European Union's Horizon 2020 Programme
European Commission
Directorate General for Communications Networks, Content and Technology
eInfrastructure

Project[9] Number: 654225

Project Acronym: MAGIC

Middleware for collaborative Applications
and Global vIrtual Communities

Deliverable D1.1

Interim Progress Report (M1-M6)

Part B

Period covered by the report: from 01/05/2015 to 31/10/2015

Periodic report: 1st

---

[9] The term 'project' used in this template equates to an 'action' in certain other Horizon 2020 documentation

1. Explanation of the work carried out by the beneficiaries and Overview of the progress

1.1 Objectives

General Objective:

The MAGIC Project seeks to establish a set of agreements for Europe, Latin America and other participating World Regions, aiming at consolidating and completing the building blocks of middleware necessary for the establishment of a marketplace of services and real-time applications for international and inter-continental research groups which facilitates mobility and the work of global science communities.

Specific Objectives:

a) To foster the deployment of the platforms that enable mobility of people and seamless access to services by promoting the establishment of identity federations interconnected via eduGAIN, creating awareness of privacy and security issues and spreading eduroam by: sharing experiences, carrying out training and making available shared infrastructure to ease the process in the partner world regions.

The Workpackage on Mobility (WP2) focused first on preparing a roadmap for the work of deploying Identity Federations in the different project regions: Arab Countries, South and East Africa, West Africa, Central Asia, the Caribbean, Asia-Pacific and Latin America identifying the NRENs which were interested and building a list of training needs. The roamdmap led to the planning of training workshops. Two workshops on Identity Federations and eduroam were carried out during this period: one for the Arab States region on September 8-10, 2015 in Amman and the second one for the Caribbean region hold in Kingston, Jamaica.

b) To develop a model for inter-operation between NREN cloud application markets of participating world regions, based on cloud provisioning and taking advantage of applications developed and run by NRENs across different continents to create a model for a worldwide application market for collaboration tools and services

In Workpackage 3 the work has been focused on two activities: a) the improvement and deployment of the Colaboratorio collaboration tool for the use of different NREN partners and b) the analysis of the groupware standards available for group collaboration.

In the deployment of shared collaboration tools we can report that a personalized version of the Colaboratorio has been deployed for the use of Nigeria in Africa as well as CEDIA in Ecuador and several other NRENs are already in several stages of use and/or deployment of this tool. The tool has also been deployed for the use of WACREN and TANDEM is using it for group collaboration

In the Groupware standards, the WP has found that 5 middleware technologies that can be used for the purpose of applications integration with working groups: OPENCONEXT, PERUN, SYMPA, SCIM and UNITY. The WP is now working on completing a set of basic minimum set of inter-operation requierements and then will move into the testing and construction of a testbed for the integration of several tools requiring Group Management into the Colaboratorio portal.

c) To seek consensus among participating world regions on the importance of interoperability of real-time applications and work towards the adoption of standards such

as those proposed by the Global CEO Forum to promote the creation of a worldwide environment for these applications.

In Workpackage 4 the activities have been centered around the adoption of NRENum. For this, training was conducted at the TICAL2015 meeting in Viña del Mar, Chile. In this training workshop participated 11 participants from five Latin American countries: Chile, Costa Rica, Ecuador, Mexico and Perú. The material developed for this workshop was then uploaded to RedCLARA's e.Learning website and translated in to English and French where the material is ready for use in the implementation of NRENum around the World.

The other key activity of WP4 has been the support to the adoption of NRENum. We can report that Three (3) new NRENs has become members of NRENum.net service. The three new NRENs are (chronologically added): CEDIA from Ecuador (24 July 2015), RAICES from El Salvador (30 September 2015) and recently CUDI from Mexico (15 October 2015). Several countries in Africa and Asia Pacific have been contacted with the support of the regional partners and work is underway to include them in the coming months as NRENum delegated areas.

d) To foster the collaborative work of Global Science Communities by actively promoting the participation of Latin American and other regions' researchers in European Commission Calls and those of other international funding agencies with high impact in the participating regions and other networking activities.

In Workpackage 5 the focus of the activities has been the identification of the common areas of interest among different world regions. After a survey among different partners, in October 2015 it was agreed to concentrate the work in the following areas: Biodiversity, Environment, e-Health and Remote Instrumentation on nanostructure materials. The basic idea is to start using as a basis the user communities promoted during the ELCIRA Project and expand from there to the other World regions. A workshop on user communities is planned to be held during the UbuntuNet conference in Maputo. The WP did also a lot of work on the expansion of the "Fund Alerts database" from Latin America to Africa, Arab Countries, Asia Pacific and the Caribbean as well as generating user training material for the use of the Colaboratorio, the collaboration tool promoted by ELCIRA and MAGIC.

Finally, the Dissemination and Training activities have been extensive. The MAGIC project has been present in the following Meetings: IST Africa 2015 in Maputo, Mozambique; TNC2015 in Porto; TICAL2015 in Viña del Mar, Chile; RNP Forum in Brasilia, Brazil and ICT 2015 in Lisbon, Portugal. Also training has been organized for the WP2 on Federated Access and eduroam in Amman, Jordan; and Kingston, Jamaica. For WP4 on NRENum and mobility in Viña del Mar, Chile.

1.2 Explanation of the work carried per WP

1.2.1 Work Package 1: Management

The management tasks carried out in this period were as follows:

- To organise the Kick-off Meeting in Paris and make sure that all Work Packages organised themselves and their work progress. As reported, the Kick-off took place in Paris on June

11-12, 2015, and was attended by representatives of 19 out of the 20 partners. Only SURFNet excused its attendance.

- To agree on and sign a Consortium Agreement. Issues which required discussed for the Consortium Agreement included the treatment of Intellectual Property Rights, the level of distribution of the applications and other matters such as the distribution of the funding and the mechanisms to include and exclude partners. The Consortium Agreement, modeled upon the DESCA Model (www.desca.-2020.eu) was signed by all partners as of August 18, 2015.

- To distribute the funding from the European Commission as agreed in the Consortium Agreement. This was done between July 01, 2015 and August 20, 2015.

- To maintain regular Steering Committee meetings to ensure the correct implementation of the project. These meetings took place by Videoconference, with the exception of the Kick-off Meeting which was a face-to-face meeting. Steering Committee Meetings were held on the following dates:

  o June 11-12, 2015 (The Kick-off Meeting)
  o July 23, 2015
  o September 24, 2015

The minutes of the Meetings are available in the wiki of the MAGIC Community maintained in the Colaboratorio Portal.

- To oversee the Deliverables and Milestones.
  o All deliverables have been submitted to the EC through the H2020 Project Management System.
- The milestones have the following status:
  o MS1 completed
    ▪ Kick off Meeting Minutes; Project Website
    ▪ Event participation plan
  o MS2 has been completed as of October 2015, i.e., Month 6 instead of Month 4 because of changes in the procedures to sign MoUs internally in GÉANT due to its internal restructuring.
    ▪ The agreement itself
  o MS3 has been completed by September 29, 2015
    ▪ The pilot portal itself deployed in Ecuador (CEDIA), Costa Rica (CONARE) and Nigeria (NgREN).
  o MS4 was planned to be the Global Science Community Opening Conference. This Conference has been postponed due to the difficulty of coordinating the right timing and attendance from several regions. The original idea was to hold it during the UbunuNet Conference, but that was not possible, instead a Meeting of WP5 is scheduled there.
  o MS5 Assesment of group management platforms has been successfully completed on Octoner 30, 2015 as described in D3.2
  o MS6 has been successufully completed as NRENum.net has been deployed in 3 countries in Latin America: RAICES, CEDIA and CUDI.

- No major problems have occurred during this period, the project has run smoothly, except for the delays that have already been reported. There are three principle reasons for these delays:

- o A slow start affecting above all the time needed to reach agreements between European and Latin American Projects.
- o The difficulty to identify user communities willing to become test communities and the time-consuming work of collecting information on researchers and research groups.
- o The difficulty in creating Identity Federations. As in other countries this is a slow process. Nevertheless, it can be seen that there is a lot of interest and it is expected that there will be four Identity Federations by the end of the project, though it is possible that additional time may be needed for the project to achieve all of its goals.

- No changes in the consortium yet, but UNAM has asked to change status from Third Party to Full Partner without funding. This request has been approved by the Steering Committee and is being processed through the Project Officer.

1.2.2 Work Package 2: Platforms for Mobility

During this first semester were centered in training. The activities were carried on by RNP.

Two workshops on Joining eduroam and Identity Federation were carried out:

The first workshop was realized at Arab States Research and Education Network office at Talal Abu-Ghazaleh University (TAGI-UNI) on 8 to 10 September 2015 in conjunction with the 1st International Conference on Open Source Software Computing (OSSCOM 2015). There were 11 participants from 6 countries: Algeria, Jordan, Lebanon, Morocco, Palestine and Tunisia

The second workshop was coordinated by Caribbean Knowledge and Learning Network, from 7 to 9 October 2015. The Jamaica Research and Education Network, JREN, along with the UWI, hosted the workshop and saw participation from Jamaican tertiary institutions, as well as representatives from institutions and NRENs in Grenada, Mexico and the Dominican Republic. 16 technicians attended the workshop.

The other major activity was the planning phase for the delivery and deployment of eduroam, National AAIs and Federations in the different World regions. As a result, the roadmap for this work was delivered as Deliverable D2.1.

In the area of eduroam Uruguay was the first country to sign the eduroam statement after the MAGIC project launch.

The work in WP2 has been lead by RNP with contributions from ASREN, CEDIA, CESNET, CKLN, CUDI, GÉANT, GRNET, NIIFI, NITC, RENATER, TEIN*CC and WACREN

1.2.3 Work Package 3: Cloud Provisioning and Groupware Standards

For the reporting period, the Work Package 3 team has worked on the new implementations of the Colaboratorio applications, and the evaluation of group management in federations (GMF) solutions. The Colaboratorio was implemented in the NRENs from Costa Rica (CONARE), Ecuador (CEDIA) and Nigeria (NgREN). It is worth mentioning that the total number of users in the Colaboratorio has increased by more than 80% since 2014. As it was mentioned in the deliverable "D3.1 Collaboration portal implemented in 3 new NRENs", one of the NRENs that contributed considerably in this respect was RENATA from Colombia with a total of 2441 users. Also, Ecuador, Costa Rica, WACREN, CKLN and Argentina that contributed with 1118 users. The services in the Colaboratorio for the new NRENs included: a) Communities management, b) Wiki, c) Filesender, d) Webconference, e) fund notifications, f) Events

management (Indico). The following screen from NgNREN shows the typical Colaboratorio implementation:

The other work advance that have been done was in the assessment on the group management technologies and standards, reported on the deliverable "D3.2 Assessment of the existing group management standards, NREN tools and value services for the global communities". In this deliverable, the working group identified technologies like Openconext, Perun, SICM, Sympa, HEXAA and UNITY. The document contains a description of aspects like sustainability model, core functionality, interfaces of API, delegated administration among other elements that were identified as crucial for the Group Management in Federations (GMF). The group found that solutions like Openconext contains a complete set of components to handle all authentication and authorization process in a federated market. Solutions like Perun focused in group management from its core, or Sympa that fuses a mailing list manager with a group management application, and could be easier to integrate in an existing environment. The protocols VOOT and Grouper are the tools that various solutions use to share information across domains. The package 3 team also identified potential applications for the pilot as: a) Colaboratorio, b) Webconference (Jit/MCONF), c) Shared Cloud Storage, Zimbra, Wikies, and eLearning. These applications have a high components in groups management that could be applied to the work pilot.

Workpackage 3 has been lead by RedCLARA with significant contributions from ASREN, CEDIA, CESNET, CKLN, CSIR, CUDI, GÉANT, GRNET, NIIFI, NITC, RENATER, REUNA, RNP, SURFNet, TEIN*CC and WACREN

1.2.4 Work Package 4: Agreements for Real Time Collaboration

The work of this WP, lead by RENATA has focused during this period on NRENum training and implemantation as well as setting the necessary agreements for the implementation of interoperation of real time applications.

In particular, an agreement of MAGIC with GÉANT to work on RTC standards has been developed and signed. Also, agreements are under way with APAN (Asia Pacific) and AARnet (Australia), who have extensive experience in RTC applications and are leading the Global CEO working group on RTC.

The first NRENum.net training activity was caried out during the TICAL 2015 conference held in Viña del Mar - Chile, in July 2015 where 11 participants from different countries in Latin America were trained on how to implement NRENum.net. People who attended this event were contacted by RENATA to start working on the implementation of NRENum.net in their countries.

An Online training course was also developed to ease training in the different world regions. The course is available on line in English, French and Spanish The course is intended to guide NRENs on delegation and technical issues related to establishing an NRENum.net service. RedCLARA has offered its Moodle Platform to host these training courses and RENATA deployed documentation about the use and implementation of NRENum.net service. This course is oriented to systems administrators of NRENs in charge of running this service for their users and institutions.

Online training material is On line in the following links:

Spanish: http://cursos.redclara.net/course/view.php?id=47

English: http://cursos.redclara.net/course/view.php?id=48

French: http://cursos.redclara.net/course/view.php?id=49

Invitations to participate on NRENum.net service offering RENATA's support were sent to all NRENs in Latin America as well as, through the different world regional leaders, to the other participating regions. A special emphasis has been put to invite NRENs from Asia Pacific and Africa.

In Latin America, RAICES from El Salvador and RAU from Uruguay showed inmediate interest on thes service. A meeting has been done with each of them to explain information, benefits and to schedule a work plan for delegation of the NRENum.net zone to the NREN itself.

Follwing this effort, three (3) new NRENs have already become members of NRENum.net service. The three new NRENs are (chronologically added): CEDIA from Ecuador (24 July 2015), RAICES from El Salvador (30 September 2015) and recently CUDI from Mexico (15 October 2015).

With RedCLARA support, CEDIA has been guided in their delegation process of the NRENum.net zone (+593). CEDIA did a very fast step with configurations and proceedings so they were the first delegated country.

RAICES the Salvadorian NREN did a very good job and RENATA supported every step in the configuration of the DNS zone for the country code (+503), they had to overcome technical issues because their DNS haven't had reverse domains registered but finally zone was fully delegated.

CUDI from Mexico did a very good job on installation of DNS servers and the configuration of the NRENum.net zone (+52) on them. They had the same problem because their DNS servers haven't had reverse domains registered, after these problems were solved and configurations were set the zone it is now delegated.

WP4 has been lead by RENATA with contributions from CEDIA, CUDI, NIIFI, RedCLARA, RENATER, REUNA, RNP, andWACREN

1.2.5 Work Package 5: Global Science Communities

During the reported period , one of the main activities was centered in the definition of the priorities areas that will be taken to the creation of global science communities. After looking at several considerations, the partners decided to adopt the results of the ELCIRA project "Report on Key Research Communities", because even though it represents the information provided in Latin America, it also has similarities with the situation of other regions. For example, a report from CKLN showed that the Caribbean region had the following priority areas: Health, Earth Sciences, Security, Agriculture, Forestry & Fisheries and Education.

The areas presented in ELCIRA are: Biodiversity, Environment, e-Health and High Energy Physics. Having looked at feedback coming from the regions, partners decided not to include High Energy Physics for this moment, but to continue with a proposal from Mexico to create a Community on Remote Instrumentation on nanostructure materials.

WP5 send out a call to regional partners to submit names and contact details of potential participants from all MAGIC regions to join the Global Science Communities in the identified priorities. The opening meeting with the communities is scheduled for mid-December 2015.

Aother important activity was the work on the identification of open calls to feed the Information System on Worldwide Funding Opportunities and Partner Search database, which is accessible through Colaboratorio. To follow up the activity, a report system was developed that allows access to calls published in a specific period. The report of the publication is available online and can be seen in (link for internal use, not for dissemination):

http://dev1.redclara.net/joomla4_new/joomla4/reporte_fondos/

For the development of worldwide virtual days to foster collaboration, the partners are working on an informative day on Open Access to be held on December 15th, intended to present the situation in different regions of the world for the African researchers and academics related to the topic.

Training materials in form of a tutorial that shows the how to use the main tools of the Colaboratorio (eNVIO, Partner Finder, VC Espresso, Communities and Wiki) have been developed. The document explains how a new user can configure his/her profile and explain the mains parts that integrate the platform. The first version of the document is in English. The following version will be Spanish and French. The document will be published on the web side of the project. This has partly fulfilled MS9, which is due in Month 10.

It was decided in the follow up meetings that take place every Tuesday to develop a face to face meeting on November 17, 2015 in Maputo, Mozambique, in the context of the activities of the Ubuntunet Connect Conference that will be held on November 19 and 20. During the meeting the partners will have an agenda of work about the deliverables and milestones that should be completed and deliver in the following moths as well as the activities carried out according to the task of the Work Package.

This WP has been lead by UbuntuNet and RedCLARA with significant contributions from: ASREN, CKLN, CSIR, CUDI, GÉANT, NIIFI, NITC, RNP, TEIN*CC and WACREN.

1.2.6 Work Package 6: Dissemination and Training

Training in Latin America, Arab countries and The Caribbean:

Within the reported period three face-to-face training sessions were carried out:

- **Federated Access and eduroam workshop in the Caribbean**
  Date: October 7 to 9, 2015
  Venue: Jamaica Tertiary Education Commission, 14 Gibraltar Camp Way, Mona Campus, University of the West Indies, Jamaica
  Attendees: 16 participants from 11 institutions and three Caribbean countries (Jamaica, Grenada, Dominican Republic) and one Latin American country (Mexico).
  Note from CKLN: "Attendees are expected to deploy the pilot and implementation in their respective NRENs/Institutions on the subsequent phases of the project".

- **Workshop on Joining eduroam and Identity Federation**
  Date: September 8 to 10, 2015
  Venue: Talal Abu-Ghazaleh University (TAGI-UNI), Amman, Jordan
  Attendees: 13 participants representing five Arab countries: Morocco, Algeria, Lebanon, Palestine and Jordan.
  Note from ASREN: "Participants should start immediately working on eduroam then idp".

- **Mobility Federated Services and Nrenum.net**
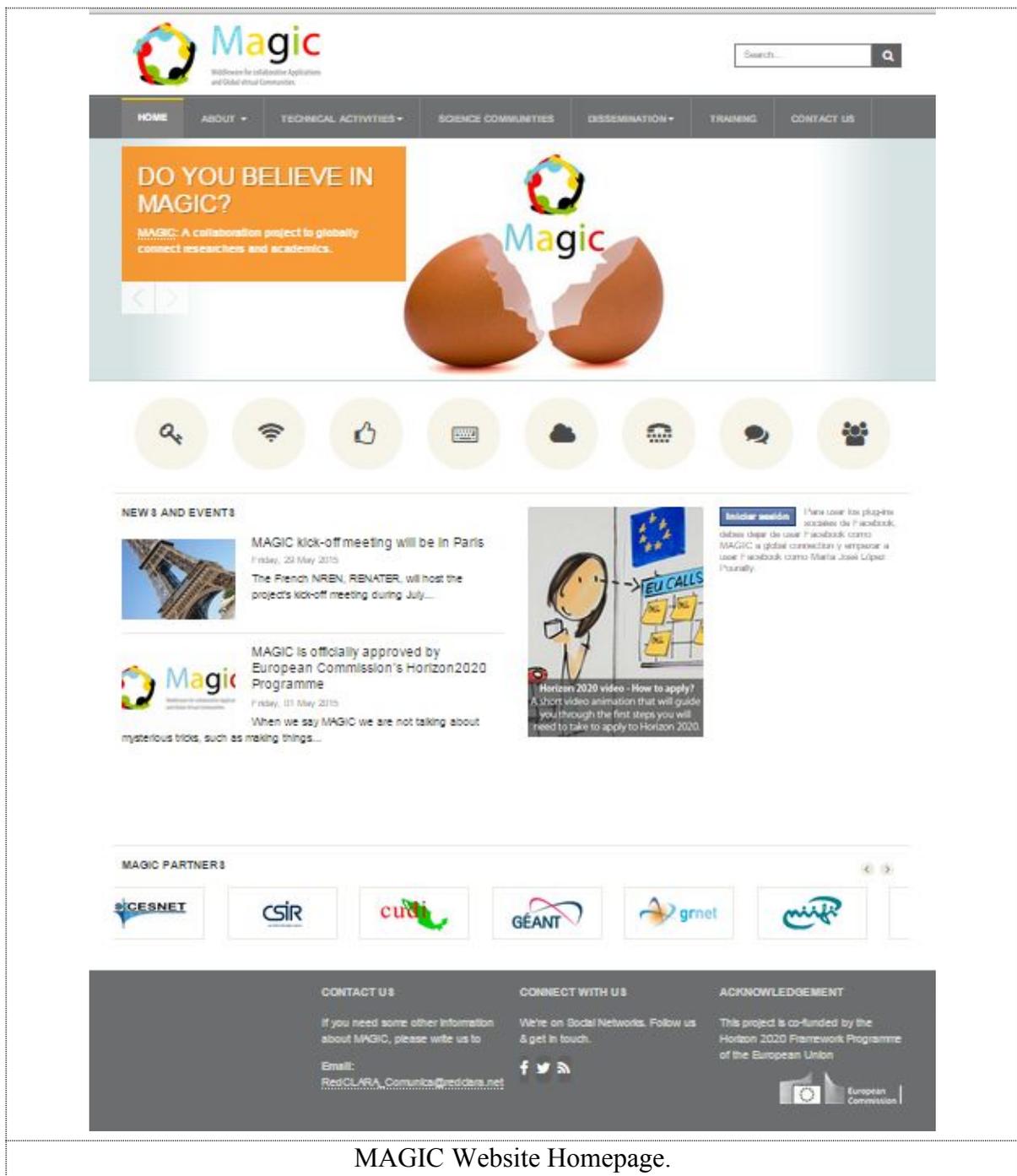 Date: July 8, 2015

Venue: Viña del Mar, Chile. Enjoy Conference Center
Attendees: 11 participants from five Latin American countries: Chile, Costa Rica, Ecuador, Mexico and Peru.

On-line presence:

MAGIC's on-line presence consists in its Intranet, which is based in Colaboratorio, its Website, Facebook and Twitter social interphases and its by-monthly Newsletter.
Regarding its Intranet, it is extensively used by the project partners for all its internal communications and for the different WP interaction.

MAGIC Website Homepage.

The MAGIC website was developed during M01 and M02, and delivered on-line on 8 June 2015 (M02) with the URL http://www.magic-project.eu/. The MAGIC social network presence was delivered on the same date.

The success of the website and the social network pages, has been statistically measured by WP6 to identify the type of information which is of greater relevance for the different media users and inform on how to disseminate the project more effectively. The website usage is measured using the Piwik open-source tool which started taking website statistics on 16 June 2015, and the main numbers are the following ones:

	6/21/2015	6/28/2015	7/5/2015	7/12/2015	7/19/2015	7/26/2015	8/2/2015	8/9/2015	8/16/2015	8/23/2015	8/30/2015	9/6/2015	9/13/2015	9/20/2015	9/27/2015	10/4/2015	10/11/2015	10/18/2015
Number of unique visitors	54	177	74	37	42	58	101	46	56	61	76	79	74	92	83	105	111	109
Number of page views	174	577	232	73	108	197	319	116	120	174	176	168	215	214	278	243	226	233
Number of single pages viewed	139	434	172	64	85	167	245	101	99	149	149	146	154	172	206	208	199	185
Average length of visit	4min45s	4min35s	4min1s	1min49s	4min53s	3min1s	6min30s	3min9s	2min41s	52s	1min59s	1min18s		3min2s	4min38s	3min48s	1min38s	1min58s	2mi
Continents of visitors origin																		
Central and South America	20	55	25	20	14	28	50	12	30	27	35	25	36	34	31	41	40	37
North America	2	54	19	4	4	6	8	11	6	4	7	8	14	16	6	16	11	22
Central America		25	4	2	9	7	1	12	8	1	1	5	4	6	7	15	17	2
Europe	12	30	23	9	6	9	24	7	5	21	14	23	12	5	24	12	22	27
Unknown	3	2	2		2	1	1			1	5	4		3		4	4	5
Asia	1	5		2	4	3	8	2	1	4	4	7	5	27	10	12	12	9
Oceania	5												1				1	1
Africa	11	6	1		3	4	9	2	6	3	10	7	2	1	5	5	4	6

MAGIC Website main statistics of usage

In October 27tn 2015, "MAGIC a global connection" had 66 likes (Facebook) and "@MAGIC_our_voice" had 30 followers (Twitter).

Regarding the project's newsletter, under the name of "MAGIC TIME" three editions wer3e delivered to all the project members, in July and September and with the third edition in preparation while this document was under writing process, all the editions can be checked out at http://magic-project.eu/index.php/2015-05-28-22-53-32/newsletter.

First edition of the MAGIC TIME, July 2015.

The following table show the statistics of the first two newsletters:

Issue	eMails sent	Opened eMails	Number of clicks within the newsletter contents
Nº1 - July	90	53	59
Nº12 - September	98	53	219

Brochures and promotional material done

In order to serve the different dissemination needs, project brochures were printed in Spanish (1000 copies), English (1500 copies), and Portuguese (1000 copies) and also translated into French. All these brochures have been published in the website under Dissemination section, tab >> MAGIC Brochures (http://magic-project.eu/index.php/2015-05-28-22-53-32/magic-brochures) for its downloading in PDF format, and most of them were distributed in those international events where MAGIC had representation by means of a booth .

Regarding the branded promotional goodies, within the reported period we did the following pieces for its distribution in the international events in where MAGIC had representation within a booth:

> 400 umbrellas
> 1000 speakears for mobile devices
> 1500 vintage puzzles

The distribution of these material will be explained in the following paragraphs.

Participation in international events

Within the reported period, the MAGIC project was disseminated within three major international events, the first two of them in Latin America and the third in Europe. In all these events MAGIC had space in a stand were it distributed brochures and branded promotional goodies among the attendees.

July 6th to 8th, TICAL2015, Viña del Mar, Chile:
MAGIC had an exhibition booth at TICAL2015 were brochures in Spanish and umbrellas with MAGIC's logo were delivered. A video explaining MAGIC in spanish was generated for the ocassion MAGIC and also published in MAGIC's Facebook interphase. In addition, videos of the attendees were recorded and published through MAGIC's Facebook and Twitter accounts. Training sessions within TICAL's Conference framework were coordinated.

August 25th to 27th, RNP2015 Forum, Brasilia, Brazil:
MAGIC had a space at RNP stand. Brochures of the project were translated into portuguese and distributed among the attendees. In addition promotional MAGIC umbrellas were given away between those who requested more information about our project. Videos of the attendees were recorded and published through MAGIC's Facebook and Twitter accounts.

October 20 to 20nd, ICT2015, Lisbon, Portugal:
In a common effort with TANDEM and Sci-GaIA, under the name of GIIISC (Global ICT Infrastructures for International Scientific Collaboration), the MAGIC project had a shared exhibition booth at the INCO Village, and a Networking Sessions in ICT2015. Within the stand MAGIC delivered brochures with the Project information in English, Spanish and Portuguese, and branded goodies: vintage puzzles and speakers for the mobile devices.

The following table shows the number of dissemination and promotion pieces given away in all these three events.

	Number of pieces delivered in each international event		
Pieces	**TICAL2015**	**RNP2015 Forum**	**ICT2015**
Brochures in Spanish	600 (the Ecuadorian and the Chilean NRENs asked for brochures to send to their members)		100

		300	130
Brohures in Portuguese		300	130
Brochures in English			500
Umbrellas	257	60	
Speakers			500
Puzzles			700

Also, within the reported period MAGIC's participation in two international events was under preparation: UbuntuNet Connect2015 and e-AGE2015. MAGIC will have a stand and a presentation in both events, but this will be reported in the Second Progress Report.

WP6 has been lead by RedCLARA with contributions from ASREN, CKLN, CUDI, GÉANT, NITC, RNP, TEIN*CC and WACREN,.

1.3 Impact

As the information on expected impacts is relevant as was proposed in the DoA, we will go one by one analysing the advances in the Indicators and expected dates to reach its full achievement.

a) Adoption of European infrastructure standards eduroam and eduGAIN in several developing countries. Globalisation of these standards.

Following the strategy of extensive training carried out at regional meetings followed up afterwards with training material on an e-learning platform, and the availability of a service platform to lower the barrier of hardware and software deployment plus the leadership of a local NREN in each region, the project will create the basis for a deployment of eduroam and eduGAIN in each region involved in the project.

Indicator (DoA): *Number of trained technicians in AAI from Africa, the Arab Countries, the Caribbean, Central Asia and Asia Pacific is over 30.*

Advances in the Indicator:

Training in the Arab Countries carried on   Number of trained engineers 15
Training in The Caribbean carried on in   Number of trained engineers 16

b) Coordination with several continents in basic infrastructure deployment

The project includes the collaboration of NRENs and Regional Networks in Africa, Asia, the Caribbean, Europe and Latin America on the development of agreements, human capacities and a network of collaborators that will foster the deployment of basic infrastructure needed for secure, authenticated access to collaboration tools as well as a means to application-sharing across the NREN world with the potential to include the commercial market serving NRENs and the university/research community. This basic infrastructure is eduroam, eduGAIN and the proposed agreement for the interoperable groupware management system.

Indicators: *12 countries having signed eduroam agreements with MAGIC*
                   4 new pilot federations

Advances in the Indicator:
> *Too soon to show advances, but Uruguay was the first country to sign the eduroam statement after MAGIC's project launch.*
> *Pilot federations are expected to be created in the Caribbean, ASREN, UbunuNet and WACREN regions.*

c) Facilitation of standards to develop a global interoperable market of collaboration services for academia and other interest groups. Potential to ease the creation of a global market.

The project will include several world regions in the discussion for Open Standards in Real Time Collaboration and Service Delivery, including Groupware Management. This will ease the way for a global adoption of these standards which will help the creation of a global market for collaborative and other applications, be these provided by one NREN, or by external providers, to the academic community.

Indicators: 3 world regions incorporated in the pilot federated groupware service

Advances in the Indicator:
> *Too soon to show advances, results are expected in April 2016. Nevertheless, as the testbed will be the Colaboratorio platform, at least Latin America (Ecuador, Colombia, Costa Rica, Mexico), Africa (WACREN, UbuntuNet) and the Arab Countries (ASREN) will be included in the test.*

d) Concertation in the development of worldwide services

The project will work jointly with the GÉANT project as well as the GSD and GRTC groups of the Global CEO Forum in order to promote and pilot the agreements reached for Real Time Collaboration standards as well as application sharing and service delivery. This will make it possible to include in these agreements several world regions that have been absent from these forums, such as Africa, Central Asia and the Caribbean

Indicators: 6 countries in 2 regions having incorporated NRENum.net for Global dialing

Advances in the Indicator:
> *3 countries in LA already joined NRENum.net, 3 more are in the process*
> *Countries in Africa and the Arab Countries are working on it.*

e) Application-sharing among NRENs and the global academic community.

The project will select applications being provided by NRENs and will propose a model for application-sharing so that NRENs may become providers of one to the other and/or to/from Regional Networks to take advantage of efforts made in one part of the world in benefit of another one. In particular, this will boost the use of academic applications developed by NRENs by adding a significant number of potential users to them and favouring in this way collaboration and economies of scale.

Indicators:

> *5 NRENs using applications built and deployed/hosted by another.*
> *2 NRENs with a pilot cloud applications portal implemented*
> *The number of applications deployed in the pilot test will be at least 2*
> *The Directory of the applications provided by NRENs available for use of other NRENs contains at least 10 applications*

Advances in the Indicator:

> *Colaboratorio, where applications developed by UNINET and RedCLARA are being used by CEDIA (Ecuador), CONARE (Costa Rica), NgREN/WACREN (Nigeria). The above result is added to the existing Colaboratorio implementations in RENATA (Colombia), CKLN (Caribbean), CUDI (Mexico) and the undergoing work with INNOVARED (Argentina) that is on testing phase.*
> *Applications to be shared include FileSender (already in use), Zimbra (e-mail and calendar), MCONF (already in use) and JITSI (proposed by RENATER) and several others. The number of applications will clearly be well over 5 or more.*

f)   Worldwide research communities using collaboration tools to improve their daily work

The project will foster the use of collaboration technology among worldwide research communities working in three (3) selected areas. This will serve as a proof of concept and support dissemination by developing NRENs among their researchers of the potential of the use of these tools for their collaboration work across the world. The project will also extend the Funding Opportunities Database and Partner Search application developed by the ELCIRA Project to cover the developing regions and provide valuable funding information for the defined global communities and others. Finally, the project will support dissemination of funding opportunities available in the H2020 project and other funding opportunities through regional Virtual Information Days that follow the EC Information days and other international call for proposals.

Indicators: *The number of global research communities selected for special support will be three   (3).*

> *The number of information days will be at least two (2) each year depending upon the number of existing calls.*
> *Finally, the database of funding opportunities will be a key result for all researchers to find collaboration opportunities worldwide.*

Advances in the Indicator:

> *Too soon to show advances in the Global communities, but communities are being worked on in the areas of: Biodiversity, Environment, e-Health and Remote Instrumentation on nanostructure materials*
> *The information days are being planned for this year 1.*
> *The Database of funding is in completion and the application is being improved for the Global scale*

2. Update of the plan for exploitation and dissemination of result (if applicable)

No update is necessary

3. Update of the data management plan (if applicable)

No update is necessary

4. Follow-up of recommendations and comments from previous review(s) (if applicable)

No review yet

5. Deviations from Annex 1 (if applicable)

5.1 Tasks

The only task that has been delayed in two months is the Workshop of User Communities. This was due to two factors: 1) the slow start in UbuntuNet and 2) the longer than expected time needed to define the areas of interest common to all world regions.

5.2 Use of resources

The following table shows the amount of resources spent which amounts to € 390,893 and is requesting reimbursement for € 269,046.

Participant	Country	(A) Direct personnel costs	(B) Other direct costs	(C) Direct costs of subcontracting	(F) Indirect costs (=0.25*(A+B+E))	(H) Total eligible costs (=A+B+C+D+F+G)	(K) Requested reimbursement
CLARA	UY	€ 71,438	€ 16,722	€ 12,358	€ 22,040	€ 122,557	€ 122,557
DANTE	UK	€ 2,658	€ 821	€ 0	€ 870	€ 4,349	€ 4,278
TERENA	NL	€ 6,470	€ 6,657	€ 0	€ 3,282	€ 16,409	€ 16,409
RNP	BR	€ 11,175	€ 8,680	€ 0	€ 4,964	€ 24,819	€ 0
RENATA	CO	€ 11,238	€ 1,072	€ 0	€ 3,078	€ 15,388	€ 15,388
REUNA	CL	€ 3,361	€ 5,305	€ 0	€ 2,167	€ 10,833	€ 7,493
CEDIA	EC	€ 4,640	€ 3,270	€ 0	€ 1,978	€ 9,888	€ 4,088
CUDI	MX	€ 48,156	€ 8,378	€ 0	€ 14,134	€ 70,668	€ 0
UbuntuNet	NL	€ 7,244	€ 735	€ 0	€ 1,995	€ 9,973	€ 9,973
WACREN	GH	€ 14,522	€ 5,545	€ 0	€ 5,017	€ 25,083	€ 25,083
ASREN	DE	€ 16,800	€ 2,092	€ 0	€ 4,723	€ 23,615	€ 23,615
CESNET	CZ	€ 3,378	€ 1,632	€ 0	€ 1,253	€ 6,263	€ 6,263
GRNET	EL	€ 6,200	€ 898	€ 0	€ 1,774	€ 8,872	€ 8,872
SURFNET	NL	€ 1,078	€ 0	€ 0	€ 269	€ 1,347	€ 0
CSIR(SANREN)	ZA	€ 2,152	€ 1,926	€ 0	€ 1,020	€ 5,098	€ 0
RENATER	FR	€ 4,885	€ 1,035	€ 0	€ 1,480	€ 7,400	€ 7,400
NIIFI	HU	€ 3,864	€ 1,606	€ 0	€ 1,367	€ 6,837	€ 6,837
CKLN	GD	€ 5,445	€ 1,237	€ 0	€ 1,671	€ 8,353	€ 8,353
CAREN NOC	HK	€ 1,250	€ 700	€ 0	€ 488	€ 2,438	€ 2,438
TEIN*CC	KG	€ 2,810	€ 5,754	€ 0	€ 2,141	€ 10,705	€ 0
TOTAL		€ 228,763	€ 74,065	€ 12,358	€ 75,707	€ 390,893	€ 269,046

In general, the use of ressources is in line with the planning, the only deviations to underline are:

UbuntuNet Whose slow start explain the low use of manpower during the first months. Now that additional personnel has been hired, they will invest more time to catch up with their activities, specially in WP5.

CEDIA. Whose activities are planned to be centered in WP4 and WP3 having carried out a large part of its activities in this period. They maintain their commitment of continuing their support to the project adding more manpower if needed at their own expenses.

CESNET, SURFNet, GRNet, RENATER. Whose activities will be more centered in the coming months with their participation in WP3 and WP4.

In terms of manpower, the partners have spent a total of 66.94 PMs, i.e., 22% of the total manpower committed which is in line with the time elapsed which corresponds to 25% of the total time. The variation can be explained mainly by the Northern Hemisphere Summer that has included in this period. The following is the detail of PMs spent by partner:

	WP1	WP2	WP3	WP4	WP5	WP6	Total Person/ Months per Participant
CLARA	4.56	0.04	7.16	1.06	4.56	4.20	21.58
DANTE	0.32	0.02	0.04	0.02	0.02	0.09	0.51
TERENA	0.20	0.33	0.24	0.00	0.02	0.00	0.78
RNP	0.25	1.88	0.36	0.36	0.50	0.50	3.85
RENATA	0.00	0.00	0.00	4.00	0.00	0.00	4.00
REUNA	0.40	0.04	0.24	0.46	0.00	0.00	1.14
CEDIA	0.00	0.45	0.36	0.56	0.00	0.00	1.38
CUDI	0.00	6.94	2.19	3.84	1.77	2.38	17.12
UbuntuNet	0.56	0.02	0.01	0.01	0.71	0.04	1.35
WACREN	0.13	0.75	0.38	0.63	0.75	0.25	2.88
ASREN	0.20	3.20	0.20	0.00	0.70	0.50	4.80
CESNET	0.00	0.30	1.10	0.00	0.00	0.00	1.40
GRNET	0.00	0.37	0.74	0.00	0.00	0.00	1.11
SURFNET	0.05	0.00	0.06	0.00	0.00	0.00	0.11
CSIR(SANREN)	0.15	0.00	0.05	0.00	0.05	0.00	0.25
RENATER	0.28	0.09	0.36	0.09	0.00	0.00	0.82
NIIFI	0.17	0.03	0.09	0.15	0.37	0.00	0.81
CKLN	0.24	0.20	0.05	0.00	0.13	0.00	0.62
CAREN NOC	0.50	0.25	0.25	0.00	0.25	0.50	1.75
TEIN*CC	0.10	0.25	0.10	0.00	0.08	0.16	0.69
Total Person/Months	8.11	15.16	13.97	11.17	9.90	8.62	66.94

5.2.1 Unforeseen subcontracting (if applicable)

None

5.2.2 Unforeseen use of in kind contribution from third party against payment or free of charges (if applicable)

None