



## EGI-Engage

# Analysis of existing biodiversity informatics standards, tools and protocols and needs to support species relationship data

LW-CC D3.1 (internal)

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Date	12 June 2015
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Lead Partner	CSIC/CIBIO
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### Abstract

After an analysis of the framework of different standards, protocols and tools available within GBIF, the needs of adaptation/expansion to support species relationship data will be defined. Storage and organization needs of geo-referenced information on species interactions, extracted from the primary literature, will be considered. The system implemented will be able to build networks of potential interactions, based on the species that have been reported in a given area. Social network algorithms will be used to provide constraints on the network built by the researcher. The relationships should be connected with the environmental information layers, allowing the prediction of changes due to climate and land use change, estimate the impact of invasive species or the spread of agricultural and forest pests, and test the theory on the structure and dynamics of ecological networks.



EGI-Engage is co-funded by the Horizon 2020 Framework Programme of the European Union under grant number 654142. <http://go.egi.eu/eng>

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#### DELIVERY SLIP

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#### DOCUMENT LOG

<i>Issue</i>	<i>Date</i>	<i>Comment</i>	<i>Author/Partner</i>
<b>V0.1</b>	25 may 2015	First ideas after discussion at EGI Conference in Lisbon	J.Marco CSIC
<b>V0.2</b>	30 jun 2015	Compilation ready	
<b>V1.0</b>	15 jul 2015	First complete version	
<b>V2.0</b>	31 jul 2015	Final version after review	

#### TERMINOLOGY

A complete project glossary is provided at the following page: <http://www.egi.eu/about/glossary/>

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Title of the Document / Number if required

## Contents

1	Introduction.....	5
1.1	Methodology followed in the analysis.....	5
1.1.1	List of tools for project management .....	5
1.1.2	List of tools for Forums .....	5
1.1.3	List of tools for education/webinars.....	5
2	Result of the analysis of initiatives.....	6
2.1	Selection for project management .....	6
2.1.1	OpenProject.....	<b> Error! Marcador no definido.</b>
2.2	Selection for Collaboration.....	7
2.2.1	Wiki + INDICO .....	<b> Error! Marcador no definido.</b>
2.3	Selection for training/education.....	7
2.3.1	MOODLE.....	<b> Error! Marcador no definido.</b>
2.3.2	EDX .....	<b> Error! Marcador no definido.</b>
3	Actions required for using the tools.....	9
3.1	On the Implementation of OpenProject .....	9
3.2	On the Implementation of Wiki and INDICO.....	9
3.3	On the implementation of moodle/edX .....	9
4	Now for the lists and etc.....	10
4.1	Bullet lists.....	10
4.2	Numbered lists .....	10
5	Figures and captions .....	11
5.1	Pictures .....	11
5.2	Tables .....	11
6	References .....	13
	Appendix I. Appendix example .....	14

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Title of the Document / Number if required

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Title of the Document / Number if required

# 1 Introduction

*From the proposal:*

After an analysis of the framework of different standards, protocols and tools available within GBIF, the needs of adaptation/expansion to support species relationship data will be defined. Storage and organization needs of geo-referenced information on species interactions, extracted from the primary literature, will be considered. The system implemented will be able to build networks of potential interactions, based on the species that have been reported in a given area. Social network algorithms will be used to provide constraints on the network built by the researcher. The relationships should be connected with the environmental information layers, allowing the prediction of changes due to climate and land use change, estimate the impact of invasive species or the spread of agricultural and forest pests, and test the theory on the structure and dynamics of ecological networks...

## 1.1 Methodology followed in the analysis

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### 1.1.1 List of standards

### 1.1.2 List of protocols

### 1.1.3 List of tools

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## 2 Result of the analysis of initiatives

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### 2.1 Selection for standards

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#### 2.1.1 GBIF related...

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##### 2.1.1.1 *Support and integration*

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## 2.2 Selection for Tools

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### 2.2.1 ?

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#### 2.2.1.1 *Support and integration*

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## 2.3 Selection for ...

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### 2.3.1 ?

### 2.3.2 ?

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#### *2.3.2.1 Support and integration*

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## 3 Actions required for using the tools

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### 3.1 On the Implementation of xxxx

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### 3.2 On the Implementation of ...

### 3.3 On the implementation of ...

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## 4 Now for the lists and etc.

### 4.1 Bullet lists

- Item 1
- Item 2
- Item 3

### 4.2 Numbered lists

1. Item 1
2. Item 2

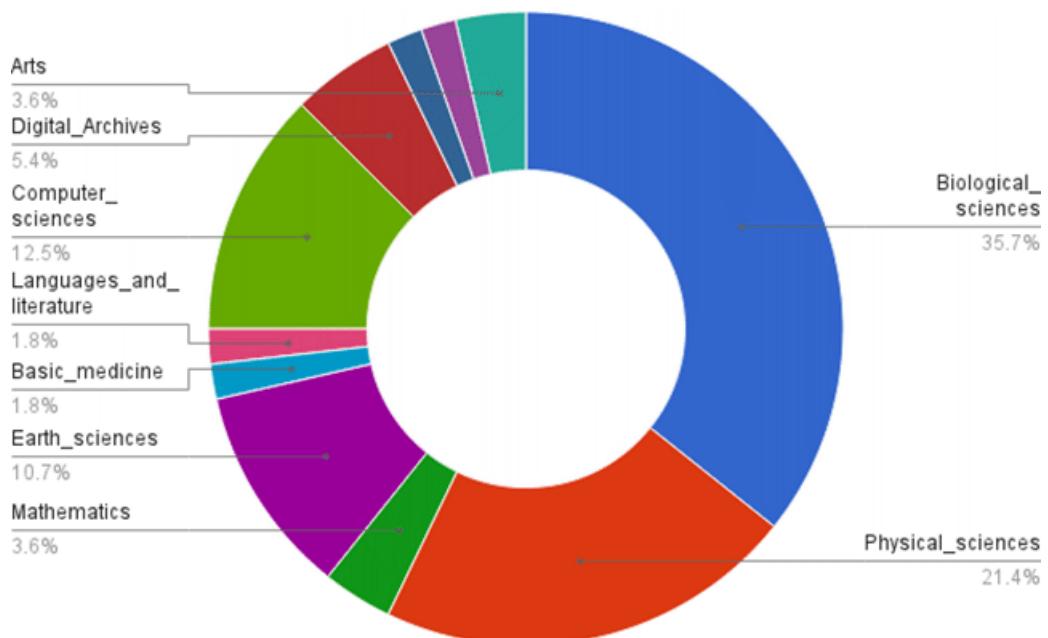
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## 5 Figures and captions

### 5.1 Pictures

- WRAP TEXT: “in line with text”
- The caption should go after the picture
- The figures should be centred and the caption as well
- Do not use expressions such as “the picture above” or the “figure below” when referring to figures (it may be wrong!)
- When referring to figures in the text, please follow one or the two options:
  - Inline / non-abbreviated: E.g.: “Figure 1 shows many examples of butterflies showing dragon heads.”
  - In brackets / abbreviated: E.g.: “We demonstrated that many butterflies have dragon heads (Fig. 1)”



*Fig.1 - The figures should be centred and the caption as well*

### 5.2 Tables

- Keep the tables centred
- Use the preferred colour scheme when possible

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- Use the ‘no spacing’ quick style or the ‘normal’ quick style for your tables
- Please place the caption above the tables.
- When referring to tables in the text please never abbreviate ‘Table’

**Table 1 – Preferred colour scheme**

	<b>Name</b>	<b>Partner/Activity</b>	<b>Date</b>
<b>From:</b>			
<b>Moderated by:</b>			
<b>Reviewed by</b>			
<b>Approved by:</b>			

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## 6 References

No	Description/Link
R1	Description <a href="http://example.com">http://example.com</a>
R2	

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## Appendix I. Appendix example