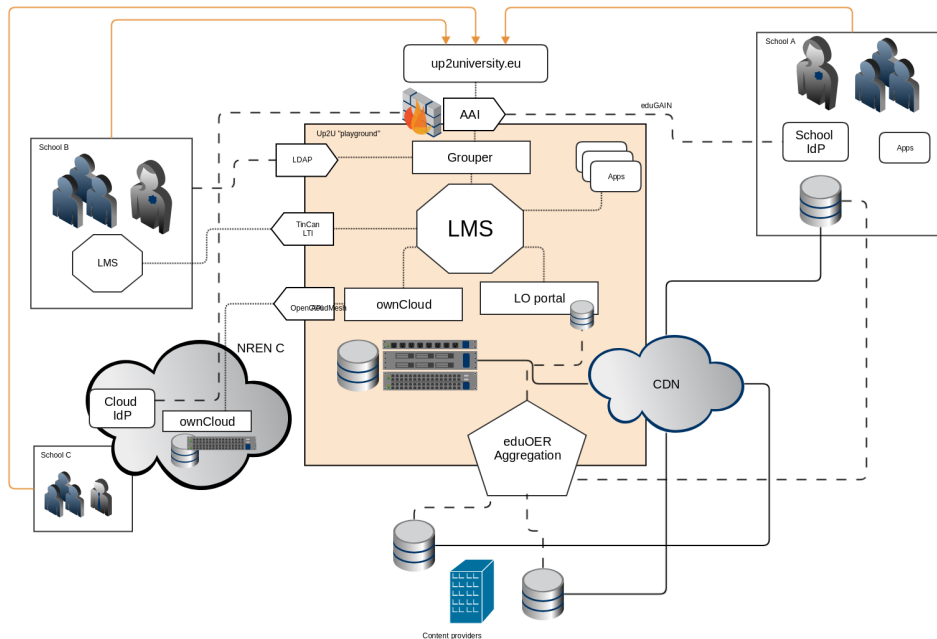


# 1st GA notes

## Concept overview



## \*WP1\* - Management

The 60% pre-financing was transferred to all partners on 21 February 2017.

Only one signature is missing from the Consortium Agreement (CERN), will soon be distributed to all.

Financial reporting is needed quarterly. Finance mailing list will be reminded in March. There was an excel template distributed on the list for the reports.

Budget on the "other direct cost" line can be spent on hosting face-to-face meetings (venue and catering, no dinner) and/or hosting infrastructure (only for infrastructure partners justified in Annex 1: storage, VMs, etc.).

GÉANT is going to distribute more budget on the "travel" budget line to all partners after Year 1. This needs contract amendment (together with other potential changes)!

NIIF, Hungary changed its name to KIFU. It is already administered by the EC. Contract amendment is not needed for this.

Subcontracting is only allowed to UROMA. For others, needs contract amendment.

Hardware equipment cannot be bought under this project.

The General Assembly unanimously appointed the Up2U Board Members:

Gabriella Paolini - GARR, Italy

John Domingue - Open University, UK

Eli Shmueli - IUCC, Israel

Antonio Vieira de Castro - ISEP, Portugal

Vicente Goyanes - TELTEK, Spain

The board meets quarterly (via video), checks the partners' financial reports, the deliverables due in the period, advises the Management Team and/or escalates to General Assembly.

The next coming face-to-face meeting will be in early May (first or second week) in Portugal (either Lisbon or Porto). The following meeting could be in October time-frame in Poland (TBC).

<https://wiki.geant.org/display/UP2U/WP1++Project+management+and+external+liaison>

## \*WP2\* - Dissemination

Project visual appearance and logo design chosen by WP2 was introduced and explained.

Preliminary public Wordpress website (up2university.eu) and event list on Wiki had been submitted to the EC as Deliverable 2.1

There is an urgent need for a new public website using the new Wordpress template.

There is an urgent need for a common "press kit" that contains the main messages and communication strategy towards our key stakeholders: teachers, schools, students, IT admins, governments, EC, content providers, NRENs, industry, etc.

The press kit should be used to create flyers that can then be translated to all Up2U project languages.

The public website content should also be translated and the Wordpress site must allow language selection. Investigate its feasibility.

There is an urgent need to coordinate social media appearance of Up2U: YouTube channel, Facebook page, Twitter hashtag, etc. Some partners already created social media accounts during the meeting. COORDINATION IS INEVITABLE.

There is a vacancy for a permanent social media manager in WP2.

The event list (on the Wiki) must be maintained. Presentations given and/or papers submitted must be collected on the WP2 document store.

Partners presenting Up2U at any events can charge their time and efforts spent at the conference against WP2. The actual content preparation and technical work must be charged on the corresponding work package.

<https://wiki.geant.org/display/UP2U/WP2++Dissemination+and+outreach>

### **\*WP3\* - Infrastructure**

Architecture straw-man document must be drafted and circulated to WP3 partners. Main architecture concepts must be discussed and clarified.

Infrastructure partners (GWDG, CERN, PSNC, GRNET) are going to meet and converge viewpoints on the basic architecture design.

It was agreed to deploy a central Up2U infrastructure ie. "playground" including:

- storage and File Sync&Share platform with OCM
- VM infrastructure for LMS platform and apps with LTI
- possibly storage and repository for metadata/content/learning-path connected to eduOER.

The central Up2U infrastructure should be able to interconnect/federate with national infrastructure. Software may be packaged and ported to national infrastructure (design goal).

Taking into account the rapid prototyping approach, off-the-shelf, open source software platforms are recommended in the first phase:

- ownCloud/OCM
- Moodle/LTI
- possibly DSpace repository

The central Up2U infrastructure playground MUST have:

- eduGAIN supported federated access, SAML2 based SSO
- local LDAP sign-on for homeless
- pluggable group management function
- multi-tenancy on LMS (accommodate multiple schools)
- ThinCan and/or LTI support on LMS
- OCM support for ownCloud federations
- all repositories connected via eduOER (gateway)

Infrastructure partners should discuss ASAP what central components can be hosted where, who will be responsible for what, and how those components can seamlessly interoperate.

The central infrastructure must have at least a pilot and a production instance. Preferably: testing, pilot and production instances.

Global CDN networks (Google, Akamai, etc) already have caching points inside the NREN networks. Usually, there is no problem with accessing global content.

A CDN might make sense in case of content sitting in distributed smaller repositories across institutions. PSNC will "pilot and test" a CDN infrastructure connecting pilot countries and evaluate network/streaming performance in different scenarios. Partners willing to participate in the initial CDN pilot should contact PSNC.

The Deliverable D3.1 in M6 will be the analysis of network services requirements of schools. This is an on-line document, perhaps the survey results about schools' connectivity and eduroam availability in the initial pilot countries (how schools are connected, by NREN, by ISP, if eduroam is available at schools, libraries, public places???)

Our project is not for rolling out eduroam to schools however, we have to investigate and prioritize those schools where eduroam is already available during piloting.

The same applies to federated access. Our project is not to roll out IdPs to schools however, those schools with their own IdPs (or centralized IdP provided by the NREN of the country) should be prioritized.

<https://wiki.geant.org/display/UP2U/WP3++Cloud-based+infrastructure+services>

### **\*WP4\* - Applications**

There was a consensus about the need of a central LMS system that Up2U provides to all schools willing to participate in piloting without their own LMS. Moodle is the choice to start with. Must be pluggable to swap if decided.

A separated pluggable AAI and group management component must be put in front of the LMS. GARR is to investigate options, maybe Grouper.

The central LMS should be able to communicate/federate with other LMSs via TinCan and/or LTI. Liaison with IMS Global has already been established.

As Deliverable 4.1 WP4 should demonstrate a working prototype of the central LMS and other playground components available/integrated.

Learning analytics and digital reward system (based on Open Badges and possibly Blockchain) will be investigated by OU and UROMA.

eduOER should be the hub to connect all repertoires wishing to gateway into Up2U. eduOER only harvests metadata via standard protocols and also make them re-harvestable by any front-end portals or other applications.

There were several opinions but no firm consensus around the deployment of a central Up2U content repository. The major concern was around our legal responsibility for the content stored in that repository (should be addressed by WP6). Up2U Consortium is not a separate legal entity, only the partners can take responsibility but who will?

Perhaps the Up2U repository could store only metadata and information about learning paths that teachers/students create. Perhaps only unanonymized short Learning Object can be stored there... Open for discussion.

There was an agreement to try and implement a pilot Learning Object portal within Up2U that can complement the GÉANT eduOER portal that includes mostly full lecture recordings and conference sessions less useful in the Up2U context. The Up2U LO portal should contain not only multimedia but other content types too.

Several multimedia learning tools were introduced and demonstrated by partners. All very promising!!! We have to work on a consolidated portfolio of tools (categorised list) that can be tested out by teachers. Interoperability is KEY.

Potential tools:

- Jupyter Notebooks (CERN)
- CommonSpaces (UROMA)
- SeLeCont (NTUA)
- Easy2Rec (ISEP)
- Web Personal Recorder (TELTEK)
- Clipit (FCT)
- WebTUT (FCT)
- Science lab (CERN)
- Virtual museum (ISEP)

Various integration options of these tools had been envisaged during the informal discussions. Very good starting point.

Use cases are essential to determine what tools will be provided and maintained by Up2U as part of the toolbox portfolio. The public website should be the place to socialize ideas and experiences about tools used by teachers and students.

<https://wiki.geant.org/display/UP2U/WP4++Integrated+application+toolbox>

#### **\*WP5\* - Community**

The students participation was appreciated. They confirmed the difficulties in first grade university: new tools and new teaching practices. They have to become much more independent learners. Not everyone can adjust, this results in large drop-out rate in first year uni.

The primary focus of Up2U is on teachers. We put the teachers in the centre. Teachers have a changing role from being the central source of trusted information to acting more like tutors, mentors, facilitators either in a formal or informal environment. Critical thinking must be developed in kids.

We also focus on secondary education, ie. the last step before university/collage. We should leave it to the teachers judgement how old kids they want to involve in the pilots. Different tools may apply to different age groups. We should encourage mixed age groups to participate in the pilots.

There are established communities and on-going dialogue in several countries already: Italy, Greece, Lithuania, Portugal, Israel, Germany,.... We should bring together these groups, share information and knowledge and harmonize.

Early feedback from "teachers we know" is essential. We need to extend the dialogues/surveying process to many countries and exchange outcome.

Common MoU template must be designed as a formal engagement instrument. Schools must sign MoU to participate in the Up2U pilots.

The charter for the Subject Matter Committee must be defined as mix of permanent members and ad-hoc expert participants in a flexible way. Different countries may have different sub-committees. Set up a hierarchical model. Charter and process must be published on the website by NTUA.

Teachers must also be trained (about tools and new skills) Some potential training programmes should be drafted.

<https://wiki.geant.org/display/UP2U/WP5++Learning+community+management+and+skills>

#### **\*WP6\* - Security and trust**

First deliverable in M6 is our official participation in the EC's Open Data Pilot. We have to explain who we comply and contribute. We should also give our roadmap to a creating and maintaining a secure and trusted Up2U ecosystem.

We have to actively promote federations and AAI. Identity provides at schools and the controlled attribute release process towards applications and services is the way to secure the students privacy.

IPR, open access and fair use policies must be investigated. Open content vs. personal data. There is a difference between finding something and accessing something. Also knowing who is accessing something.

We have to make sure that we fully comply with the new EC Personal Data Protection regulations stepping into force in 2018.

<https://wiki.geant.org/display/UP2U/WP6+--+Roadmap+for+security+and+trust>

#### **\*WP7\* - Piloting**

WP7 is responsible for the technical aspects of piloting in the potential pilot countries. WP5 should be the first point of contact towards schools and teachers as they cover the pedagogical aspects.

WP5 dialogues and surveys must investigate the technical capabilities of schools and NRENs in the potential pilot countries.

Partners willing to join the pilots in any ways should contact PSNC. We are going to fix the involvement in WP7 at the earliest contract amendment.

Pilot countries must be categorized and prioritized based on their technical capabilities. "Homeless countries" with no infrastructure can use the central Up2U playground as a cloud service. Countries with infrastructure may want to federate/interconnect their own services (i.e ownCloud, repository, LMS, IdP, what have them) with Up2U. Some countries may want to take our packages software stack and replicate (if possible).

The Deliverable 7.1 in M6 should demonstrate a working prototype of the central infrastructure: storage, VM infrastructure, CDN pilot.

<https://wiki.geant.org/display/UP2U/WP7+--+Pilot+coordination+and+continuous+risk+assessment>

#### **\*WP8\* - Sustainability**

WP8 was not introduced at the meeting (officially the activity starts only in M6) but several references were made.

Long term sustainability of the infrastructure and services/tools must be addressed from day 1. We have to identify the business models and key stakeholders who has interest and money (not the schools, teachers and students). They are potentially: governments, foundations, NRENs, universities, educational content providers, publishers, etc.

It would be critical to understand what universities can benefit from Up2U in the first place, as we have university partners.

Alternative business models are needed for publishers with paid content. What other income source we can guarantee for them (ie. support services, training programme conceptions, etc.) to get their content in Up2U for free?

We need to understand what the central infrastructure costs (CAPEX/OPEX) if we have to maintain that after the EC funding ends. Is there sufficient interest from the NRENs' side (or others)?

<https://wiki.geant.org/display/UP2U/WP8+--+Sustainability+and+exploitation+of+results>

#### **\*WP9\* - Ethics**

All three Ethics deliverables (NON-EU, H, POPD) had been submitted to EC. They are confidential. Partners can access them in the restricted part of the project Wiki.

EC personal data protection reform requires us to make "reasonable efforts" to get consent from parents/guardians of children under 16yo using our tools and services.

The proposal, also described in Deliverable 9.1 - Humans, is to rely on the schools and teachers in this respect.

The assumption is that the school asks the parents' consents upon enrolment to the given semester/school year. Up2U must sign an MoU with every participating schools to verify this.

Schools who signed up to Up2U can

- a) give a list of teachers who we can authorize on our systems (local credentials and database) OR
- b) release the appropriate attributes from their IdPs (federated access and authorization)

Teachers can then invite students to join. It is the responsibility of the teachers and the school then to ensure the consent of the parents.

All subscribed users (either local credentials or federated) must be traceable.

These issues will all be addressed by WP6.