €	39.400,00 €	27.600,00 €	26.500,00€	27.000,00€	24.200,00€
Consorzio IB Innovation		25.420,20€	32.744,47 €	2.888,59 €	55.350,00€	43.300,00€	51.300,00 €
Regional Development Age	r	32.745,00 €	38.115,00 €	26.950,00 €	1.600,00€	41.850,00€	22.400,00€
Luka Koper, port and logist		20.187,00 €	20.040,00 €	22.120,00 €	64.064,00 €	38.168,00 €	47.810,00 €
Regional Developmentcent	r	30.547,50 €	33.790,50 €	26.025,00 €	17.875,00 €	24.750,00€	22.100,00€
University of Leipzig		34.450,00 €	29.900,00€	71.400,00 €	68.000,00 €	.9.000,00€	47.500,00 €
Tota	l	502.167,82 €	508.996,07€	475.395,11 €	467.851,00 €	76.556,00 €	512.910,00 €



