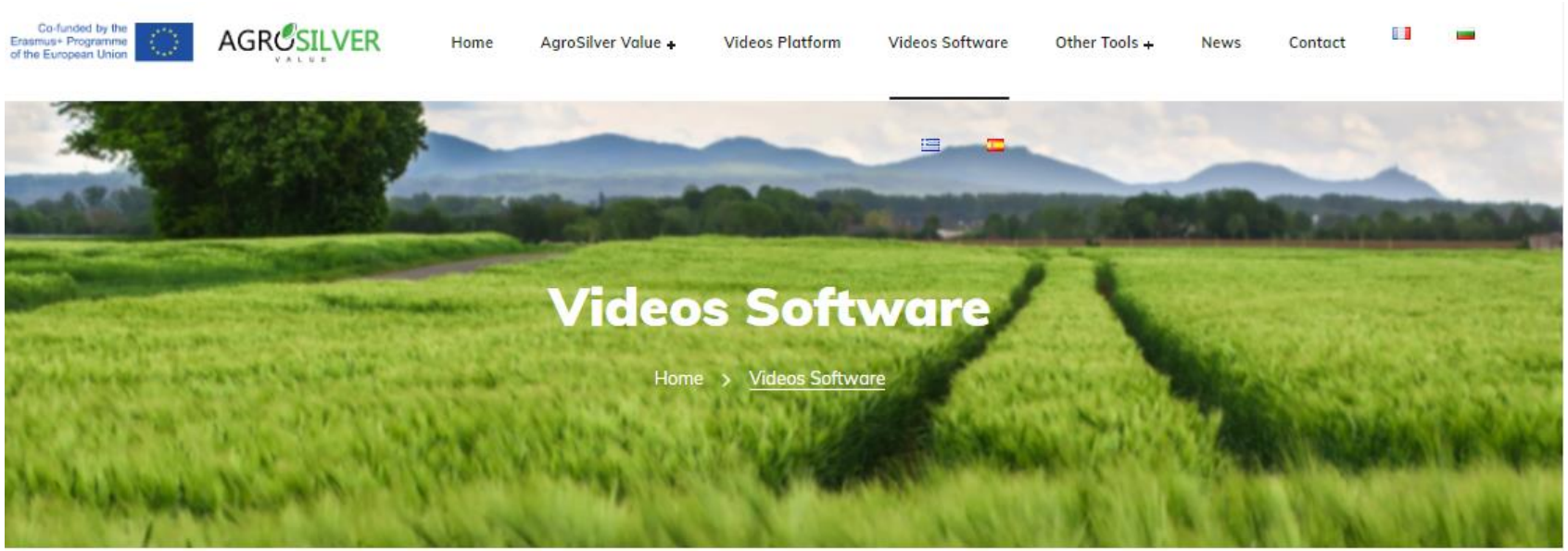
With the support of the Erasmus+ Programme of the European Union

INTELLECTUAL OUTPUT 2. SILVERKNOWS SOFTWARE

AGROSILVER VALUE

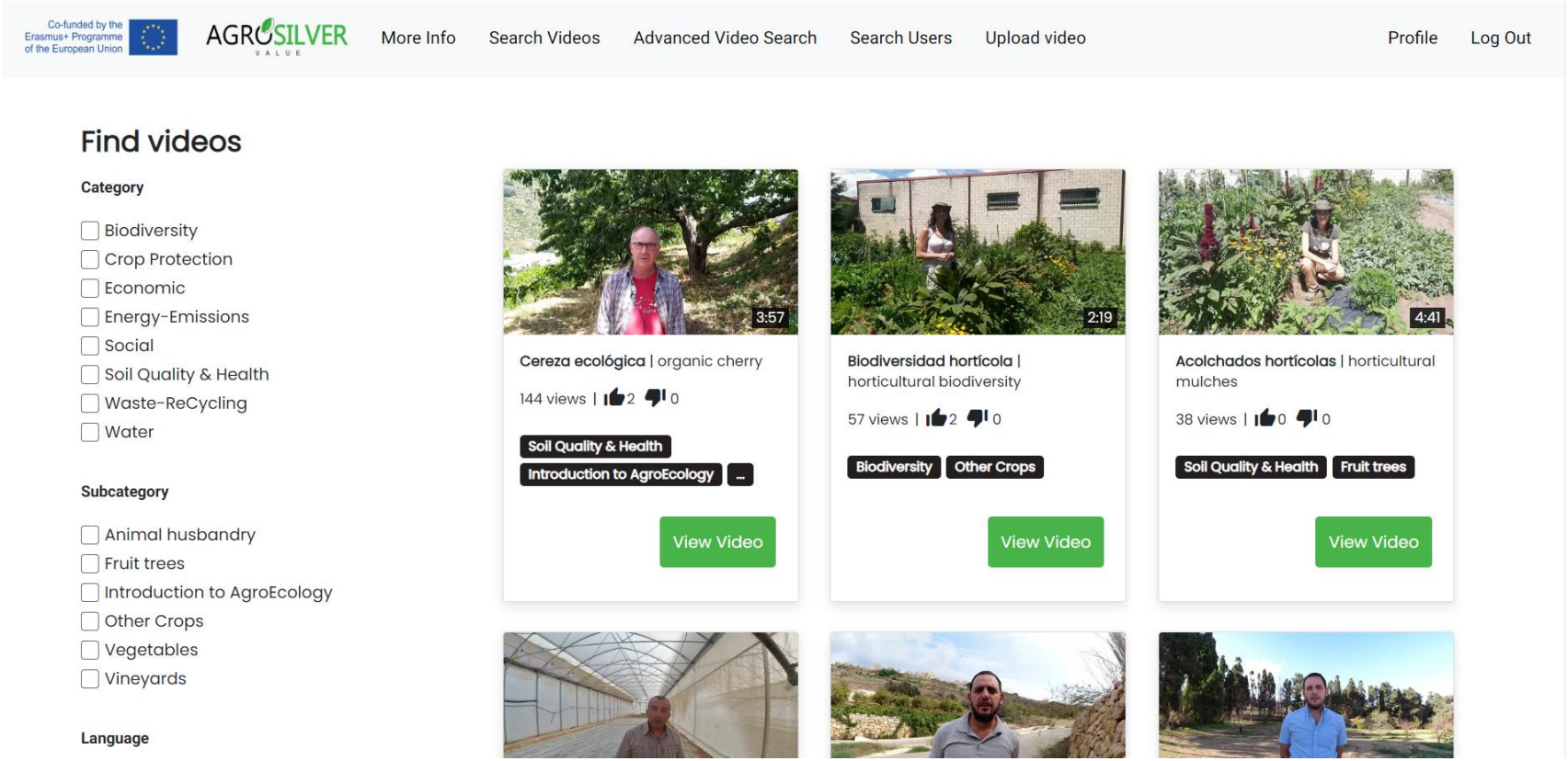
Integrating silver knowledge from agricultural sector into the VET systems

SILVERKNOWS SOFTWARE. Introduction

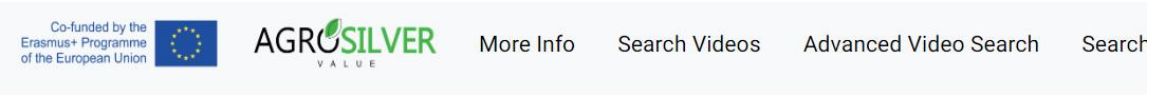


SILVERKNOWS SOFTWARE. Introduction

SilverKnows is the key element of the project.



SILVERKNOWS SOFTWARE. Introduction



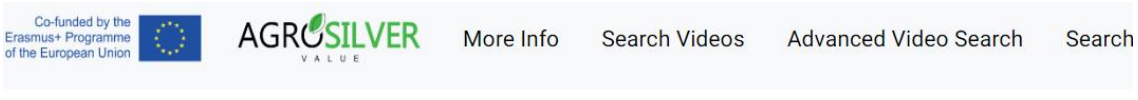
Grafting 'T-budding' process

3 0

VANESSA CUTAJAR

25/10/2022 • 45 views • 1 downloads

VIDEO



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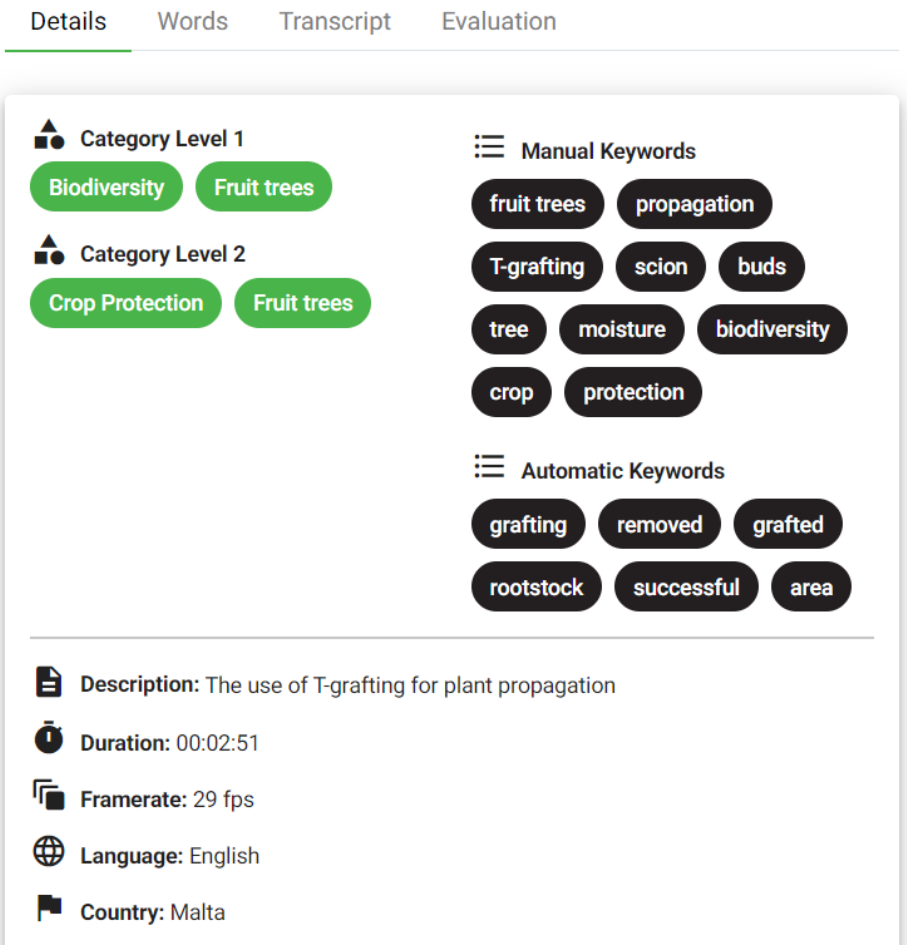
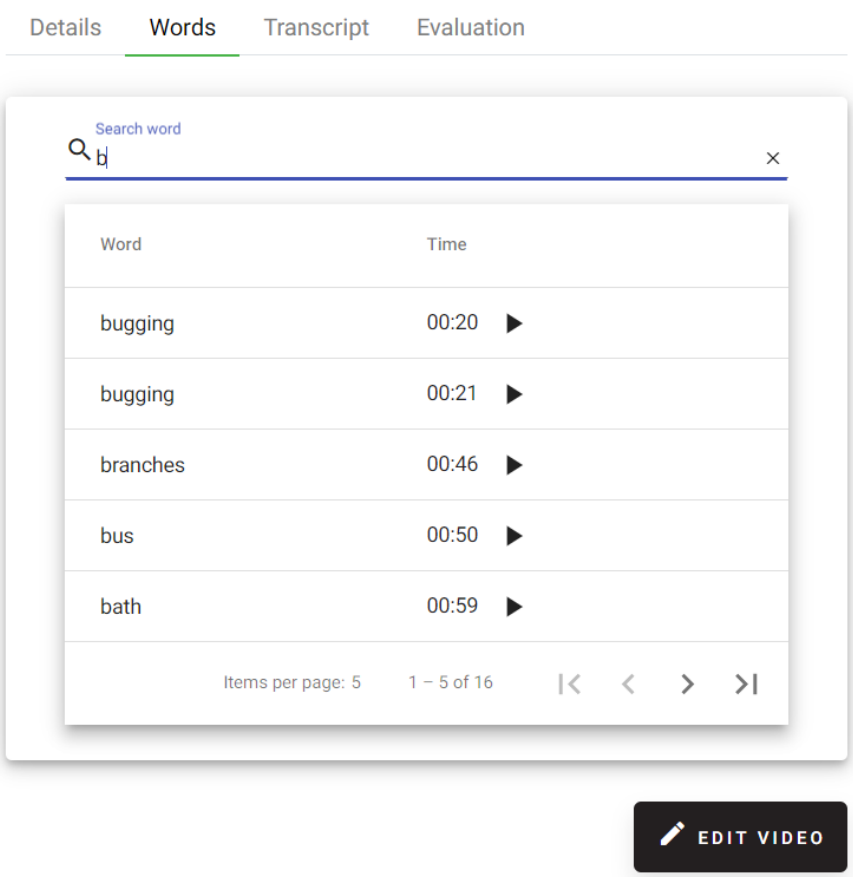
VIDEO

SILVERKNOWS SOFTWARE. Introduction





SILVERKNOWS SOFTWARE. Introduction

Grafting 'T-budding' process

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Details Words Transcript Evaluation

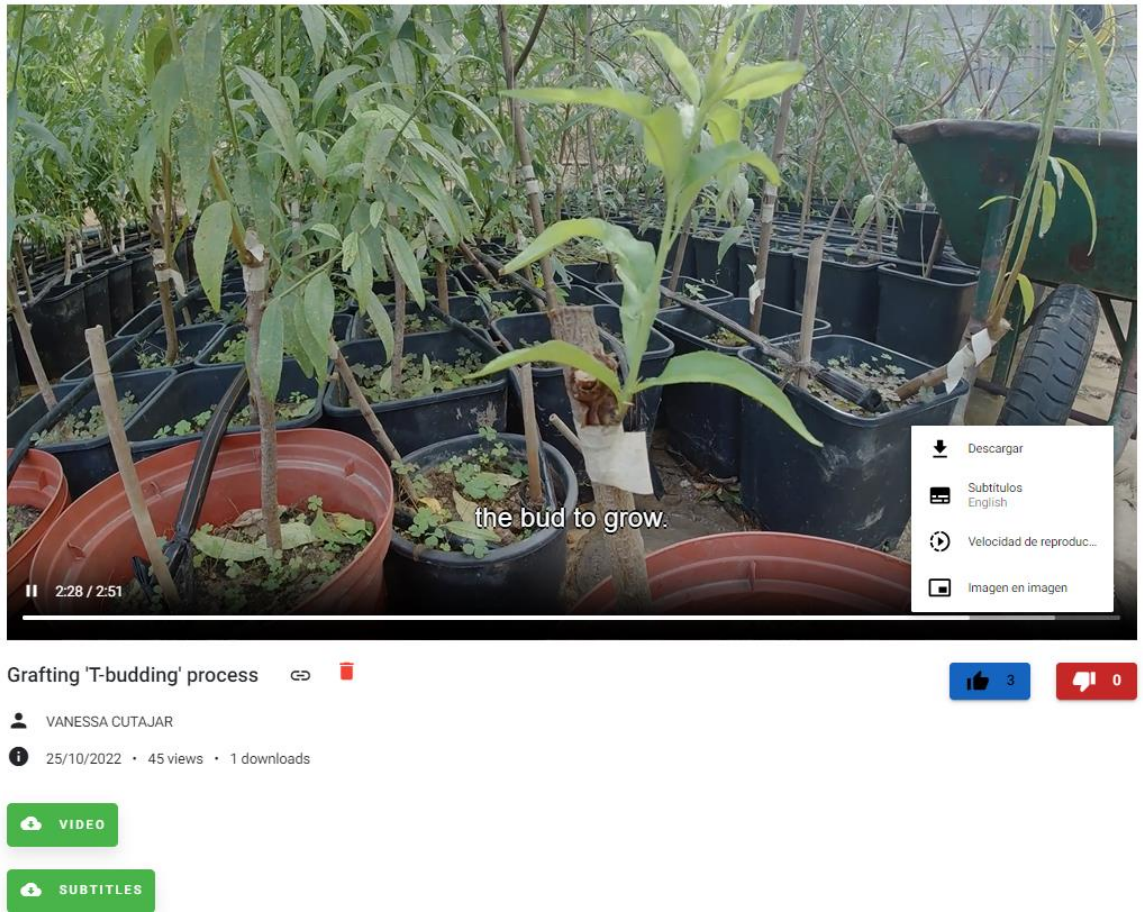
Language

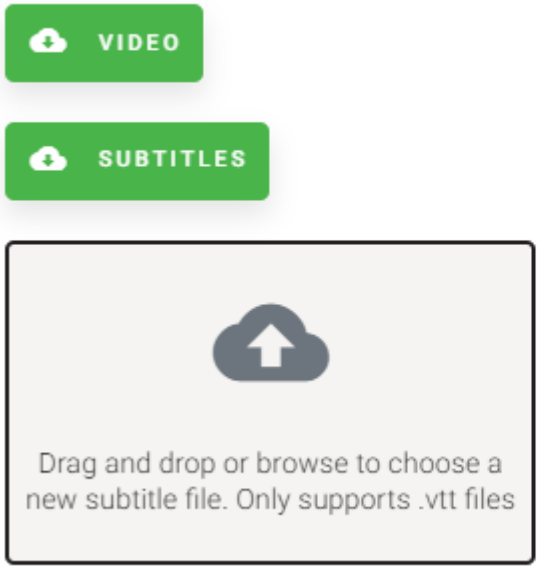
DA
DE
EL
EN
ES
ET
FI

work as an officer at the government experiment
Gozo Today I am introducing you to a special
T-budding or shield budding This will produce
rafted onto is it referred to as the rootstock while
referred to as the scion Successful t-budding
as mature buds for higher successful rates bud
t good growth are selected. The leaves from the
to avoid evapotranspiration The process of t-
e bud from the bud stick using the grafting knife.
w the bud. The bud and a small sliver of bark is
cut upwards with a slicing motion. Another cut is made across the top of the bud to join the previous cut to separate it from the bud stick. This should create a shield shape cut. For the grafting on the rootstock, a horizontal and a vertical incision on the stem of the rootstock is made. The t-shape cut can also be

EDIT VIDEO

SILVERKNOWS SOFTWARE. Introduction





SILVERKNOWS SOFTWARE. Introduction

The software is able to:

- Read the contents of the videos, converting the audio into encoded information, in any of the country languages.
- To link the encoded information the right moment when it is explained in the video.
- To analyse the encoded information and provide key topics which are included in the video and can be the main thematic of the information.
- To store this encoded information and be able to compare it with the rest of encode information coming from other videos, in order to look for patterns of answers.

SILVERKNOWS SOFTWARE. Introduction

The software is able also to:

- To show moments of the video where the key information is displayed.

- To allow users to search for specific content, based on multiple filters and key information, in order to obtain customized reports on the training available in the selected topic.

- The results of the queries can be displayed as a report, where the different results coming from different countries are displayed and compared. Users will be able to include several related searches, like an index of learning units, and the software will provide the report with the results of every learning unit included.

SILVERKNOWS SOFTWARE. Reports

The objective of the software is to easy the teachers work when looking for contents for a specific learning unit.

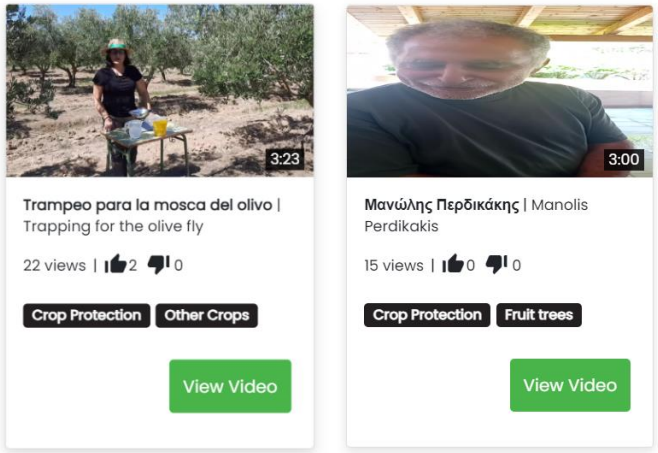
Instead of having to analyse the videos and visualizing them one by one, sometimes to find out that the quality of the information is not good, the teacher obtains a visual report listing the videos where the information is explained, together with the information (encoded text) of the video.

The teacher is able to read the different texts of the videos, identifying the parts which are more interesting for him and being able to select the different proposed videos.

SILVERKNOWS SOFTWARE. Scoring the quality of information

Another extra value of the software is the comparison of encode text, which allow to identify the right information in the videos (if the same answer is repeated several times in the video, the software propose it as correct), separating right videos from wrong videos. For example, if a farmer is speaking about quantity of nitrate for a crop, and the same information is repeated in several videos, the software identifies the answer as correct.

Teacher is also able to score the information of the videos, so the software also takes into account this scoring when displaying to other teachers.



SILVERKNOWS SOFTWARE. Innovation of OUTPUT

The software application in the VET is **a full innovation.**

A few applications currently encode audio to obtain the content in text format, but they are used for providing subtitles and other services.

The application of the software into the videos in order to identify their content and be able to connect videos from different sources, obtaining related information, is a new approach which easy the utility of any video content for training.

The software include a pilot development for translation into different languages, so the information provided from a silver farmer of one part of Europa can be also used by teacher on the other side of the continent.

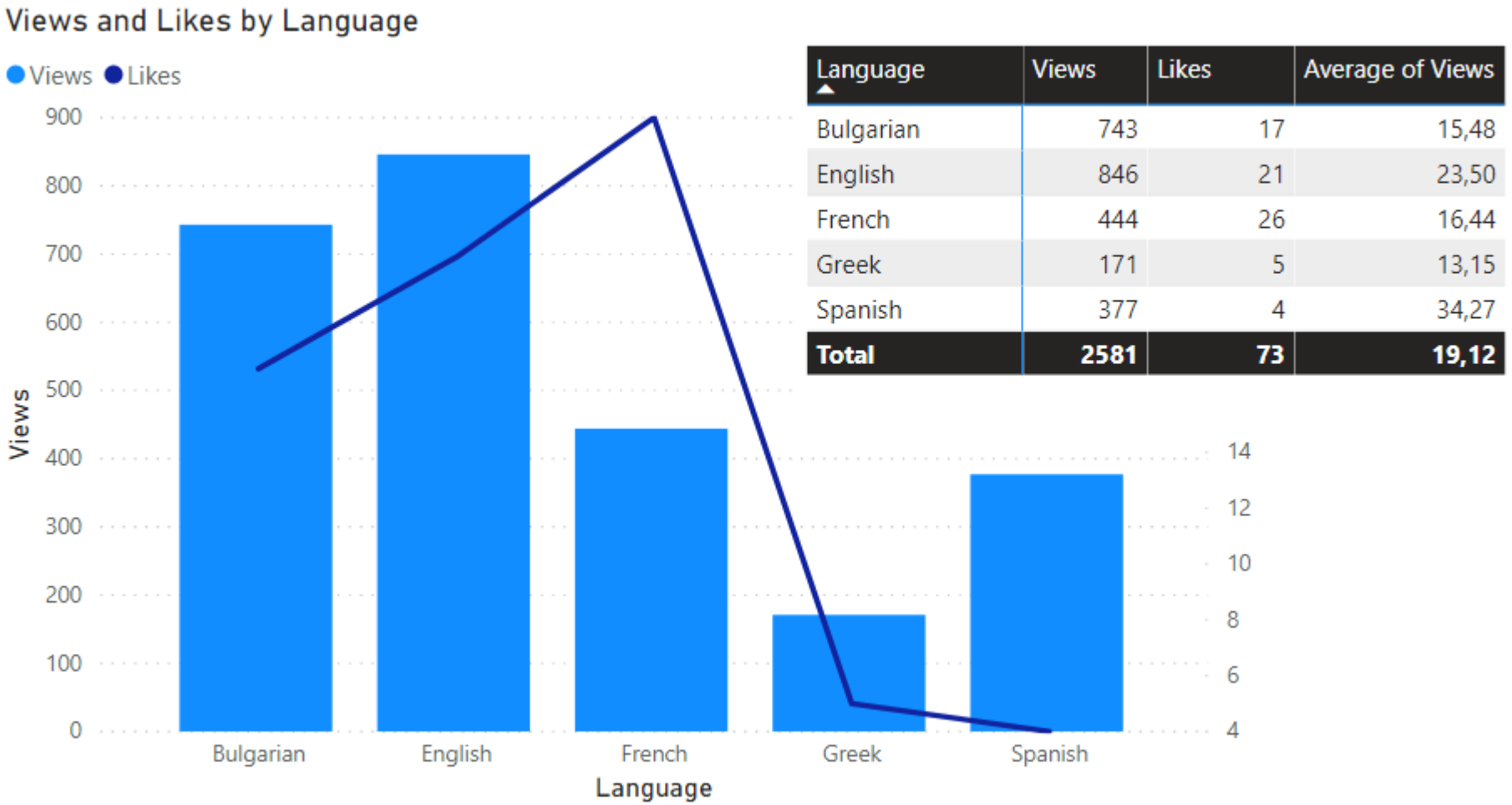
SILVERKNOWS SOFTWARE. Transferability and impact

The software is the most important intellectual output of the project, and it was expected to have a very large impact in the project organizations, the VET centres of the project regions and VET centres and teachers all over Europe.

All the videos from the data platform have been processed in the software, creating a mine of processed videos with close to 1.000 minutes of experiences.

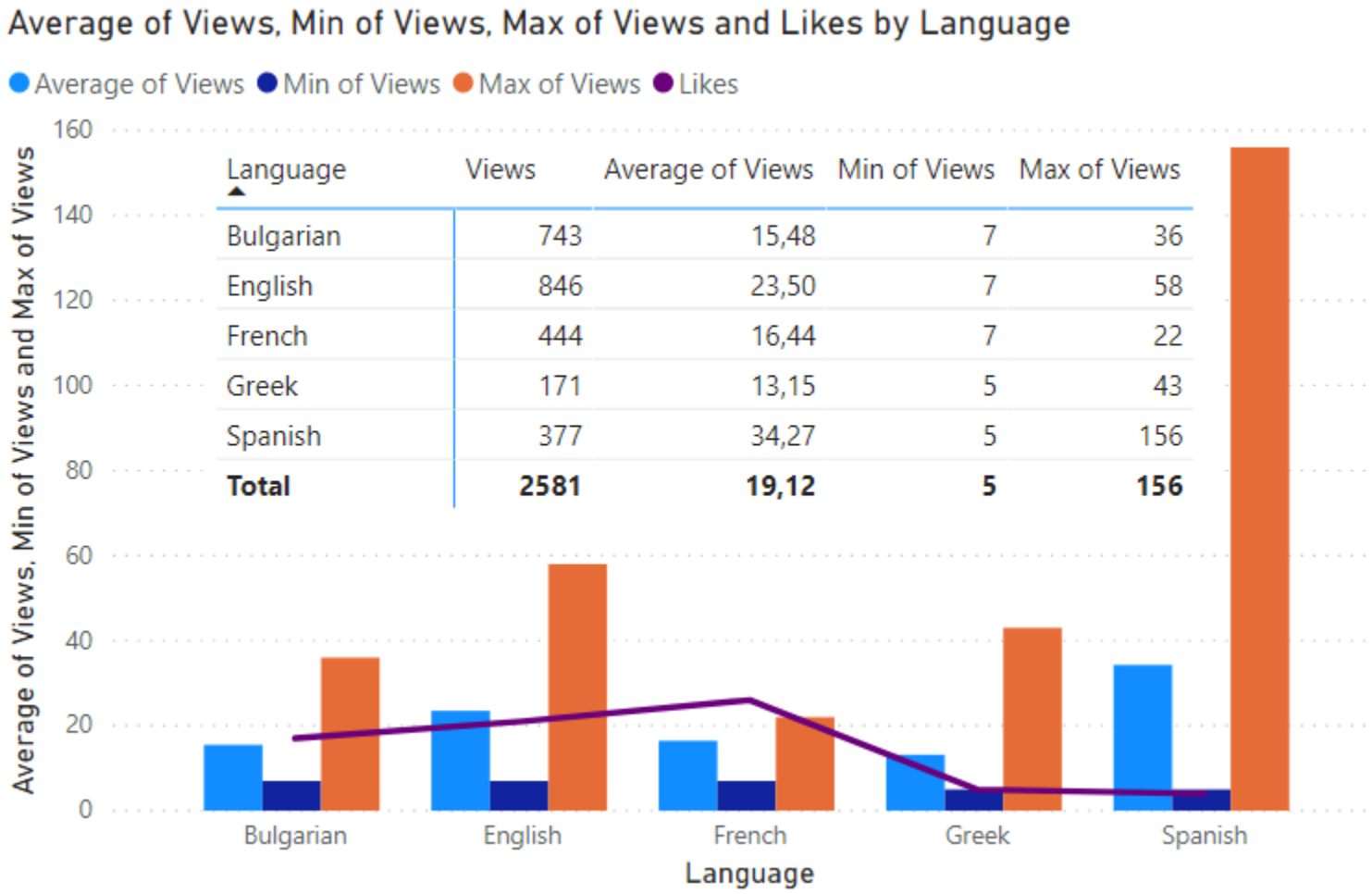
BULGARIA	329 minutes	47 videos
SPAIN	46 minutes	10 videos
FRANCE	100 minutes	21 videos
MALTA	64 minutes	20 videos
GREECE	478 minutes	32 videos
TOTAL	1.017 minutes	130 videos

SILVERKNOWS SOFTWARE. Transferability and impact



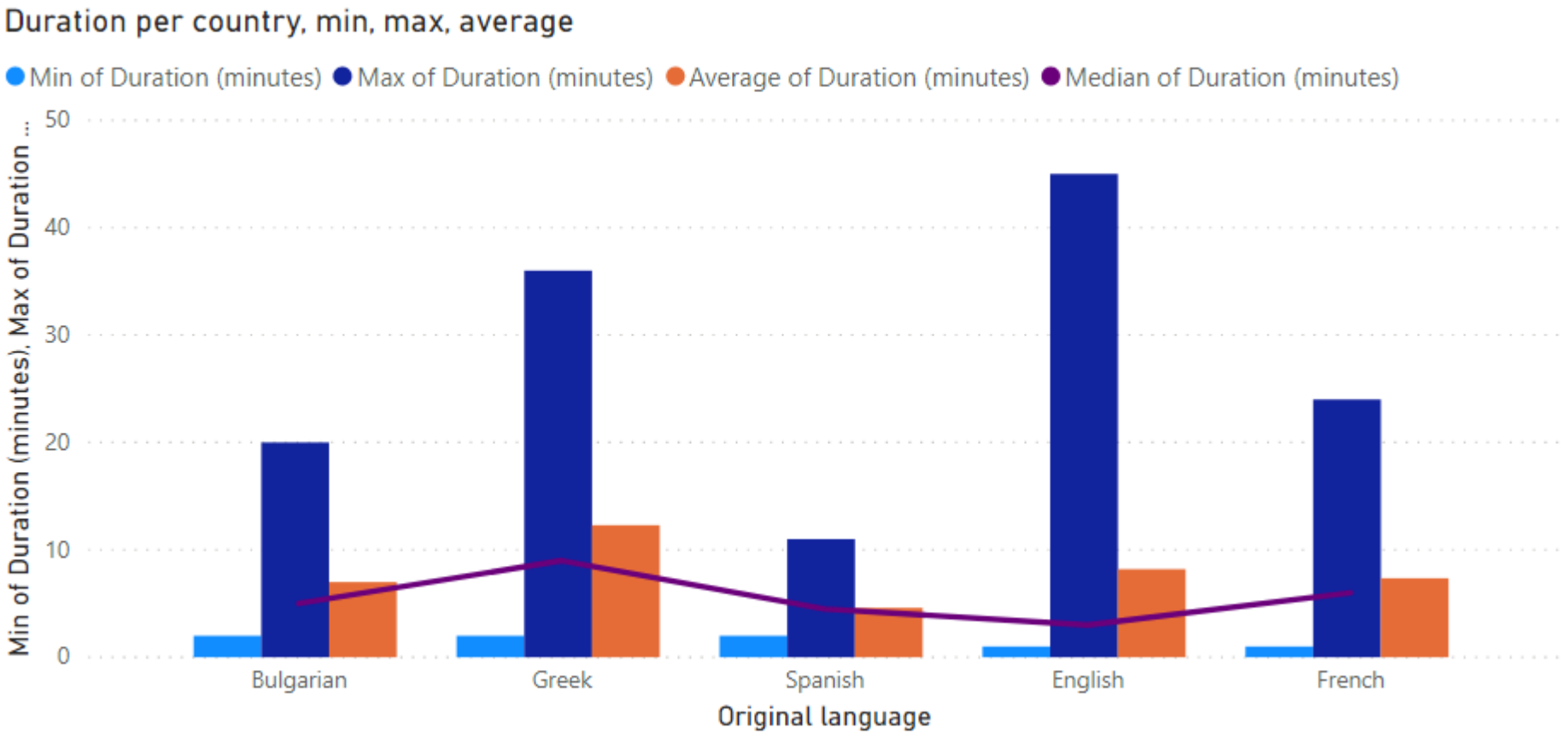
Language	Views	Likes	Average of Views
Bulgarian	743	17	15,48
English	846	21	23,50
French	444	26	16,44
Greek	171	5	13,15
Spanish	377	4	34,27
Total	**2581**	**73**	**19,12**

SILVERKNOWS SOFTWARE. Transferability and impact



Language	Views	Average of Views	Min of Views	Max of Views
Bulgarian	743	15,48	7	36
English	846	23,50	7	58
French	444	16,44	7	22
Greek	171	13,15	5	43
Spanish	377	34,27	5	156
Total	**2581**	**19,12**	**5**	**156**

SILVERKNOWS SOFTWARE. Transferability and impact



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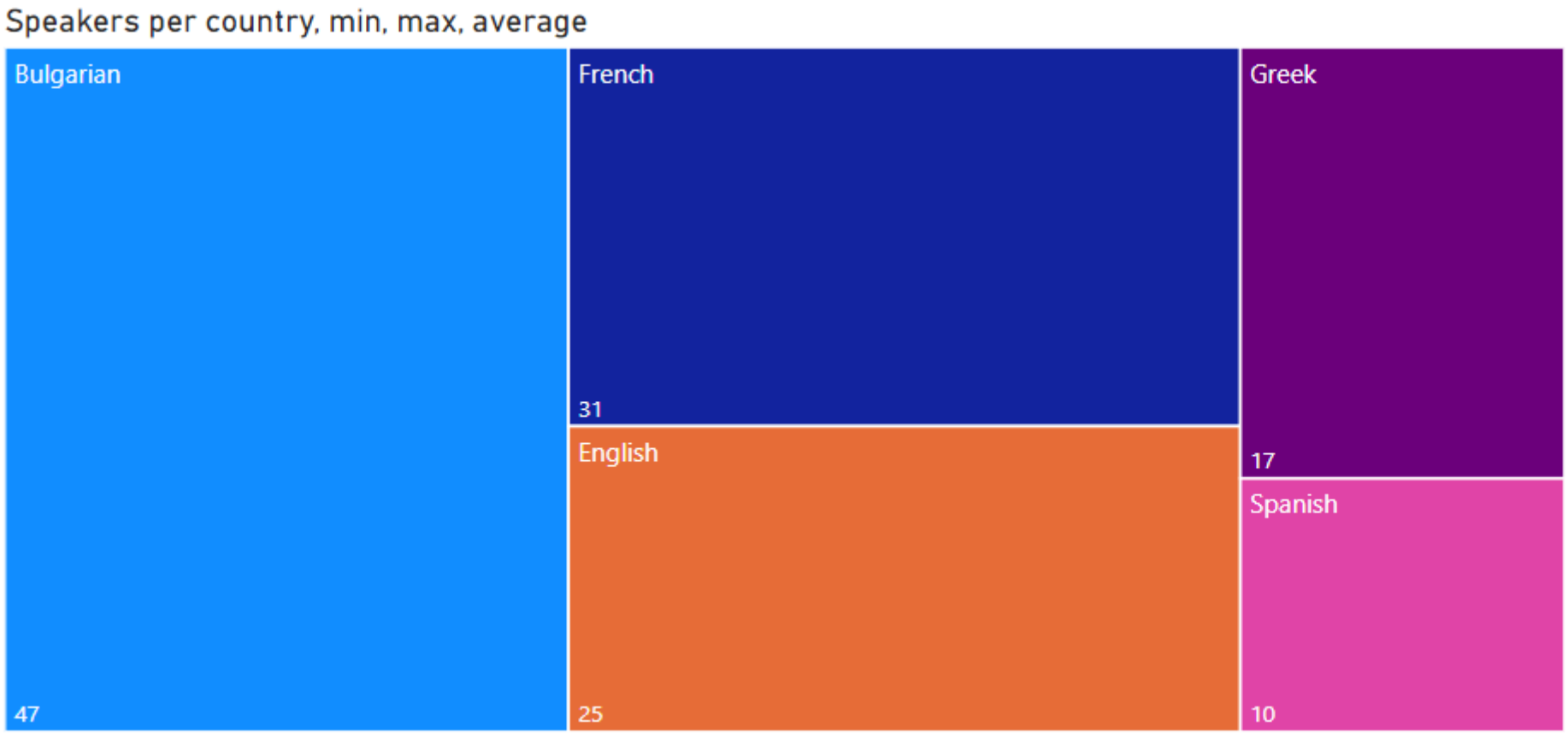

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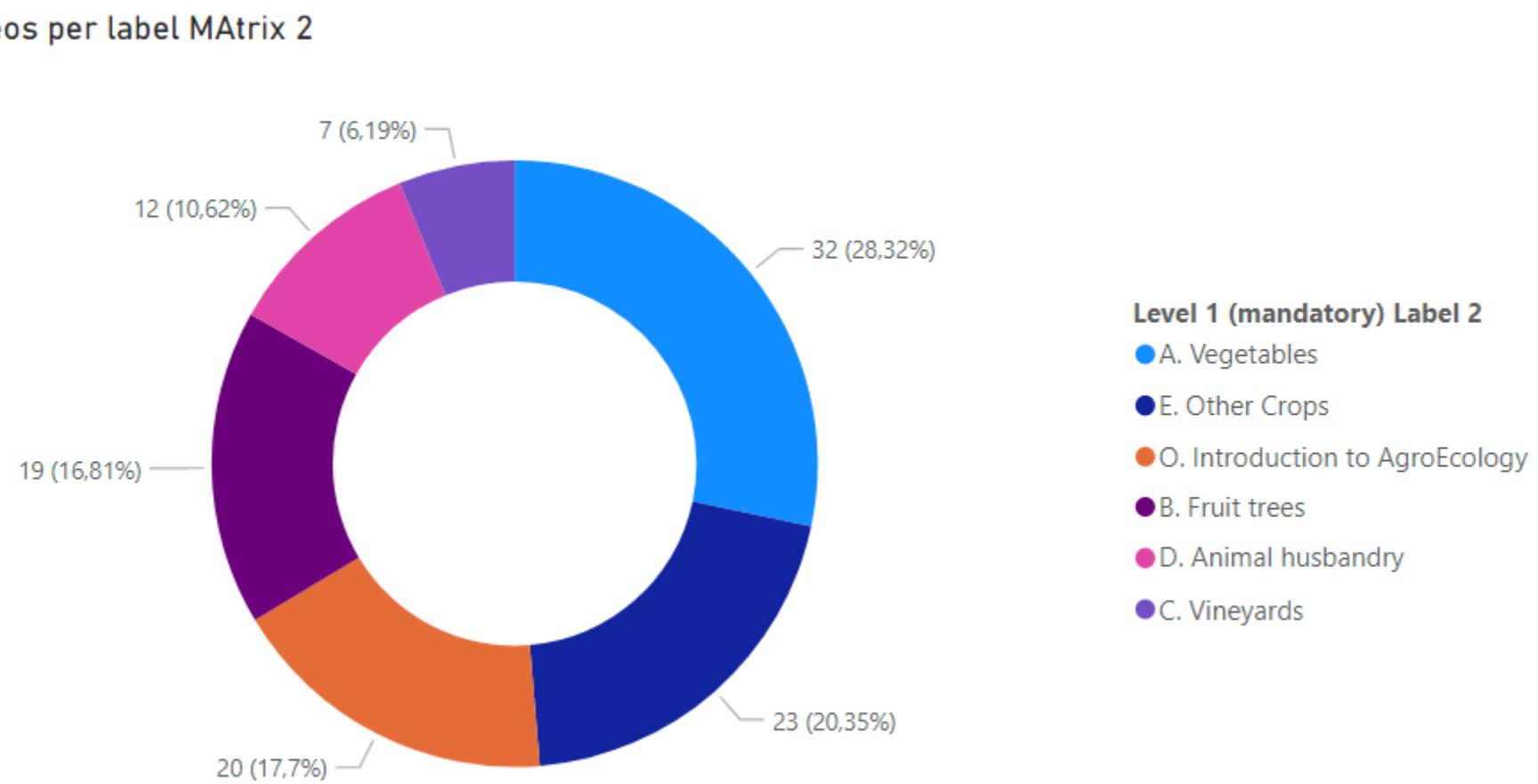

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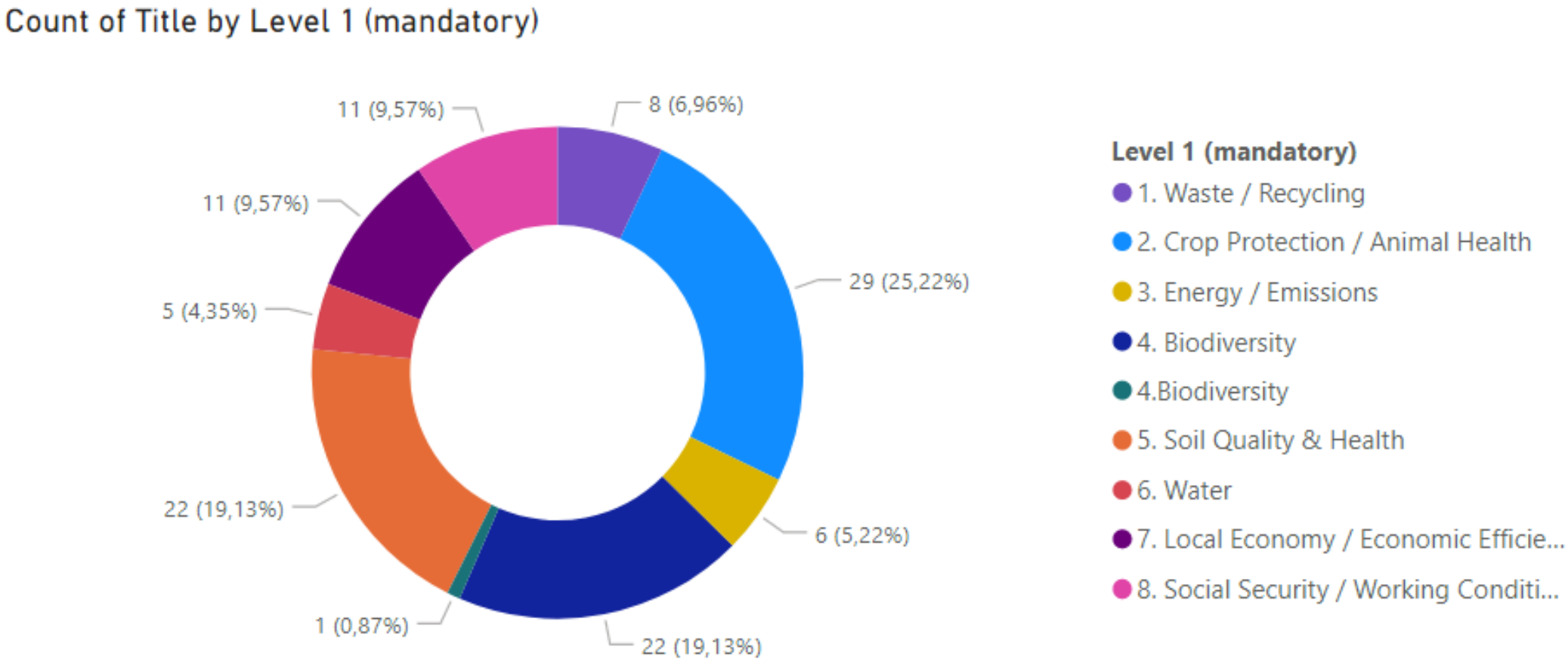

SILVERKNOWS SOFTWARE. Transferability and impact

Original language	Duration (minutes)	Average of Duration (minutes)	Nº Speaker Company	Nº of Speaker	Nº videos
Bulgarian	329	7,00	33	47	47
French	228	7,35	14	22	31
English	205	8,20	12	17	25
Greek	209	12,29	13	15	17
Spanish	46	4,60	3	6	10
Total	**1017**	**7,82**	**74**	**106**	**130**

SILVERKNOWS SOFTWARE. Transferability and impact

The GT Dissemination and exploitation includes specific activities to multiply the impact that the project intellectual outputs produce in the participant groups and other target groups.

The main tools for promoting the replicability of this output is the EXPLOITATION PLAN.

In order to guarantee a correct exploitation of projects results, the plan specifies:
- Objectives of post project sustainability actions collectively and by individual partners
- Identification of main exploitable assets and the priority assets
- Measures for successful exploitation

SILVERKNOWS SOFTWARE. Introduction

Based on the high potential of replicability of the Software, and the planned exploitation activities, were actually reached the following key figures and impacts:

- 1.000 minutes of videos from partners and 100 new minutes processed every year
- 100 teachers using the software in pilot courses and 100 new users every year
- >500 sessions per year in the software

SILVERKNOWS SOFTWARE. Tasks leading to the production of the intellectual output and the applied methodology

FundeuTAD has coordinated the development of the Silver Knowledge Software, following the indications of the partnership.

Every partner has participated in the definition of the usability for the teachers, the definition of the reports, the validation workshops for software technical specifications, and the processing of the videos with the software.

- CALeG coordinates the specific dissemination actions for the exploitation of this intellectual output.
- INPLA has coordinated the quality evaluation of the output with the experts' network.

The Software is the intellectual output consuming more resources, with **289 days of technicians work and 279 of teachers.**

SILVERKNOWS SOFTWARE. Tasks leading to the production of the intellectual output and the applied methodology

The involved tasks for the delivery of this intellectual outputs are:

TG2. MARKET ANALYSIS (Preparation) leader FundeuTAD.

GT3 DATA PLATFORM (M1 to M9) leader Maich
TASK 3.1. Detailed content (M1 – M2)
TASK 3.2. Video production (M2 – M9)
TASK 3.3. Data structuring and indexing (M2 – M9)

SILVERKNOWS SOFTWARE. Tasks leading to the production of the intellectual output and the applied methodology

GT4 SILVERKNOWS SOFTWARE (M2 to M16) leader FundeuTAD

TASK 4.1. Development of SilverKnows Software (M1-M16)

Silverknows is a software which allows to mine into the specific knowledge included in every video. The value of the software is to read the internal content of the video and to be able to identify key words, data and the moment when the video is providing it. The jump of quality is to pass from a video with labels included manually, to a video with thousands of labels produced automatically and identificating the specific moments where the video is explaining the topic.

FundeuTAD has coordinated this work, which count with allocation for external consultants, and has lead the development of the tool based on their expertise in the field.

TASK 4.2. Teachers usability and reports (M9-M16)

The tool has to assure its usability for teachers, so teachers will be involved in the definition of the interface, and format of the reports. Teachers has been asked to design the format of the reports, identifying the key data they need to improve their learning contents or methods.

SILVERKNOWS SOFTWARE. Tasks leading to the production of the intellectual output and the applied methodology

TASK 4.3. Video processing and refining (M9-M16)

Videos of the project had different levels of processing and refining, the basic one is the manual indexing of the Data Platform, the advanced one is the detailed indexing after the processing of the videos with the SilverKnows software, and finally the processed videos receive a second manual process for validating and refining of contents, where videos with better contents are selected and pointed out as top references.

In this task, the full content of the Data Platform has been processed with the software, creating a mine of videos with hundreds of minutes of information indexed and stored. The consortium has used this data mine to create the 3 learning units which have been used in the pilot courses.

SILVERKNOWS SOFTWARE. Tasks leading to the production of the intellectual output and the applied methodology

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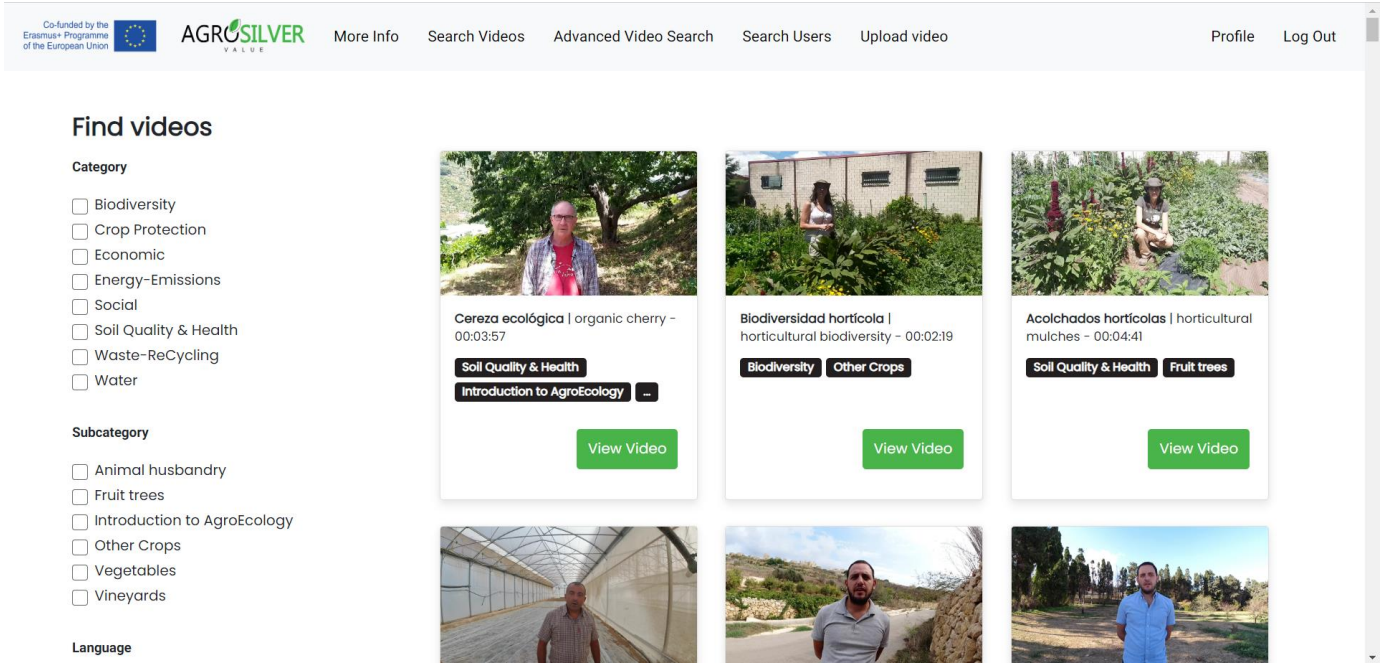
SILVERKNOWS SOFTWARE. Tasks leading to the production of the intellectual output and the applied methodology

MILESTONES GT4, validated in workshop 3

- Software SilverKnowS (M16)
- Videos in data Platform processed (M16)



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