Enabling Grids for E-science in Europe

Information Society Technologies

EGEE

NA4 EXECUTION PLAN

FOR THE 1ST YEAR

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Abstract: This document describes the execution plan for NA4 (applications identification and support) Activity for the first year of the EGEE project.

Document Log

Issue	Date	Comment	Author
0-0	20/11/03	First draft	G. Zaquine
0-3	02/12/03	Modifications after SA1 meeting	G. Zaquine
0-4	05/01/04	Minor changes	G. Zaquine

Document Change Record

Issue	Item	Reason for Change

CONTENT

1. INTRODUCTION

1.1. PURPOSE

This document describes the execution plan for NA4 Activity for the first year.

The main items described are the following:

- NA4 overview
  - Recall the scope of the work (from TA)
  - Table of milestones and EU deliverables
- Organisation, role & responsibility (from TA + refinements)
- NA4 Management monitoring
  - Product Breakdown Structure (PBS)
  - Work Breakdown Structure (WBS)
  - Staffing and resource plan
  - Training
  - Initial risk assessment
  - Initial quality target indicators
  - Major links with other activities
  - Timeline with GANTT chart
- Technical Main Processes
- Tools & Methodology

1.2. APPLICATION AREA

The execution plan refines NA4 activities defined in the technical annex. The work on the execution plan may lead to minor changes to the Technical Annex.

1.3. REFERENCES

[R1] https://edms.cern.ch/document/400278	Technical Annex
[R2] https://edms.cern.ch/document/422807	Execution Plan Guidelines
[R3] https://edms.cern.ch/document/422978	JRA2 execution plan

1.4. DOCUMENT EVOLUTION PROCEDURE

This document will be updated incrementally as the NA4 Activity knowledge increases.

Comments should be sent to the author.

1.5. TERMINOLOGY

Glossary

ISO 9001	International Organization for Standardization: Quality assurance normalization
JRA2	EGEE Quality Assurance activity
NA4	EGEE application identification and support activity
QA	Quality Assurance
QAG	Quality Group
QAM	Quality Management Team
QAR	Quality Assurance Representative
TA	Technical Annex
PBS	Product breakdown structure
xPM	x Person Month
PMx	Project Month x
WBS	Work breakdown structure

Definitions

2. NA4 OVERVIEW

2.1. SCOPE OF THE WORK

Activity NA4 focuses on the identification and support of early-user and established applications for use on the EGEE infrastructure. It has the following objectives:

- To identify through the dissemination partners and a well defined integration process a portfolio of early user applications from a broad range of application sectors from academia, industry and commerce.
- To support development and production use of all of these applications on the EGEE infrastructure and thereby establish a strong user base on which to build a broad EGEE user community.
- To initially focus on two well-defined application areas – Particle Physics and Life sciences.

The expected outcome of the activity will be the establishment of a broad portfolio of applications across a wide range of sectors suited to execution on the EGEE infrastructure meeting the needs of a broad collection of user groups from many sectors across Europe as illustrated in Figure (note the timeline for the introduction of each application domain is purely illustrative).

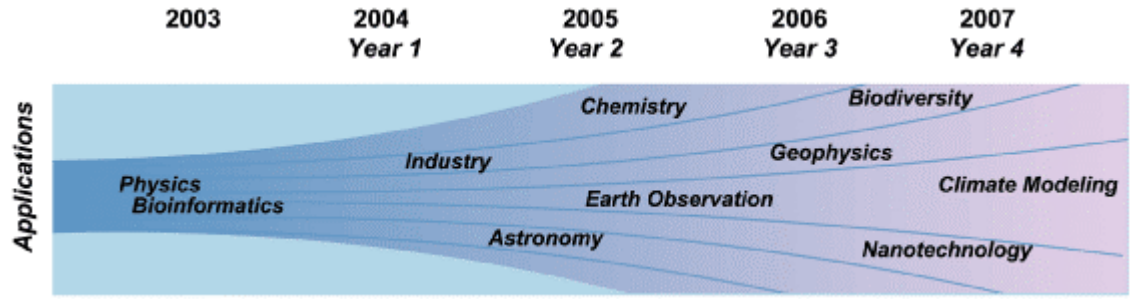


Figure 1 ***Schematic illustration of the broadening portfolio of scientific communities using the European Grid infrastructure over the four year programme of which EGEE represents the first two years. The applications names and dates are purely illustrative.***

2.2. TABLE OF NA4 MILESTONES AND EU DELIVERABLES

Month	Deliverables & Milestones	Item	Lead Partner
M1	MNA4.1	Definition of requirements from applications and first version of associated testsuite	CNRS
M3	DNA4.1	Definition of Common Application Interface and Planning Document	CNRS
M6	DNA4.2	Target Application Sector Strategy document	CNRS
M6	MNA4.2	First applications migrated to the EGEE infrastructure	CNRS
M9	DNA4.3.1	EGEE Application Migration Progress report	CNRS

M12	MNA4.3	First external review of Applications Identification and Support with feedback	CNRS
M15	DNA4.3.2	EGEE Application Migration Progress report	CNRS
M21	DNA4.3.3	EGEE Application Migration Progress report	CNRS
M24	DNA4.4	Final report of Application Identification and Support Activity	CNRS
M24	MNA4.4	Second external review of Applications Identification and Support with feedback	CNRS

3. ORGANISATION

4. ACTIVITY MANAGEMENT MONITORING

4.1. PRODUCT BREAKDOWN STRUCTURE

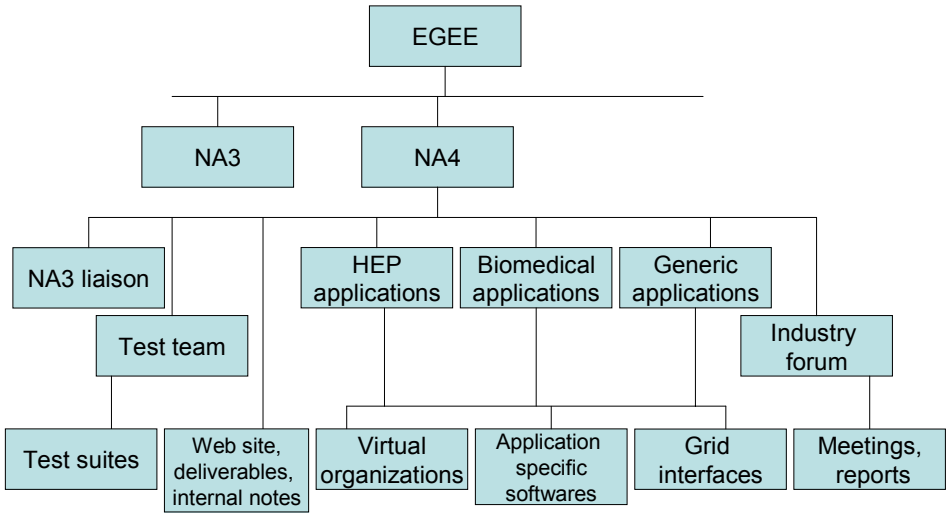
The Product Breakdown Structure (PBS) serves as a logical decomposition of the system in order to identify smaller and smaller subsets until the lowest level which could be new component, external software or material.

The PBS refers only to the products not services. For example for JRA1 the Grid Middleware is a top-level product.

4.2. WORK BREAKDOWN STRUCTURE

NA4 products are applications deployed on EGEE infrastructure. An application is a package made available to a community of users in the grid environment. An application may require application specific software which is interfaced to the grid. Its deployment on the grid infrastructure takes place within a virtual organization gathering a community of grid users.

(JJB : handling virtual organization requires grid tools. It should be part of grid interfaces box)



4.3. TA EFFORT ESTIMATE

This section extracted from the TA, recalls the TA NA4 estimated efforts.

The effort expressed in FTE in the TA, are converted into Person month (PM). One FTE=12PM, *i.e.* 24PM for the duration of the project. The distribution of the resources between the first and the second year of the project is added.

Activity NA4	Total effort (FTE) during 2 years	Total effort (PM) during 2 years	1st year effort (PM)	2nd year effort (PM)	Activity
CERN	16	192	96	96	HEP
CESNET	3.2	38.4	19.2	19.2	Generic
MTA	0.8	9.6	4.8	4.8	Generic
UEDIN	2	24	12	12	NA3 liaison
CNRS	20	240	120	120	Bio + Coord + testing team
CSSI	4	48	24	24	Testing team
CRSA	4	48	24	24	Industry forum
DKRZ	2	24	12	12	Generic
FhG	2	24	12	12	Generic
INFN	8	96	48	48	Generic
FOM	4	48	24	24	Generic
IHEP	3.2	38.4	19.2	19.2	HEP
IMPB RAS	2.6	31.2	15.6	15.6	Bio
ITEP	4	48	24	24	HEP
JINR	3.2	38.4	19.2	19.2	HEP
PNPI	3.2	38.4	19.2	19.2	HEP
RRC KI	4	48	24	24	HEP
SINP-MSU	4	48	24	24	HEP
CSIC	4	48	24	24	Bio
UPV	4	48	24	24	Bio
TOTAL	98.2	1178.4	589.2	589.2	

Total effort = Funded + Unfunded, PM = efforts are expressed in Person month.

(JJB : how to handle the fact that so many people have to start at the same time ? Probably, most partners should start at PM6)

4.4. WORK BREAKDOWN STRUCTURE FOR THE FIRST YEAR

The Work Breakdown Structure (WBS) is constituted during the initial phase of the project and will be the basis for setting up the first project planning.

The following table will be updated deeper as NA4 activities will be refined.

The PM total effort corresponds to the TA effort expressed in PM for the first year.

4.4.1. Task NA4.1 Initial definition of requirements from applications

Month start : PM0, Month end : PM1, outcome : MNA4.1 Milestone M1 Definition of requirements from applications and first version of associated testsuite

NA4 groups involved : NA4 coordination, HEP, biomed, generic

Task NA4.1.1 Collection of requirements from all application sectors

The work consists in compiling existing documents from EDG and other projects (LCG, GridLab, ARDA, Healthgrid, etc…). These requirements will be reviewed at the end of the first project year.

Effort : HEP(1PM), Bio(1PM), Generic (1PM), NA4 coordination (1PM)

4.4.2. Task NA4.2 Definition of common application interface and planning document

Month start : PM0, Month end : PM3, outcome : DNA4.1 Deliverable M3 Definition of Common Application Interface

NA4 groups involved : HEP, biomed and generic

Subtask NA4.2.1 Definition of common application interface

The work consists of collecting existing documents from EDG and other projects (LCG, GridLab, ARDA, Healthgrid, etc…) and proposing a common application layer. As well as HEP and Biomed, a contribution from generic applications is expected to at least validate the proposed layer

Effort : NA4 Coordination(6PM), HEP (4PM), Bio (3PM + 1PM), Generic (1PM + 1PM)

Subtask NA4.2.2 Planning for HEP and Biomed

The work consists of planning the deployment of pilot applications during the project lifetime.

Effort : HEP (4PM), Bio (3PM + 1PM), NA4 coordination (1PM)

Subtask NA4.2.3 Writing of deliverable DNA4.1

This document describes the common layer for all applications.

Effort : NA4 coordination(2PM), HEP(1PM), Biomed (1PM) and generic(1PM)

(Modification to the Technical Annex: new title of DNA4.1" Definition of common application interface")

4.4.3. Task NA4.3 Definition of the strategy for involving new users communities

Month start: PM0, Month end : PM6, outcome : deliverable DNA4.2

NA4 groups involved : NA4 coordination, generic, NA3 liaison

Subtask NA4.3.1 Definition of strategy

The definition of NA4 strategy towards new users communities has to take into account many criteria internal and external to the project. Strategy has to be defined at different levels:

- deployment of applications on the existing EGEE infrastructure
- addition of new nodes to the EGEE infrastructure
- training and user support from the project

- virtual organization

Strategy will be discussed with JRA1, middleware engineering and integration, SA1 and NA3 through the NA3 liaison.

Effort : NA4 coordination (3PM), NA3 liaison (2PM), generic (6PM)

Task NA4.3.2 Set-up of the selection process

The set-up of the selection process involves the creation of the selection committee.

Effort : NA4 coordination (1PM), generic (1PM)

Task NA4.3.3 Writing of deliverable DNA4.2

The deliverable DNA4.2 "Target Application Sector Strategy document" at PM6 describes the strategy adopted by NA4 to involve new communities of users and industrial partners. It also describes the list of requirements involved in the collaboration between EGEE and the external communities and EGEE commitments.

Effort : NA4 coordination (1PM), generic (1PM)

Title of DNA4.2 changed to "Strategy document for the integration of new application communities "

4.4.4. Task NA4.4 Migration of pilot applications to EGEE infrastructure

The first applications migrated on EGEE will originate from the two scientific areas identified as early users of the infrastructure : High Energy Physics and Life Sciences.

Month start : PM0, month end : PM12 , outcomes : milestone MNA4.2 "First applications migrated to the EGEE infrastructure" at PM6, deliverable DNA4.3 "EGEE Applications Migration Progress report" (change the title of DNA4.3)

NA4 groups involved : NA4 coordination, HEP, biomed, NA3 liaison

Task NA4.4.1 Identification of current application portfolios

The identification of biomedical applications that could potentially benefit from the grid is more complex than the identification of potential HEP applications. For HEP, there is well defined application related to Monte-Carlo production. Batch analysis could be also addressed.

Effort: HEP (2PM), Biomed (4PM)

Task NA4.4.2 Selection of the pilot applications

Among the applications identified by task 4.1, a few will be selected for early deployment as pilot applications.

Effort: HEP (1PM), Biomed (2PM), NA4 coordination (1PM)

Task NA4.4.3 Migration of pilot applications

This task involves the creation of virtual organizations.

Effort: 141PM (HEP) + 78PM (Biomed) + 3PM (coord.) + 2PM UNEDI (NA3 liaison)

Task NA4.4.4 Writing of the part concerning pilot applications of deliverable DNA4.3.1 "EGEE Application Migration Progress report" at PM9

Effort: HEP(1PM), Biomed(1PM) , NA4 coordination (1PM)

4.4.5. Task NA4.5 Deployment of generic applications from early adopters beyond HEP and biomed

Month start : PM0, Month end : PM12, outcomes : deliverable DNA4.3.1 "EGEE Application Migration Progress report" at PM9, milestone MNA4.3 "First external review of Applications Identification and Support with feedback" at PM12

NA4 groups involved: Generic, NA4 coordination, NA3 liaison

Task NA4.5.1 Selection of one or two early adopters

Contacts established before the project start-up and during the first month of the project will end up with the selection of one or two large scale applications coming from communities outside HEP and Biomed. The selection will be done along the lines of the selection process defined in task NA4.3 although this process is not fully operational.

Effort : Generic (1PM), NA4 coordination (1PM)

Task NA4.5.2 Preparation of application deployment(PM2)

This involves the creation of virtual organizations, identification and training of the engineers in charge of the deployment, organization of support.

Effort : Generic (6PM), NA4 coordination (2PM), NA3 liaison (2PM)

Task NA4.5.3 Migration of applications (PM3)

Effort : Generic (44PM)

Task NA4.5.4 Selection of one or two more adopters (PM7)

For this second cycle, the selection process defined in task 3 will be operational

Effort : Generic (1PM), NA4 coordination (1PM)

Task NA4.5.5 Second preparation of application deployment (PM8)

For this second round, the effort should be smaller as the process will be better known.

Effort : Generic (3PM), NA4 coordination (1PM), NA3 liaison (1PM)

Task NA4.5.6 Second migration of applications

Effort : Generic (44PM)

Task NA4.5.7 Writing of the part concerning generic applications of deliverable DNA4.3.1 "EGEE Application Migration Progress report" at PM9

Effort: Generic(1PM) , NA4 coordination (1PM)

Change text of milestone to MNA4.3 "First review of Applications Identification and Support with feedback"

4.4.6. Task NA4.6 Management of NA4

Month start : PM1, Month end : PM12

NA4 groups involved : NA4 coordination, HEP, bio, generic

This task corresponds to the NA4 management : attendance to NA4 steering committee meetings, to Project Executive Board, project conferences, travels to visit NA4 partners, edition of internal and quarterly reports, minutes,…

Effort : CERN(3PM), CNRS(15PM), INFN(3PM)

4.4.7. Task NA4.7 : Test suite

NA4 test team is part of the quality organization proposed and described in detail in JRA2 execution plan [R3]. It is dedicated to Application tests, mainly to develop and perform tests case corresponding to the use cases and a set of typical applications.

Month start : PM0, Month end : PM12, outcome : test suite

NA4 groups involved : NA4 test team, HEP, Biomed, Generic

Task NA4.7.1 : first version of legacy associated test suite

This first version of the test suite should come out of EDG/LCG. Groups deploying applications are expected to interact with the test team to help define test suites.

Effort : CNRS (6PM), CSSI(12PM), HEP (1PM), Bio(1PM), Generic(1PM)

Output : test suites

(JJB : incoherence in the definition of the test suite before the common application layer is defined. It makes more sense to have the definition of the sest suite when the application layer is defined, i.e at PM3.)

4.4.8. Task NA4.8 : Industry forum

Month start : PM0, Month end : PM12

NA4 groups involved : NA4 coord, CSSA

Task NA4.8.1 : formal set-up of the industry forum (PM3)

Task NA4.8.2 : contribution of the industry forum to the first review (PM9)

Output : meetings, reports, creation of working groups (business models, technology track) , meeting of the industry forum (connected to project conferences), contribution to dissemination events

4.5. SUMMARY

Effort	Task NA4.1	Task NA4.2	Task NA4.3	Task NA4.4	Task NA4.5	Task NA4.6	Task NA4.7	Task NA4.8	Total
NA4 coordination	1	9	5	6	10	12	0	2	45/48
HEP	1	9	0	145	0	3	0	0	158/160,8
Bio	1	9	0	85	0	3	0	0	98/100,8
Generic	1	3	8	0	88	3	0	0	103/120
NA3 liaison	0	0	3	2	7	0	0	0	12/12
Testing team	0	0	0	0	0	0	72	0	72/72

CS SA	0	0	0	0	0	0	0	12	12/24
Total	4	30	16	238	105	21	72	14	500

Task	Task Title	Partners	Month Start	Month End	Allocated Total effort	Task explanation & comments
			M	M	PM	
	Activity NA4					
Tx.NA4.1	**Definition of requirements**		**0**	**1**	**4**	**1pm CNRS (bio) + 1pm CERN (hep) + 1pm(generic) + 1pm CNRS (coord.)**
Tx.NA4.2	**Definition of common application interface and planning document**		**0**	**3**	**30**	**9pm CNRS (coor) + 7pm CNRS(bio) + 9pm CERN (HEP) +3pm INFN (generic) + 2pm (Bio)**
Tx NA4.2.1	Definition of common application interface	Coord. + HEP + Biomed + Generic	0	3	16	6pm CNRS(coor), 3pm CNRS(bio), 4pm CERN (hep), 2pm generic(INFN) + + 1pm UPV/CSIC (bio)
Tx NA4.2.2	Planning for HEP and Biomed	Coord. + HEP + Biomed	0	3	9	1pm CNRS(coor), 3pm CNRS(bio), 4pm CERN(hep) + 1pm (biomed)
Tx. NA4.2.3	Writing of deliverable DNA4.1	Coord. + HEP + Biomed + Generic	2	3	5	2pm CNRS (coor.), 1pm CNRS (bio), 1pm CERN(hep),1pm INFN (generic)
Tx NA4.3	**Definition of the strategy for involving new users communities**		**0**	**6**	**16**	**5pm CNRS(coord) + 8pm INFN(generic) + 3pm UNEDI(NA3 liaison)**
Tx NA4.3.1	Definition of strategy	Coord. + NA3 Liaison + Generic	0	6	12	6pm (generic) + 3pm CNRS(coord.) + 3pm UNEDI (NA3 liaison)
Tx NA4.3.2	First set-up of the selection process	Coord + Generic	0	1	2	1pm INFN(generic) + 1pm CNRS(coord.)
Tx NA4.3.3	Writing of deliverable DNA4.2	Coord.+Generic	5	**6**	**2**	1pm INFN (generic) + 1pm CNRS (coord.)
Tx.NA4.4	**Migration of first applications to EGEE infrastructure**		**0**	**12**	**236**	**6pm CNRS (coord) + 4pm CERN (HEP) + 6pm CNRS (biomed) + 141pm (HEP) + 78pm (biomed) +1pm(UPV/CSIC)+ 2pm UNEDI (NA3 liaison)**
Tx NA4.4.1	Identification of current application portfolios	HEP + biomed	0	3	6	2pm CERN (HEP) + 3pm CNRS (biomed) + 1pm UPV-CSIC (Biomed)
Tx NA4.4.2	Selection of a base application portfolio	HEP + biomed + coord	3	4	4	1pm CERN (HEP) + 2pm CNRS (biomed) + 1pm CNRS (coord.)
Tx NA4.4.3	Migration of applications	HEP + biomed + coord	4	12		3pm CNRS(coord.) + 2pm UNEDI (NA3 liaison) + 141pm (HEP) + 78pm (bio)
Tx NA4.4.4	Writing of the part of deliverable DNA4.3 concerning HEP et Biomed	HEP + biomed + coord	8	9	3	1pm CERN (HEP) + 1pm CNRS (bio) + 1pm CNRS (coord.)
Tx.NA4.5	**Deployment of applications from early adopters beyond HEP and biomed**	**Generic + Coord**	**0**	**12**	**105**	**18pm INFN (generic) + 10pm CNRS (coord) + 7pm UNEDI (NA3 liaison) + 70pm (Generic)**
Tx NA4.5.1	Selection of one or two early adopters	Generic + coord	0	1	2	1pm INFN (generic) + 1pm CNRS (coord.)
Tx NA4.5.2	Preparation of application deployment	Generic + coord	1	3	10	6pm INFN(generic) +2pm CNRS (coord.)+ 2pm UNEDI (NA3 liaison)
Tx NA4.5.3	Migration of applications of early adopters	Generic + coord + NA3 liaison	3	12	57	3pm INFN (Generic) + 2pm CNRS (coord) + 2 pm UNEDI (NA3 liaison) + 50pm(generic)

Tx NA4.5.4	Selection of one or two more adopters	Generic + coord	7	8	2	1pm INFN (generic) + 1pm CNRS (coord.)
Tx NA4.5.5	Second preparation of application deployment	Generic + coord	8	10	5	3pm INFN(generic) +1pm CNRS (coord.)+ 1pm UNEDI (NA3 liaison)
Tx NA4.5.6	Migration of second round of applications	Generic + coord + NA3 liaison	10	12	27	3pm INFN(Generic) + 2pm CNRS (coord) + 2pm UNEDI (NA3 liaison) + 20pm(generic)
Tx NA4.5.7	Writing of the part of deliverable DNA4.3 concerning generic applications	Generic + coord	8	9	2	1pm INFN(generic) + 1pm CNRS (coord.)
Tx NA4.6	**NA4 management**	**Coord + CNRS + CERN + INFN**	**0**	**12**	**21**	**12pm CNRS (coord) + 3pm CNRS (bio) + 3pm CERN (HEP) + 3pm INFN (generic)**
Tx NA4.7	**Test suite**	**CNRS + CSSI**	**0**	**12**	**72**	**48 CNRS + 24 CSSI**
Tx NA4.8	**Industry forum**	**Coord + CSSA**	**0**	**12**	**14**	
Tx 4.8.1	Formal set-up of the industry forum	Coord + CSSA	0	3	4	1pm CNRS (coor) + 3pm (CSSA)
Tx 4.8.2	Contribution of the industry forum to the first review	Coord + CSSA	3	9	10	1pm CNRS (coor) + 9pm(CSSA)
Total effort (PM)					**500**	

Task number	HEP	Biomed	Generic	Test/NA3 liaison/CSSA	Coordination	Total
Tx NA4.1	CERN (1PM)	CNRS(1PM)	INFN(1PM)		CNRS(1PM)	4PM
Tx NA4.2	CERN (9PM)	CNRS(7PM) UPV/CSIC (2PM)	INFN(3PM)		CNRS(9PM)	30PM
Tx NA4.3			INFN(8PM)	UNEDI(3PM)	CNRS(5PM)	16PM
Tx NA4.4	CERN (4PM) +HEP (141PM)	CNRS(6PM) +UPV/CSIC (1PM) + bio (78PM)		UNEDI(2PM)	CNRS(6PM)	238PM
Tx NA4.5			INFN(18PM)+generic (70PM)	UNEDI(7PM)	CNRS(10PM)	105PM
Tx NA4.6	CERN (3PM)	CNRS(3PM)	INFN(3PM)		CNRS(12PM)	21PM
Tx NA4.7				CNRS(48PM) CSSI (24PM)		72PM
Tx NA4.8				CSSA(12PM)	CNRS (2PM)	14PM
TOTAL	CERN (15PM) + 141PM	CNRS (17PM) + UPV/CSIC	INFN(33PM) + 70PM for application	UNEDI(12PM)	CNRS(45PM)	500PM

	for application migration + other (2PM) =158pm	(3PM) + 78PM for application migration =98PM	migration = 103PM	CNRS(48PM) CSSI(24PM) CSSA(12PM) = 96pm		

4.6. STAFFING AND RESOURCE PLAN FOR THE FIRST YEAR

In order to follow the hiring of the resources needed, the following table will be updated from now and the deviation will be reported to the PEB meeting.

The PM total effort must correspond to the TA effort expressed in PM for the first year.

Note: Please use Last name then First name.

4.6.1. NA4 coordination

Collaborator name	**Partner**	**Status**	**Function**	**Provisional date in Month 1 to 12**	**FTE (1=full time, 0.5 half time,…)**	**F or UF**
Wormser G.	CNRS		Activity management	1		
Total effort						
Effort from the TA						
Deviation						

4.6.2. HEP applications

Collaborator name	**Partner**	**Status**	**Function**	**Provisional date in Month 1 to 12**	**FTE (1=full time, 0.5 half time,…)**	**F or UF**
Harris F.	CERN		HEP management	1	1	UF
Total effort						
Effort from the TA						
Deviation						

4.6.3. Biomedical applications

Collaborator name	**Partner**	**Status**	**Function**	**Provisional date in Month 1 to 12**	**FTE (1=full time, 0.5 half time,…)**	**F or UF**
Breton V.	CNRS	Research associate	Activity Management	1	0.5	UF
Legre Y.	CNRS	Engineer	Loose cannon – VO management	1	0.5	F
Thiam C.	CNRS	PhD student	Application deployment	1	0.5	UF
Maigne L.	CNRS	PhD student	Application deployment	1	0.75	UF
Montagnat J.	CNRS	Researcher	Activity Management, Application deployment	1	0.5	UF
Bellet F.	CNRS	Engineer	Application deployment	1	0.25	UF
Benoit-Cattin H.	CNRS	Assistant Professor	Application deployment	1	0.15	UF
Duque H.	CNRS	PhD student	Application deployment	1	1	UF
X (to hire)	CNRS	Engineer	Loose cannon, application deployment	1	1	F
X (to hire)	CNRS	Engineer	Loose cannon, application deployment	1	1	F
Jose R. Valverde	CNB/CSIC	Head of IT Services	Activity Management		0.25	
Sonia de Diego	CNB/CSIC	Systems Manager	Migration and Support		0.25	
Enrique de Andres	CNB/CSIC	Engineer	Migration and Support		0.5	
David Garcia	CNB/CSIC	Engineer	Migration and Support		0.5	
Hernandez V.	UPV	Full Professor (CU)	Activity Management/Identification		0.65	
Llorens J.	UPV	Full Professor (CU)	Identification/Migration and Support		0.65	
Vidal V.	UPV	Professor (TU)	Migration and Support		0.5	
Total effort						

Effort from the TA						
Deviation						

4.6.4. Generic applications

Collaborator name	Partner	Status	Function	Provisional date in Month 1 to 12	FTE (1=full time, 0.5 half time,…)	F or UF
Barbera R.	INFN				0.5	
Ferro E.	INFN				0.25	
Ferrari R.	INFN				0.25	
Michelotto M.	INFN				0.5	
Platania G.	INFN				0.5	
Total effort						
Effort from the TA						
Deviation						

4.6.5. Test team/NA3 liaison/Industry forum

Collaborator name	Partner	Status	Function	Provisional date in Month 1 to 12	FTE (1=full time, 0.5 half time,…)	F or UF
Total effort						
Effort from the TA						
Deviation						

~~4.6.~~4.7. TRAINING PLAN

This section will present the training planned for the member of each activity.

~~4.7.~~4.8. INITIAL RISKS ASSESSMENT

This table list JRA2 initial risks assessment.

To be completed later.

~~4.8.~~4.9. TIMELINE WITH GANTT CHART

To be completed later.