

M9C Pedagogical Framework

Mastering 9 Conversations

Comprehensive bouquet of
Learning Content, Tools, and Guides
to let Organizations Supporting Refugees be able to

- **organize and give 9C courses** to help refugees develop entrepreneurial skills and put them to profit
- **organize and give M9C courses** to train new facilitators able to give the 9C course.

- 1) A whole **WORKFLOW** for the RSO to manage courses
- 2) **Support to Business Planning for the RSO**
- 3) **Course Material (for 9C and M9C)**
- 4) **Low Tech Learning Management System** (Google Drive)
- 5) **EU Skills Profile + Self Evaluation Tool (9C)**
- 6) Digital certification
- 7) **Guides**

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1. Introduction

In this report we intend to describe the M9C approach to the fulfilment of the project's aims.

In general, the project's work intended to put into existence two courses, the general pedagogical framework for them, and the support to their continuing existence after the project's time span.

The courses are supposed to be given by Refugees Supporting Organizations (RSOs) in order to enhance the entrepreneurial skills of refugees seeking to integrate into the social structure of the country where they intend to live, after departing from their place of origin.

The first of such courses originated by the work done in a previous project (9Conversations, which is also the name of the course, 9C henceforth).

It is designed to allow a class of refugees to acquire information about the local laws and methods to give rise to their personal entrepreneurial activity, interact with persons in the same situation, and start creating a network of acquaintances (private persons and institutions' representatives) that will be important when their activity will have to be started and sustained. In short, about this course, M9C project produced additional material, also to support effectively the possibility to attend the course at two different levels (depending on the starting awareness and knowledge of the potential student).

The M9C project, then had the aim to produce a new course, called "Training the Trainer / Facilitator" (M9C course, henceforth).

The M9C course aims to allow the formation of potential facilitator for future 9C courses.

Both courses are designed to be given using the same pedagogical framework, which includes

- A class composed by the students, together with a "facilitator". The facilitator is not exactly a teacher; it might be not an expert in the matter taught in the course (for instance it is not expected to be a guru of economics and business disciplines). It is rather a reference figure in the class, guiding the learners along the course's steps (see below), spurring discussion in the group, monitoring learners' work / participation, and validating the learners' qualification at the end of the course (to back up the award of a certificate).
- A style of development of the course giving/taking, based on "steps". A step is a meeting with the class and the facilitator interacting in order to present learning material and plan individual activities. The meeting can be both in presence or online, with a preference for the first option. This architecture in steps, and ideally in

9 steps, has been inspired by the concept of Business Model Canvas, originated by Osterwalder¹.

As a matter of facts, the above mentioned pedagogical framework has been expanded in M9C project, to fulfil the project's aims: this brought to the description, and implementation, of a whole workflow, to be followed by the RSO that intends to give the two above mentioned courses. Such an activity is in fact complex, ranging from the initial decision to offer the 9C course, or/and the M9C course, through the preparation activities, to the actual giving courses and certifying their taking. A further aspect is in that such workflow should reasonably support the aim of allowing the above mentioned activities beyond the scope of the M9C project's duration.

So we came up with a set of overall accomplishments of the M9C project. These accomplishments, or *products*, are related to the preparation of the extension learning material for the course 9C, and of the whole learning material for the M9C course, in the first place. Then they implement a whole framework that the M9C project offers to the RSOs, to let them undertake the giving of 9C and M9C courses, and the related award of certifications.

So the whole framework designed through the M9C products is as follows:

- Support to Business Planning for the RSO: This is implemented as a report/guide to help the RSO's planning of the course activities (related to 9C and M9C courses);
- Course Material: This is implemented as two sets of Open Educational Resources, built as web pages, pdf, video-clip, text resources to be used by the students in the courses and by the course facilitator; the learning material is created for the extension of the 9C course (while the original 9C material remains available), and for the whole M9C course;
- Low Tech Learning Management System: This is implemented as a Google Drive based resource, to be installed on the RSO's cloud premises; it supports the giving and taking of the courses and is produced in two versions (one for the 9C course, and one for the M9C course);
- EU Skills Profile: This is implemented as an extension of the original EU Skills profile available among the EU web resources; it is used to unveil the profile of a student and (limited to the 9C course) direct the student to attend one of the two available versions of the course (basic, and advanced);
- Self Evaluation Tool: This is implemented as a sub-system in the M9C website (<https://m9c.idi.ntnu.no/>) and allows the student to self-evaluate (limited to the 9C course) the state of her/his knowledge as evolving during the course;

¹ Osterwalder, A.; Pigneur, Y.; Clark, T. (2010). Business Model Generation: A Handbook For Visionaries, Game Changers, and Challengers. Strategyzer series. Hoboken, NJ: John Wiley & Sons. ISBN 9780470876411

- Digital certification: This regards the awarding the student with a proper certification about the positive outcome of the course taking; the certification is designed to be based on digital signature, to prevent forgery, and is stored in the student's e-portfolio available in the Low-Tech Learning Management System; in principle the RSO can use any digital signature system (especially in the case it already has one in place), however, in a dedicated Guide, see below, three methods, as easy and less expensive as possible, are described for the RSOs, so to allow them to make an educated selection, should they have not an own digital signature system already;
- Guides: This set of products will provide support to the RSOs after the end of the M9C project; they are devised, as well as the previously mentioned products, as a way to allow the RSOs to undertake the path to offering 9C (and/or M9C) courses in autonomy; in particular, the following are the guides produced by the M9C project.
 - o *IO6 - M9C – Business Plan*: This is devised as a guide to help the RSO building the educational activity as provider of courses coming from the M9C project.
 - o *IO1 - 9C Guide for the Facilitator*: This is a revision of a report produced by the previous project (9Conversations); it is devised as a guide to help the facilitator of 9C course;
 - o *IO4 - M9C Train the Facilitator Handbook*: This is devised as a guide to help the facilitator of M9C course;
 - o *IO5 – Guide - Installing the Low Tech Learning Management System*: This is a guide for the RSO, helping in the process of establishing a google drive based environment where to give a 9C or M9C course;
 - o *IO5 – Guide - Managing the Low Tech Learning Management System*: This is a guide for the Facilitator, about the actual use of the various aspects, folders, and functionalities, of the Low Tech Learning Management System (during a 9C or M9C course);
 - o *IO3 – Guide - Managing Digital certification, for RSO and Facilitator*: This is a guide to select, make available, and use a digital signature method, in order to allow for the production of the individual certifications of the students.

In the following sections we will present the framework, starting with a description of the courses (Sec. 2). After that we will discuss the general management of the educational activities that can be undertaken by the RSO, in relation to 9C and M9C courses.

So in Sec.3 we will deal with the support to the definition of a whole business plan for the educational activities of the RSO, the actual management of courses through the Low-Tech Learning Management System, and the management of digital signatures for the courses certifications. The content of this section will depict a whole protocol, suggested by the project to the interested RSOs, usable to walk the path from the rising of the intention to

give a 9C (or M9C) course, through the definition of a suitable business plan for such activity, also through the installation and use of the Low-Tech Learning Management System, to the final awarding of certifications to the students who completed the course.

Then, in Sec.4 we will introduce two tools to be used prior of and during the course taking by the students. In particular, this will regard the 9C course only.

Finally, in Sec.5 we will introduce the list of guides that will allow RSOs to give courses based on our products in future.

2. The courses (description – Learning Outcomes)

Here we describe the courses 9C and M9C, their learning outcomes and where the learning material is stored, to make it available during a course edition.

2.1. 9C course

The course aims to improve the entrepreneurship skills of refugees.

It constitutes a guidance for the participants, to develop the ability to

- imagine
- describe
- analyse the feasibility in the local area
- and possibly build

an entrepreneurial initiative, in their new living place, to increase possibilities of integration in the societal structure of the country where they moved

The course provides elements of entrepreneurship using the well-known schema defined by the Business Model Canvas.

The activity of building such Business Model is the main instructional experience in the course, and it implies

- investigating about the needs and possibilities around the local area,
- confronting with other persons,
- reporting own experience and findings
- making the Business Model, step by step, progressively more precise, toward a project that could be applied on the territory.

The Business Model Canvas explains everything in 9 step, so, more or less likewise, the course is divided in 9 STEPS; each step is, by norm, held as a conversation in presence, although online connection is possible, in case of emergency. During a step the participant interacts with the facilitator, and with the other participants. Outside of a step are the individual autonomous activities, such as the completion of homework, the maintenance of a diary, to report about the participant's proceeding, and interaction with the local social area, to seek out information, acquaintance, and applied knowledge about the public services that might be relevant.

The Learning Outcomes of the 9C course can be summarized as follows:

1. Be able to complete a personal skill profile with the modifications provided by the M9C project); this can be useful, for the student, in presenting her/himself in a new professional setting, and help developing a network of acquaintances, for exchange of experiences and information, and help.
2. Be able to decide on a business idea to explore in the rest of the course, that might link the personal profile (established at previous point) and the new local business environment of the student (Steps 1-3).
3. Be able to explain what the Business Model Canvas is, for example to a fellow refugee (All steps, but especially 1 and 9).
4. Produce a Business Model Canvas, filled in the details of all the 9 elements, for a specific business idea rooted in the community and personal context (All steps, but especially 4-7, and 9).
5. Be able to give constructive feedback on your study colleagues' completed Business Model Canvases, and to reflect on your own (All steps, but especially 4-7, and 9).

See, for more information about the development and enrichment of the 9C course in the M9C Project, the *IO1 Report – 9C Guide for the Facilitator*, and the *IO2 Report - Gap analysis for differentiation*.

2.2. M9C course – Training the Facilitator

The course 9C is managed by a facilitator. We assume that the facilitator is hired by the RSO that planned to give one or more 9C courses. Then, as stated in the Introduction, the facilitator is deemed to be a reference figure in the class, guiding the learners along the course's steps, spurring discussion in the group, monitoring learners' work and participation, and validating the learners' qualification at the end of the course (to back up the award of a certificate).

In order for the facilitator to be able to accomplish her/his duties, it is not necessary for her/him to be very knowledgeable about the specific 9C course topics; being conversant with such topics is of course a good thing, but having the facilitator to help students to acquire their skill, and in particular the skill of creating an own network to support future activities, it is rather necessary that the person in such role

- is knowledgeable with the 9C course content location and structure;
- is able to guide the class and help the individual students, and be a reference figure, in the line of the definition given in the first paragraph of this section;
- has the necessary technical capabilities, to manage an edition of the 9C course;

Hence, the Learning Outcomes of the M9C course are stated as it follows:

1. Produce a localised Business Model Canvas (BMC), to be acquainted with the work on which they will support the students in a release of the 9C. The local area to which the BMC is dedicated might be one of interest of the aspiring facilitator attending the M9C course, or it might be of interest for the RSO that will be committing the 9C course to such aspiring facilitator.
2. Be familiar with the materials of the 9C training (either to facilitate it themselves or to be able to support others in facilitating the programme)
3. Know how to lead each session (step) of the 9C course, using the suggested process (either as a facilitator, or as a support to others facilitating the programme). Includes administration of certifications and curation of materials.

Further information is in the IO4 deliveries.

3. The Management of 9C and M9C

The basic workflow for an RSO wishing to give 9C (and/or M9C) courses is summarized in the following; it is supported by the Project products, as described in the related subsections.

To start, we may imagine that, at a point in time, the RSO would decide to undertake the educational activities suggested by the M9C Project. This means that one or more releases of 9C will be managed, and maybe one or more releases of the M9C course could be delivered as well, to form new facilitators in the RSO, or in other RSO's.

- At such a point, the RSO would use the project product related to the support to business planning. This is a product of the IO6 – Business plan intellectual output, which comes as a guide (*IO6 – Guide – M9C Business Plan*), containing information and examples helpful to establish the 9C/M9C-related Business Plan.
- When a given course is going to be delivered, it is necessary to
 - o Install the Low-Tech Learning Management System (LMS) in a Google Drive available to the RSO; the material to install comes as a package produced by the Project (in particular as a product of the intellectual output IO5 – Online First, and it has only to be decompressed in the available place; then there are simple adjustments to be performed.
 - o Manage this installation, by adding the students and the facilitator in the Google drive, and let the facilitator and the participants start working. Each participant will have her/his own Google account in the Low-Tech LMS; under such account an “e-portfolio” section will be used to store the final certification telling that the student has successfully taken the course.
- While the course is ongoing, the facilitator will manage the educational activities. At the end of the course the Facilitator will award the successful participants with the course certification, to be stored in the e-portfolio of the participant.

It is worth noticing that, beside the IO6 report, already mentioned, other guides have been produced by the Project, to support the technical aspects related to the use of the Low-Tech LMS, and to the selection and management of the certifications. These documents are mentioned in the introduction; in particular, they are the

- *IO5 – Guide - Installing the Low Tech Learning Management System*: This is a guide for the RSO, helping in the process of establishing a google drive based environment where to give a 9C or M9C course;
- *IO5 – Guide - Managing the Low Tech Learning Management System*: This is a guide for the Facilitator, about the actual use of the various aspects, folders, and

functionalities, of the Low Tech Learning Management System (during a 9C or M9C course);

3.1. Support to RSO Business Planning

When the RSO has decided to start educational activities based on 9C/M9C courses, it has to plan carefully the organizational steps, in order to be able to sustain the started initiatives.

As mentioned earlier, the support to the RSO about this planning is provided by the M9C Project Intellectual Output IO6.

A Business Plan is, in fact, necessary, as the RSO should start its initiative in such a way to be reasonably sure to be able to conduct it to a happy end, without exerting its resources beyond the limit of feasibility.

In the Business Plan the RSO would consider all the organizational activities and needs for support, related to the course(s) offer. For instance, this part of the workflow would deal with

- marketing and search for prospective participants in the courses;
- actual recruitment of participants
- decision making about the number of courses to give, and what courses;
- appointment or recruitment of a facilitator for each course that is going to be offered;
- appointment or recruitment of a Technician able to deal with the informatics part of the activities, and possibly to give the facilitator some support in case of need during a course;
- plans about what informatics resources should be used during course(s). Here, for instance, the RSO has to decide whether to make a dedicate google user for the courses (that will lbe given using Google Drive), or to use a pre-existing one, and to decide the level of service that will be requested to Google for such an account (there are various possibilities, ranging from free to non-free solutions.
- Plans about the implementation (if not yet implemented of a digital signature system, that will be used to ensure the validity of the certifications given to the participants in a course, when they end it successfully.

The *IO6 – M9C Business Plan report/guide* provides the RSO with information and examples of pertinent Business Plans, that would be helpful to establish the RSO's Business Plan for the 9C/M9C-related activity.

3.2. The Low-Tech Learning Management System

Learning Management Systems (LMSs) are web-based applications that allow to create on-line containers for courses, to be given on-line, or for collections of learning material to support face to face learning activities. For a course in the LMS, among other services, the following base functionalities are supported

- The management of students participating in the course: usually they are users of the LMS, being enlisted (on their request) into the course; teachers as well are users of the LMS, that are given responsibilities on the course management.
- The management of the course's learning material, which is usually stored in a specific area of the system, dedicated to that particular course; the material is the very likely to be divided in sub-areas of the course, such as sections, or lectures, or topics, listed in sequence, to provide a learning path to be followed by the students and managed by the teacher(s) during the giving of the course.
- The provision of functionalities to organize homework and other individual activities, together with the related assessment activities. This part of a LMS provides teacher(s) and students with the necessary support to Formative Assessment (FA) and/or Summative Assessment (SA) activities. The teacher(s) can assign such activities, and the students can submit their solutions, all through the LMS functionalities, in the course area. All this is very important, of course, as they allow 1) the students to practice effectively with the course concepts, verify their results, and ultimately enhance their learning (FA), and 2) the teacher to evaluate the learning outcomes of a student (SA), so to monitor the learning process and eventually state the student's success at the time of course completion.

Please, notice that in the above three points we only focused on a few, fundamental, characteristics and functionalities that every state of the art LMSs make available. Of course each LMS offers several further functionalities to support a diverse variety of pedagogical approaches and organizational support. Just, these further characteristics are of no relevance in the context of this report.

Then, coming to the choices made in the M9C project, with regard to the support needed by the RSOs when they (will) give the 9C and M9C courses, we considered the problem of how and where to make said courses available for the RSO.

In short, we concluded that we could not just place the courses in two dedicated areas of a well-known LMS (such as Lifter, or Moodle).

In particular, we decided that we should provide the RSOs with a *Low-Tech* solution, that could be used easily and as straightforwardly as possible, by any RSO, without relying on the mandatory use of a specific state-of-the-art LMS.

The motivations for such decision lie in the analysis of the following case studies. Such cases are representative of the different situations an RSO could find itself in, once it decided to give one or more of our courses.

- 1) Let us suppose that we provided the RSO with an implementation of 9C/M9C courses, in a state-of-the-art LMS, say Moodle for the sake of this discussion. Then, if the RSO does already have formation activities in place (offering other courses), and use for exclusively a different LMS (say Blackboard), then the RSO will be confronted with the need of porting the courses from an LMS to another, before to be able to give courses. Such would be a demanding task: for one, we might imagine that the average RSO has no particularly developed informatics department; moreover, there would be no help left back from the Project, about such porting activity, as the possible targets would be too many. In this hypothesis the RSO would be abandoned to its own means, with no possible help from the Project, and this is no good incentive to adopt the 9C and M9C courses.
- 2) In the same starting hypothesis given in point 1, it may happen, of course, that RSO is actually already using Moodle for its formation activities. In this case the inclusion in the RSO's LMS of our courses would be quite less demanding, but we did not intend to rely on the probability of such happy event, when we decided how to provide the RSOs with our courses and the related workflow.
- 3) Let us, again, suppose that we provided the RSO with an implementation of 9C/M9C courses, in a state-of-the-art LMS, say Moodle, and, differently than the other cases, that the RSO has no LMS in place. In this case the RSO would be forced to install the LMS suggested by the Project, and have the courses in it. Considering the probable lack of competence in the use of LMSs in general, this would be quite a demanding task for the RSO. Here, offering a solution that would not imply hard technical efforts is a mandatory option for the project.

Analysing the above case studies, we concluded that offering an as-less-complex-as-possible solution would

- make it possible to support as much as possible the RSO in the third case
- while not being unreasonable demanding for the RSO in the other cases: in particular, the RSOs in point 1 and 2 would be likely to manage easily the Low-Tech proposal coming from the project, without prejudice on the possibility to make a porting in their own LMS, when and if they have the resources.

Hence the project worked on the production of the *M9C Low-Tech Learning Management System*, which is comprised of the following characteristics:

- learners and facilitators are users in Google Drive Services, which is a very widespread platform allowing to store information in the cloud, also at no cost when the resources used are not big. In particular,
 - o the RSO should manage a Google account to function as administrator of the Low-Tech LMS
 - o the whole environment (see below) would be uploaded on the RSO Google Drive Space, and made available to the other users via sharing management
 - o there would be separate areas (basically drive folders), one per each course that is given
 - o the environment, and one or two initial course areas would be uploaded quite easily, just transferring the folder hierarchies prepared by the project, and left for the copy and use from the RSO
- users, in particular students, would have personal profile areas (a personal area is initially uploaded as anonymous and then assigned to the individual user, who can personalize it)
- for a given course, the folders hierarchy would contain the learning materials and homework assignments; there would as well be areas where the students' homework submission would be stored for the facilitator to check; for each student an area with her/his progressive diary of activities (a kind of continuous homework) is present
- in the personal profile area there would be provision for an e-portfolio folder, which is deemed to contain the certifications awarded at the end of courses given in this environment. So this is the area where the final certification for a M9C (prospective facilitator) or 9C (student in the 9C course) will be uploaded by the RSO, when the facilitator awards it to the student. This is a significant asset, as the student can in future allow access to the e-portfolio area (and only that area) to prospective employers or anybody else (s)he intends to show her/his certifications to.

The M9C Low-Tech LMS is a project's product, is provided by the M9C Project Intellectual Output IO5 – *Online First*.

It consists in a downloadable resource (distributed through the M9C web site) and the guides we have mentioned in the previous sections.

3.3. Digital Signature of the course certifications

As mentioned earlier, the M9C project included in the course workflow the use of a certification. A student is awarded the 9C or M9C certification at the conclusion of the related course, after that the Facilitator gave her/his agreement.

The certification comes under the form of a digitally signed document, providing information about the name of the course, the period of time during which the course was

successfully take, and the learning outcome. The certification is supposed to be backed and validated by the logo of the awarding RSO.

In principle the certificate is a pdf file (it can come also as a web resource) and its validity is assured by the RSO's digital signature.

Of course the project had to meet the problem arising when the RSO has no digital signature method in place. This problem was resolved by researching suitable methods on which information and implementation instructions could be given to the RSO by the project, in the form of a Guide document.

The guide describes three methods that could be suitable, and not expensive (although not free in principle). The idea is that the RSO can be helped by the guide to select a suitable method and adopt it, basing on the information about usage, cost, and future verification of the cost, provided within the guide.

Of course, if the RSO has already a Digital signature method in place, it will be able to use it for the certifications.

The guide document, *IO3 – Guide – Digital Signature for the 9C/M9C courses certification*, presents the following three solutions:

- Digital signature for a general PDF file: the verifiable document is a computer stored pdf file; no verification is possible on a printed version;
- Qryptal QR-code: this allows to produce also to digitally verify printed certificates;
- EDCI digitally signed certification for Europass: this is basically an XML file digitally verifiable, that can be uploaded into the student's M9C e-portfolio, and into the Europass portfolio

All the presented solutions can be differently affordable for an RSO not already equipped with a method of digital signatures. In the guide, the characteristics of interest are summarized, allowing the RSO to make an educated choice.

4. M9C Tools

The two tools described in this section have been further developed starting from the previous experience in the 9Conversations project. Both of them are devised to support the learning activities of participants in the 9C course. The first one supports a learner's profiling, catering on a tool available from the European Union website, the *EU Skills Tool for Third Country Nationals*, and enhancing it to support Gap Analysis for the 9C course. The second tool is available to the participants in the 9C course, during the course, in order to perform periodical self-assessment activities.

4.1. EU Skills Profile: Extension for the 9C Course

This tool is devised to be used by participants in the 9C course, at the beginning of their course experience. It supports learner's profiling, by using the *EU Skills Tool for Third Country Nationals*, that is available through the European Commission website (<https://ec.europa.eu/migrantskills/#/>).

The *EU Skills Tool for Third Country Nationals* has been adjusted and enhanced to cover the needs a *Gap Analysis* of the participants' competencies.

It is available through the M9C project's website (<https://m9c.idi.ntnu.no/index.php/identifying-entrepreneurial-skills/>).

The Gap analysis allows to direct the fresh participant to one of the two levels (basic/advanced) the 9C is built at.

The EU Skills Tool is a product of the M9C Project Intellectual Output IO2 - *Gap analysis for differentiation*. In the related M9C report, the reader can find further details and descriptions of the work done to develop the enhancements and of the product itself.

4.2. 9C Course Self Evaluation Tool

This tool is designed to be used by participants in the 9C course, during their participation.

It allows to perform a self-analysis of the level to which the participant masters the content of the course so far. In particular, the learner can produce a 6-levels self-evaluation of the progress done so far in the course.

The tool allows to self-evaluate own competence on the various aspects of the course (the 9 sections of the Business Model Canvas: Value proposition, Customer segments, Channels, Customer relationships, Key partners, Key activities, Key resources, Revenue stream, Cost structure).

In particular, the learner can assign to each topic a level of mastering, according to the following definitions of levels:

- Level 1) Can explain one simple example with expert help
- Level 2) Can explain several examples simply with peer help
- Level 3) Can choose the best example in collaboration with peers
- Level 4) Can evaluate in relation to other BMC sectors and choose best examples in detail, supported by contacts with relevant persons/orgs.
- Level 5) Can describe how this BMC sector integrates with the BMC as a whole, taking some responsibility with guidance & help from others.
- Level 6) Can describe this BMC sector in relation to the BMC as a starting point, taking responsibility for making decisions & working with others.

The tool is embedded in the M9C project's website (<https://m9c.idi.ntnu.no/index.php/self-evaluation-test/>), and available at any moment to the learners.

The self-evaluation tool is a product of the M9C Project Intellectual Outputs *IO1 - Learning entrepreneurship, and IO2 Gap analysis for differentiation*. The related reports provide the reader with details and further information and descriptions.

5. The guides

As stated in the Introduction, and in previous sections, the M9C project decided to provide the RSO with as easy a way to install and deliver the courses as possible. This decision gave ride to the Low-Tech LMS product. It was also material to the assurance of the sustainability of the project's findings and products, after the end of the project.

With the same aim, or rather to fully meet it, a series of "Guides" was devised, so to leave RSOs and Facilitators with a stable set of instructions, suggestions, and guidance.

Such instructions, suggestions, and guidance, are meant to be used for both the technical and the pedagogical aspects of the future work of RSOs and Facilitators. So they cover an array of information that covers the whole workflow we described in the introduction: from establishing a strategy to be able to give courses, to the final certifications of course successfully taken.

The report/guide "IO6 – M9C Business Planning", provides the RSO with the information we mentioned in Sec. 3.1, where we stressed the importance, for the RSO, of a well-defined business plan, to ensure, as far as possible, that the activity of giving courses will not exert the RSO resources above a limit.

The "IO1 – 9C Guide for the Facilitator" is a revision of a previous pedagogical guide, devised to help the facilitator of a 9C course. It provides information and suggestions about how to administer the course and manage the learning content.

The "IO4 - M9C Facilitator Handbook" is a pedagogical guide for the facilitator of an M9C course. It provides information and suggestions about how to administer the course and manage the learning content.

The IO5 – Guide - Installing the Low Tech Learning Management System, and the IO5 – Guide - Managing the Low Tech Learning Management System, help the RSO and the facilitator involved in the provision of 9C/M9C courses. We have described the Low-Tech LMS in Sec. 3.2, where it was clear that some technical skills should be possessed by who will use it to give courses. However, we tried to keep such necessary skills as low, and the usage of the system as straightforward as possible, and we think that the solution we adopted in this case is way better than having installed the courses on a state of the art LMS, to then leave the RSO dealing with it. The first mentioned guide is deemed to help in

the process of establishing a google drive based environment where to give a 9C or M9C course). The second document is a guide for the Facilitator, about the actual use of the various aspects, folders, and functionalities, of the system.

The document “IO3 – Guide – Digital Signature for the 9C/M9C courses certification”, helps the RSO selecting a suitable method for digitally signing the final certifications of course successfully taken for the learners.

6. Conclusions

In this report we have provided the reader with an overall description of the products, and decisions which made us produce them, for the project M9C. An examination of the whole corpus of the reports produced by the project, also through the directions suggested here, will of course give a more complete idea of the work done in the Project, and of its results.