



RESULTS OF IO1A1

(version 9)

**Comparison of different systems for
Organizing and Monitoring
Apprenticeships**



APPRENTICE TRACK

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1 Introduction

1.1 Activity framework

IO1A1 - Comparison of different systems for Organizing and Monitoring Apprenticeships was the first Activity of Intellectual Output 1 - Measurement & Monitoring Framework for Apprenticeships.

The aim of this activity was to compare the specific inputs, processes and outputs of the management systems for apprenticeships in Slovenia, Croatia and the Czech Republic, including both documented and informal processes for apprenticeship-management.

1.2 Method used to collect data

An excel file was created to collect data across the three countries in a structured and comparable way. The excel file had six sheets. The first three (Instructions, Definitions and Example) were meant as guidelines to help the partners work with the remaining three (List of Processes, List of Forms and List of Procedures).

Partners were instructed on how to use the three sheets designed to collect data, as described below:

- Sheet "List to Processes"

In this sheet you are expected to describe the way you do the processes identified on the left column. The table in yellow shades is organized in accordance which is the standardized way to describe a process: in a flow, from left to right, of Input->Activity->Output. It therefore has two middle columns to identify/list the processes 'activities (and its number), preceded on the lefts by columns to identify the information inputs needed to perform each activity as well as where those information inputs can be collected from (origin). Then, on the right side of the column with the activities, you have columns to identify the function(s) responsible for performing the activity, the expected information outputs/results and to where those outputs need to be delivered (destination). As we know not all of you are familiarized with process description, we repeated the columns related to the identification of the activities in green, immediately after the identification of the processes, in case it makes it easier for you to identify them there first, before copying the information into the middle columns. We provided an example of a mock process in the sheet entitled "Example" for you to have an idea of what style and length of information you are expected to fill in each column.

- Sheet "List of Forms"

In this sheet you are expected to list the forms you mentioned as being used for your processes 'activities. Use one of the numbered columns to each form. Then identify each field those forms contain. Use the dropdown menus to categorize the fields. We provided an example in red, which you should delete and change the colour back to black before filling it with your real information.

- Sheet "List of Procedures"

In this sheet you are expected to list the procedures you mentioned as being used for your processes 'activities. You are also expected to provide a description of its content (in English), which might be a list of steps outlined in the procedure. And finally add a link to it (preferably an English version of it, but if that is not possible, then to the original version in your native language). You might need to upload it first to our shared cloud, before being able to provide us with a link).

To avoid ambiguity of interpretation, a glossary of terms and definitions used in the task was provided to the partners (see 1.3).

1.3 Glossary

The below table contains the set of terms and definitions provided to the partners to help them with activity 1. As possible, ISO 9000 terminology was chosen, due to its consensually international adoption. Where no ISO 9000 definitions were available, proprietary definitions were created to be used in the Apprentice Track project.

Term	Definition	Definition Source
Process	set of interrelated or interacting activities that use inputs to deliver an intended result Note 1 to entry: Whether the “intended result” of a process is called output, product or service depends on the context of the reference. Note 2 to entry: Inputs to a process are generally the outputs of other processes and outputs of a process are generally the inputs to other processes. Note 3 to entry: Two or more interrelated and interacting processes in series can also be referred to as a process. Note 4 to entry: Processes in an organization are generally planned and carried out under controlled conditions to add value. Note 5 to entry: A process where the conformity of the resulting output cannot be readily or economically validated is frequently referred to as a “special process”.	ISO 9000:2015
Activity	set of small tasks that constitute a step on a process	Proprietary (Apprentice Track Project)
Input	elements necessary to conduct an activity. Note 1 to entry: The nature of the elements can be diverse, e.g. information, resources, infrastructure, manpower, among others.	Proprietary (Apprentice Track Project)
Output	result of a process Note 1 to entry: Whether an output of the organization is a product or a service, depends on the preponderance of the characteristics involved, e.g. a painting for sale in a gallery is a product whereas supply of a commissioned painting is a service, a hamburger bought in a retail store is a product whereas receiving an order and serving a hamburger ordered in a restaurant is part of a service.	ISO 9000:2015
Information	meaningful data	ISO 9000:2015
Procedure	specified way to carry out an activity or a process Note 1 to entry: Procedures can be documented or not.	ISO 9000:2015
Form	document containing fields to accommodate information to be collected Note 1 to entry: Forms can sometimes be addressed by other terms such as layouts, questionnaires, among others. Note 2 to entry: Examples of forms can be the predefined text for a contract, the standardized layout for a report, an inquiry questionnaire, a checklist, a registration form, among others.	Proprietary (Apprentice Track Project)
Record	document stating results achieved or providing evidence of activities performed Note 1 to entry: Records can be used, for example, to formalize traceability and to provide evidence of verification, preventive action and corrective action. Note 2 to entry: Generally, records need not be under revision control.	ISO 9000:2015
Requirement	need or expectation that is stated, generally implied or obligatory Note 1 to entry: “Generally implied” means that it is custom or common practice for the organization and interested parties that the need or expectation under consideration is implied. Note 2 to entry: A specified requirement is one that is stated, for example in documented information. Note 3 to entry: A qualifier can be used to denote a specific type of requirement, e.g. product requirement, quality management requirement, customer requirement, quality requirement. Note 4 to entry: Requirements can be generated by different interested parties or by the organization itself.	ISO 9000:2015

2 Results

2.1 Method used to compare the data collected

The results of this activity will be used as input to provide specifications for software development, namely an application that can serve the three countries studied. In this framework, it is important to identify both the commonalities and the divergences between the three countries to determine which elements need to be considered during the application development.

The tables on points 2.1.1, 2.1.2 and 2.1.3 show these commonalities and divergences in terms of activities, documented procedures and forms, per each of the five processes.

Regarding the divergences, the outliers were recommended for adoption. This option arises from a decision made by the project coordinator that the software tool should cover all needs of all partners.

In the case of activities, when the same activity appeared with different names across countries, a harmonized name was suggested.

2.1.1 Results regarding Processes and Activities

Process	Activities identified	By Country			Recommendations
		CR	CZ	SL	
1. Setting the Learning Objectives of the Overall Programme	Identify Stakeholders	x	x	x	Adopt
	Consult stakeholders		x		Adopt
	Analyse Stakeholders feedback		x	x	Adopt
	Define/redefine learning objectives	x	x		Adopt
	Qualification of study program	x		x	Adopt
2. Identifying and Recruiting Placements	Mapping out students' skills	x			Adopt
	Definition of requirements for placements		x	x	Adopt
	Selection of placements	x	x	x	Adopt
3. Negotiating the Agreement	Students application		x	x	Adopt
	Matching students with employers		x	x	Adopt
	Drafting the agreement		x	x	Adopt
4. Monitoring of Apprenticeships	Monitoring of practice by students	x	x	x	Adopt
	Monitoring of practice by higher education institutions	x	x	x	Adopt
5. Assessment of Apprenticeships	Employer Assessment of learning acquired by student/apprentice	x	x	x	Adopt
	Student/apprentice Assessment of their own acquired learning	x	x	x	Adopt
	Verification that the Apprenticeship was successfully carried out	x	x	x	Adopt
	Certification	x	x	x	Adopt
	Evaluation framework for the Apprenticeship Programme	x	x	x	Adopt
	Employer evaluation of the Apprenticeship Programme		x	x	Adopt
	Student evaluation of the Apprenticeship Programme		x	x	Adopt
6. Recognition of prior learning	Application for recognition			x	Adopt
	Review of study commission			x	Adopt
	Certification			x	Adopt

Results regarding Procedures

Process	Procedures identified	By Country			Recommendations
		CR	CZ	SL	
1. Setting the Learning Objectives of the Overall Programme	Identifying Stakeholders	x		x	Adopt
	Preparing and filling in Stakeholders Consultation Report			x	Adopt
	Defining what are the Learning Objectives	x			Adopt
2. Identifying and Recruiting Placements	Mapping out students' skills	x		x	Adopt
	Mapping out list of potential companies	x		x	Adopt
	Finding placements via database (in software tool)			x	Adopt
	Implementing legally binding requirements			x	Adopt
3. Negotiating the Agreement	Students application for Practical Training			x	Adopt
	Matching students with employers			x	Adopt
	Preparation of Agreement of Practical Training for HEI/Employer/Student			x	Adopt
4. Monitoring of Apprenticeships	Monitoring of activities carried out in the company	x			Adopt
5. Assessment of Apprenticeships	Defining Assessment processes and standards			x	Adopt
	Assessment of learning acquired by students/apprentices	x			Adopt
	Evaluation of the Apprenticeship			x	Adopt
	Certification of completion of Apprenticeship			x	Adopt
6. Recognition of prior learning	Review of application and supporting evidence for recognition of prior learning			x	Adopt

2.1.2 Results regarding Forms

Process	Forms identified	By Country			Recommendations
		CR	CZ	SL	
1. Setting the Learning Objectives of the Overall Programme	Learning outputs	x			Adopt
	Croatian Qualification Framework	x			Adopt
	Stakeholders Consultation Report		x		Adopt
2. Identifying and Recruiting Placements	Catalogue of knowledge	x			Adopt
	Employers database		x	x	Adopt
	Application for practical training		x	x	Adopt
3. Negotiating the Agreement	Student's statement about the rules of conduct during the practical training		x	x	Adopt
	Contract for practical training between HEI/Employer/Student			x	Adopt
4. Monitoring of Apprenticeships	Journal of Apprenticeship	x			Adopt
	Apprenticeship Communications' Report	x	x	x	Adopt
5. Assessment of Apprenticeships	Mentor's report		x	x	Adopt
	Student's report		x	x	Adopt
	Evaluation questionnaire for mentors		x	x	Adopt
	Evaluation questionnaire for students		x	x	Adopt
	Certificate of Apprenticeship completion	x	x	x	Adopt
	Index or database of study results of the school students			x	Adopt
6. Recognition of prior learning	Application for recognition of prior learning			x	Adopt if the consortium decides to adopt the new process suggested by Slovenia (see previous tables).
	Certification for recognition of prior learning			x	

3 Conclusions

The convergences encountered on the third version of the tables submitted by each partner seem now expectable considering the state of the art in Eastern Europe regarding management of apprenticeships.

Some divergences encountered, mostly regarding activity, procedure and form names seem to be due to the approach each partner uses internally, which varies in terms of detail. This can be easily harmonized and covered in the software tool, through the inclusion of all necessary fields to allow deeper levels of detail, while keeping them optional to also satisfy the needs of partners with less detailed approaches.

The consortium should, however, consider and discuss with the software experts, if all activities and respective procedures listed are possible to be automated through a software tool and if not, select only the ones that can when providing input to the developers of the software tool. In the meeting held between version 8 and 9 of this report, some of these issues seem to have been already solved. Same applies to the harmonization issues referred in the previous paragraph.

Some mismatches remain between the procedures and forms identified by partners as inputs to the activities listed in the sheet of activities, sheet of forms and sheet of procedures. For the purpose of this report, the forms considered were the ones stated on the sheets of forms and the procedures considered were the ones listed on the sheets of procedures, as those are the ones described and, therefore, the ones that can provide input to the software developers.

Versions 7 and 8 of this report are substituted by the current version. However, to better comprehend the process held to reach the current conclusion, the content of the previous versions, both original and annotated, are necessary and, therefore, they are considered annexes to this document. Are also annexes to this report the three versions of each table with information compiled by the partners. For reference, a list of annexes is given on the last page of this document.

List of annexes

(in inverted sequence of publishing)

IO1A1_Croatia_v3

IO1A1_Czech Republic_v3

IO1A1_Slovenia_v3

IO1A1_Results_v8_with_decisions

IO1A1_Results_v8

IO1A1_Croatia_v2

IO1A1_Czech Republic_v2

IO1A1_Slovenia_v2

IO1A1_Results_v7_with_decisions

IO1A1_Results_v7

IO1A1_Croatia_v1

IO1A1_Czech Republic_v1

IO1A1_Slovenia_1

About the Apprenticetrack Project and this publication

Apprenticeships allow students to build up skills and knowledge, while providing companies with a reliable way to evaluate potential future hires and the benefit from fresh perspectives offered by academia. Despite their advantages, apprenticeships are challenging to manage, as the needs of students and of specific enterprises are difficult to match, particularly when organizations need to deal with massive amounts of students and, consequently, data. Structured communication channels between enterprises and students, robust management systems and clear evaluation protocols are necessary to manage such a complex system, are therefore needed to enable the launch of valuable, steady and sustainable Apprenticeship Programmes.

This publication contains the results of the first activity of intellectual output 1.



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