



Deliverable 6.3

Dissemination procedures

Big Data for Medical Analytics

Project Coordinator	Supriyo Chatterjea, Philips Electronics Nederland B.V.		
Start date Project	January 1 st 2018	Duration	38 months
Version	1.0		
Status	Final		
Date of issue	31/08/2018		
Dissemination level	Public		



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 780495. The content of this document reflects only the author's view. The European Commission is not responsible for any use that may be made of the information.



Authors' data

Author	Beneficiary	e-mail
Josep Redón	INCLIVA	Josep.redon@uv.es
Alexandra Muñoz	INCLIVA	
Ana Ferrer	INCLIVA	
Final editor's address	Supriyo Chatterjea Philips Electronics B.V. High Tech Campus 34 5656AE Eindhoven / Netherlands	

Management Summary

This document describes the procedures that BigMedilytics consortium must follow for the dissemination activities, which corresponds to the third deliverable of the Work Package 6: Dissemination, Communication & Standardisation, led by INCLIVA.

The document is structured in three sections: introduction and overview; dissemination of results, and dissemination procedures:

- The introduction and overview explain the purpose of the document and the background and justification of dissemination actions in EU funded projects.
- The section about dissemination of results present the objectives of the dissemination, the target and the main channels and platforms to disseminate effectively in the framework of the project.
- The third section refers to dissemination procedures: a first overview is given with the general dissemination procedures. After this, specific procedures are explained based on the Grant Agreement and the Consortium Agreement. The last aspect mentioned is the communication of the results.

Table of Contents

- 1. Introduction and overview 5**
 - 1.1. Purpose of the document..... 5
 - 1.2. Background and justification 5
 - 1.3. Related documents 6
- 2. Dissemination of results 7**
 - 2.1. Objective 7
 - 2.2. Targeted audiences 7
 - 2.3. Dissemination channels and platforms 7
 - 2.3.1. Scientific publications 8
 - 2.3.2. Events 9
 - 2.4. Evaluation 11
- 3. Dissemination procedures 12**
 - 3.1. Dissemination procedures overview 12
 - 3.2. Dissemination of own results 13
 - 3.3. Dissemination of another party’s unpublished results or background 13
 - 3.4. Justification of an objection in dissemination 13
 - 3.5. Co-operation obligations 14
 - 3.6. Open access to scientific publications 14
 - 3.7. Open access to research data 15
 - 3.8. Funding publicity 15
 - 3.9. Communication of the results 15
- Appendix A Glossary 16**
- Appendix B Publication info 17**

1. Introduction and overview

1.1. Purpose of the document

The purpose of this document is to describe the dissemination actions and procedures of the BigMedilytics project. This deliverable has been developed by INCLIVA as lead beneficiary of the Work package 6: Dissemination, Communication & Standardisation.

1.2. Background and justification

Dissemination refers to “the public disclosure of results by any appropriate means (other than resulting from protecting or exploiting the results), including by scientific publications in any medium”. Regarding results, they are defined as “any tangible or intangible output of the action, such as data, knowledge and information whatever their form or nature, whether or not they can be protected, which are generated in the action as well as any attached rights, including intellectual property rights”¹.

The dissemination of results contributes to the progress of science and it is in line with the EU Research and Innovation policy goals: open innovation, open science, open to the world². The conversion of knowledge into innovation will shape a better European future. This is why promoting and investing in innovative ideas with rapid scale-up potential is one of the key actions to maximise the impact of EU research and innovation programmes³.

In this case, the transfer of knowledge and the dissemination of results are essential to improve healthcare, and making these results openly available will enable their sharing in order to generate further researches, novel solutions or tackle other challenges. This is even more important in the framework of a project that has received funding from the European Commission through European tax payers. In this sense, the public investments done will be justified by the innovations achieved.

¹ Source: EC Research & Innovation Participant Portal Glossary/Reference Terms

² Source: <https://publications.europa.eu/en/publication-detail/-/publication/3213b335-1cbc-11e6-ba9a-01aa75ed71a1>

³Source:https://ec.europa.eu/research/evaluations/pdf/archive/other_reports_studies_and_documents/hlg_2017_report.pdf#view=fit&pagemode=none

1.3. Related documents

- D6.1 Website portal
- D6.2 Communication plan and tools

2. Dissemination of results

2.1. Objective

The BigMedilytics project takes the dissemination task as the second highest priority after the creation/exploitation of the planned project results. The objective of the dissemination is to transfer knowledge and results in order to enable others to use and take up results, thus maximising the impact of BigMedilytics. The focus will be put on the demonstration of the benefits created by big data technologies to the key players of the healthcare sector (healthcare providers, payers and vendors).

The dissemination of results is expected in the fields of the 12 pilots of the project:

- Comorbidities
- Kidney disease
- Diabetes
- COPD / Asthma
- Heart failure
- Prostate cancer
- Lung cancer
- Breast cancer
- Stroke management
- Sepsis management
- Asset management
- Radiology workflows

2.2. Targeted audiences

The dissemination in BigMedilytics aims to transfer knowledge and results among the following specific target groups:

- Industry:
 - EU HealthTech industry
 - EU ICT big data industry
 - Health insurance industry
 - Healthcare providers
- Researchers / clinical scientists
- Policy makers
- Patient organisations
- More than 100 organisations representing key players in the EU Healthcare sector: care providers, insurances, medical device and diagnosis companies, pharmaceutical companies, and healthcare IT.

2.3. Dissemination channels and platforms

It is essential to disseminate results that emerge throughout the project in a targeted manner through effective dissemination channels / platforms such as:

- Scientific publications / posters
- Open Access repositories
- Events:
 - Two workshops
 - Sector meetings
 - Presentations to selected stakeholders
 - Targeted demonstrations
 - Conferences
 - Brokerage events
 - Scientific talks
 - Training demonstrations

- Fairs
 - Policy briefs / Recommendations
 - Project and partners webs
 - Professional social networks like LinkedIn
- The most used tools to disseminate are detailed below.

2.3.1. Scientific publications

Scientific journals are the most common means used to publish results. Thus, the results obtained by the project are expected to be published in specialized journals in the fields of the twelve pilots. An initial list of potential publications by pilot has been defined:

Pilot	Journal
Comorbidities	Annals of Internal Medicine
	British Medical Journal
	BMC Public Health
	BMC Cardiovascular Disorders
	Therapeutic Advances in Chronic Diseases
	PLOsOne
	Preventing Chronic Diseases
Kidney disease	American Journal of Transplantation
	Nephrology Dialysis Transplantation
	Clinical Transplantation
	Lancet
Diabetes	The American Journal of Obstetrics and Gynecology
	The European Journal of Obstetrics & Gynecology and Reproductive Biology
	Trends in Sciences Research
	Obstetrics & Gynecology
	Nature Methods
	PNAS
COPD / Asthma	Systems Medicine: Journal of Medical Systems Biology and Network Medicine
	Lancet Respiratory
	British Medical Journal
	New England Journal of Medicine
	Thorax
	Journal of American Medical Association
	CHEST
Heart failure	NATURE primary care respiratory medicine
	European Heart Journal
	European Heart Journal-Heart Failure
	Circulation
	Circulation-Heart Failure
Prostate cancer	Journal of American College of Cardiology
	European Urology
	Journal of Urology
	British Journal of Cancer
	Prostate Cancer
	Prostate and Prostatic Disease
	The Prostate
Lung cancer	International Journal of Urology
	Journal of Medical Systems
Breast cancer	Lung cancer
	Lancet Oncology
	Cancer
	Journal Clinical Oncology
Stroke	Annals of Oncology
	Lancet Neurology
	Brain
	Journal of Neurology
	Jama Neurology

	Stroke
Sepsis management	BMJ Quality & Safety
	JAMA
	Journal of Hospital Medicine
	The Lancet Infectious Diseases
	Clinical Infectious Diseases
	Journal of Infectious Diseases
Asset management	Journal of Medical Internet Research
	BMC Medical Research Methodology
	Implementation Science
	Journal of NeuroEngineering and Rehabilitation
Radiology workflows	Computerized Medical Imaging and Graphics
	IEEE Transactions on Medical Imaging
	International Journal of Computer Vision
	Medical Image Analysis
	IEEE Transactions on Pattern Analysis and Machine Intelligence
	Pattern Recognition
	Pattern Recognition Letters
	Computer Vision and Image Understanding
	Image and Vision Computing
Journal of Information Retrieval	

Other journals have been identified in the fields of technology and healthcare:

- International Journal of Medical Informatics
- Journal of the American Medical Informatics Association: JAMIA
- Journal of Biomedical Informatics
- Computer Methods and Programs in Biomedicine
- Artificial Intelligence in Medicine
- Journal of Big Data
- Big Data Analytics
- IEEE Transactions on Big Data
- International Journal of Health Care Ethics

2.3.2. Events

The project will participate in major events in order to organize demonstrations, share results and transfer knowledge. An initial list of the most suitable events is provided below:

Broad target	Core target	Goals	Activities	Specifics
Industry	EU HealthTech industry	Demonstration, transfer or results and best practices	Own workshop, showcases and presentations at major exhibitions	BigMedilytics workshop, Medica, HIMSS, Medtec Europe, Arab Health, CPhI, FIME, conhIT, e-Heath, etc.
	EU ICT big data industry	Demonstration, transfer or results outside healthcare	Own showcase and presentations at major exhibitions; selected event demonstrations	BigMedilytics symposium collocated with BDVA summit, EDF, CeBit, IFA, ICT, Smau, BigData, etc.
	Health insurance industry	To share results with health insurers	Presentations, sector meetings	Demonstration in selected meetings/conferences (e.g. Eurapco partners)
	Pharmaceutical industry	Support, partnerships	Presentations, demonstrations	Demonstrations in EFPIA consortium meetings, etc.
Researchers / scientists	Clinical scientists and professionals	Knowledge transfer, scientific exchange	Conferences, posters or oral presentations	AAPA, ACoP, ASCPT, ASH, annual meetings
	Researchers	Inform about factors that prohibit/enable data integration and increase efficiency	Publish a realistic review of using big data technologies to drive break through productivity; study of the ethical dilemmas in the pilots	Meetings with public administration; selected event presentations
Policy makers	European Commission	Presenting results via EC networking mechanisms	Meetings, elaboration of reports and brochures, newsletters	EU and national clusters (e.g. Amiens Métropole cluster, cluster Tic & Santé)
Patient organisations		Knowledge transfer and increased understanding	Seminars, publications, demonstrations	Regular meeting with patient representatives from selected organizations
More than 100 organisations representing key players in EU Healthcare sector: care providers, insurance, medical device and diagnosis, pharmaceuticals, healthcare IT		Demonstration, best practices, knowledge transfer	Two workshops including demonstrations	BigMedilytics workshops, spread results across EU, expand market share of Big Data technology providers through new deals.

Erasmus MC will contribute to the organisation of dissemination activities by using its Erasmus Summer School course for Clinicians of the Erasmus University Congressburo.

2.4. Evaluation

An initial list of indicators has been elaborated to measure the progress of the dissemination:

TARGET	INDICATOR	PROGRESS		
		Y1	Y2	Y3
EU HealthTech Industry	BigMedilytics workshop for External Exploitaion Partners		/1	/1
EU ICT big data industry	BigMedilytics symposium	/1	/1	/1
Health insurance industry	Demonstrations in selected meetings/conferences		/1	/1
EU HealthTech industry	Demonstrations at major Medicial tradeshows		/2	/2
End users	Tutorials/presentations/demos to selected hospitals		/6	/6
Healthcare authorities/Policy makers	Workshops with local/regional/national authorities	/1	/2	/4
Patient organisations	Meetings qith representatives of selected organisations	/1	/1	/1
Reserachers/scientists	Journal papers/conferences papers/posters	/6	/8	/8
European Commission	Presenting results via EC networking mechanisms	/2	/2	/2
Liaison within programme	Meetings with projects from ICT14-18 via BDVe-CSA [16]	/2	/2	/2
Standards	Participation in standarization events	/2	/3	/4

Some initial KPIs have been identified to evaluate the actions on dissemination:

Action	KPI
Presenting results via events	Number of events where results have been presented
	Audience reached in the events
Transfer knowledge Publications of results in journals	Number of actions to transfer knowledge
	Number of publications accepted
	Impact factor of the journals (average and accumulated)
	Number of citations
	Views
Protection of results	Downloads
	Number of protected results (Patents requested / software / know-how)
Publication on the website	Number of unique visits
Social media	Number of clicks
	Engagement

3. Dissemination procedures

3.1. Dissemination procedures overview

According to the Grant Agreement and the Consortium Agreement, a partner interested in disseminating results must follow a series of general rules:

- Notify all partners minimum 30 days prior to publication submission date or a presentation on a conference. Other parties have 30 days to object.
- Ensure open access (free of charge online access) to all peer-reviewed scientific publications relating to its results.
- The obligation to disseminate results doesn't change the obligation to protect results (Art. 27 GA), the confidentiality obligations (Art. 36 GA), the security obligations (Art. 37 GA) or the obligations to protect personal data (Art. 39).
- If a beneficiary intends not to protect its results, it may need to formally notify the European Commission before dissemination takes place.
- All the publications must mention that the project has received funding from the EU using the EU emblem and the information and disclaimer text:

- EU emblem



- Text: "This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 780495. Any dissemination of results here presented reflects only the author's view. The Commission is not responsible for any use that may be made of the information it contains"

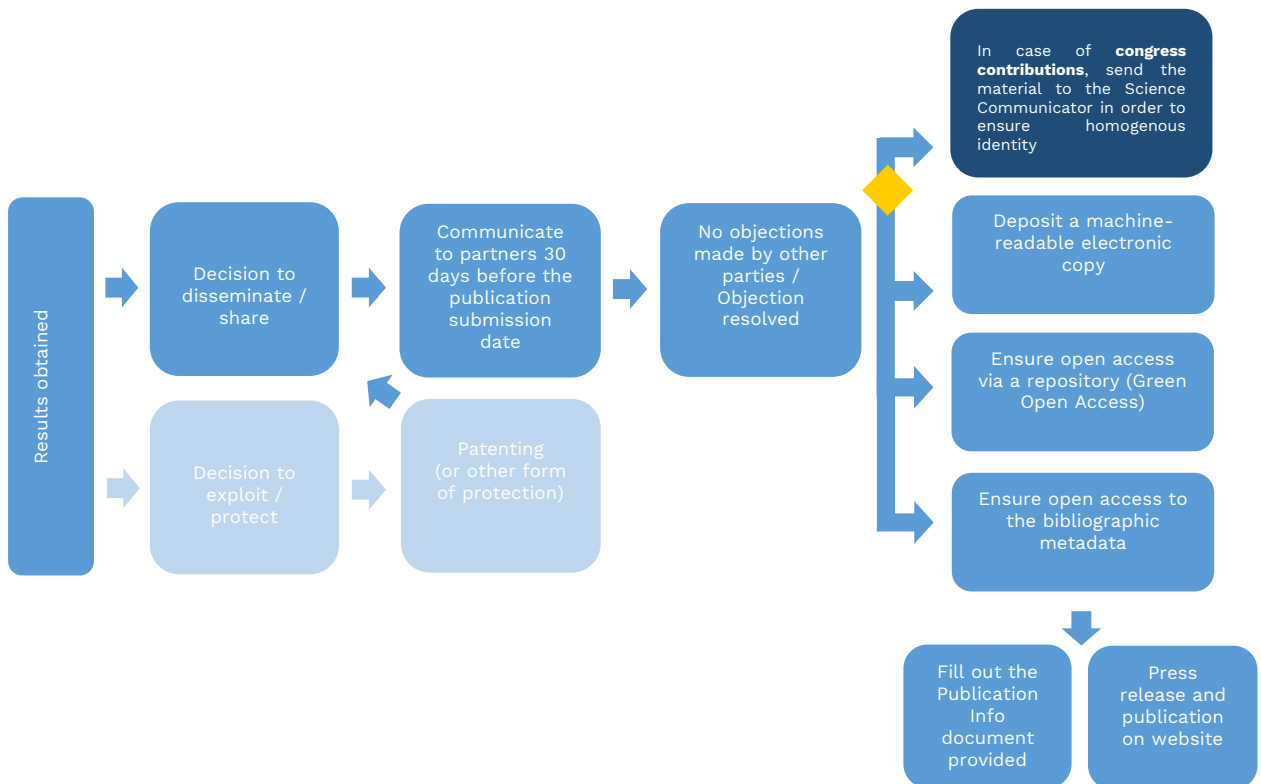


Figure 1: dissemination procedures

3.2. Dissemination of own results

The dissemination of own results, **including but not restricted to publications of whatever form** (excluding patent applications and other registrations of IPRs), is mandatory. Unless it goes against their legitimate interests, each beneficiary **must disseminate its results as soon as possible** by disclosing them to the public by appropriate means.

The dissemination shall be governed by the procedure of Article 29.1 of the Grant Agreement subject to the following provisions included in the Consortium Agreement (Art. 8.4.1):

- **“Prior written notice** of the final version of any planned publication shall be given by a party to the other parties **at least 30 days before** the planned publication submission date.”
- **“Any objection** from a party to the planned publication shall be made by such party in writing to all other parties **within 30 days after receipt** of the written notice by the objecting party. If no objection is made within the time limit stated above, the publication is permitted.”

3.3. Dissemination of another party’s unpublished results or background

In case a partner wishes to include another partner’s results in a dissemination activity (which are not publicly available or published), background and/or confidential information, it needs to first **obtain that partner’s prior written approval**. The mere absence of the foregoing objection is not considered as an approval.

The dissemination shall be governed by the procedure of Article 29.1 of the Grant Agreement subject to the following provisions included in the Consortium Agreement (Art. 8.4.1):

- **“Prior written notice** of the final version of any planned publication shall be given by a party to the other parties **at least 30 days before** the planned publication submission date.”
- **“Any objection** from a party to the planned publication shall be made by such party in writing to all other parties **within 30 days after receipt** of the written notice by the objecting party. If no objection is made within the time limit stated above, the publication is permitted.”

3.4. Justification of an objection in dissemination

According to the Consortium Agreement, an objection to a planned publication by a party is justified if:

- a) the protection of the objecting party’s **results or background is adversely affected**; and
- b) the proposed publication includes **confidential information** of the objecting party (the inclusion of **background and/or results** also justifies an objection in the case of the dissemination of another party’s unpublished results or background); or
- c) the objecting **party’s legitimate academic or commercial interests would be significantly harmed**, as sufficiently proven by the objecting party.

The objections made shall include a precise request for necessary modifications. If an objection has been raised on one or more of the above-mentioned grounds, the objecting party and the publishing party shall discuss how to overcome the justified grounds for the objection on a timely basis and whereby the scientific quality of the publication is maintained.

If appropriate measures are taken, the objecting party shall not unreasonably continue the opposition. The objecting party can request a **publication delay of not more than 90 calendar days** from the time it raises such an objection. After 90 calendar days the publication is permitted, but none of its confidential information, as indicated by the objecting party will be published.

The objecting party and the publishing party shall cooperate to **resolve the objection within 30 calendar days** of the date the objection was raised.

3.5. Co-operation obligations

As agreed in the Consortium Agreement, partners will co-operate to allow the timely submission, examination, publication and defence of any dissertation or thesis for a degree, which includes their results, background and / or confidential information, subject to the confidentiality and publication provisions.

3.6. Open access to scientific publications

As a receptor of Horizon 2020 funding, the project is required to make sure that any peer-reviewed journal article is published openly accessible, free of charge, according to the article 29.2 of the Grant Agreement. In this sense, beneficiaries must ensure that any scientific peer-reviewed publications can be **read online, downloaded and printed**.

Partners should also provide open access to other types of scientific publications including:

- monographs
- books
- conference proceedings
- grey literature (informally published written material not controlled by scientific publishers, e.g. reports)

There are **2 compulsory steps to make results openly accessible** that can occur simultaneously or not:

a. Depositing publications in repositories

BigMedilytics must **deposit a machine-readable electronic copy** of the published version or final peer-reviewed manuscript accepted for publication as soon as possible and at the latest on publication.

The repository [Zenodo](#), created by the [Open Access Infrastructure for Research in Europe \(OpenAIRE\)](#) and the European Organization for Nuclear Research ([CERN](#)), is the recommended source to deposit an electronic copy. Other suitable repositories can be chosen on [OpenAIRE](#). The electronic copy will be deposited under the Creative Commons License CC-BY for maximum dissemination and use of licensed materials.

BigMedilytics also must **aim to deposit at the same time the research data** needed to validate the results presented in the deposited scientific publications. Only aggregated data that will come out of the project will be deposited to validate the results. Patient data will not be shared due to legal restrictions (further information can be found on section 3.7).

b. Providing open access to the deposited publication via the repository at the latest:

BigMedilytics will opt for **GREEN Open Access / Self-archiving** whenever possible depositing the final peer-reviewed manuscript in a repository of its choice. BigMedilytics must ensure open access on publication, if an electronic version is available for free via the publisher, or within 6 months of publication in any other case.

In cases where the timely open-access dissemination is not possible by following the “green-access” model, BigMedilytics will opt for GOLD Open Access / Open access publishing. A copy of the publication will still need to be deposited in a repository.

BigMedilytics must also provide open access, through the repository, to the **bibliographic metadata** that identify the deposited publication. These must be in a standard format and must include the following:

- terms ["European Union (EU)" and "Horizon 2020"]
- name of the action, acronym and grant number
- publication date, the length of the embargo period (if applicable)
- a persistent identifier

3.7. Open access to research data

Health data are considered special categories of data within the framework of Regulation (EU) 2016/679 of the European Parliament and the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and the free circulation of these data.

Even when they have been previously anonymized for their use for research purposes, the adoption of measures to guarantee the safety of people is required. On the other hand, the full application of the General Data Protection Regulation as of 25 May 2018 confers to the Member States the specific regulation of research with health data. This development has not been fully realized, as there are no legal security conditions for the definition of Open Data environments in health. To guarantee the rights of the people and to respect the specific national requirements in terms of uses and ownership of data, the **data used for the research** in the project won't be open access.

3.8. Funding publicity

All the publications must include that the project has received funding from the EU using the EU emblem, the funding information text and the disclaimer excluding Commission responsibility as showed below:

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 780495. Any dissemination of results here presented reflects only the author's view. The Commission is not responsible for any use that may be made of the information it contains.



The beneficiaries may use the EU emblem for information EU funding without first obtaining approval from the Commission.

3.9. Communication of the results

After the publication of the results, **including but not restricted to publications of whatever form** (excluding patent applications and other registrations of IPRs), a press release will be launched following the press release protocol defined in the deliverable 6.2. This press release will be published on the website and the publication and this information will be spread on social networks.

BigMedilytics must inform the **European Commission** about the publication of results through the submission of a form in the participant portal. The partners that have published the results will fill out the form provided (Appendix B.1) and the project coordinator will submit this document.

Appendix A Glossary

Background	According to the Grant Agreement (Article 24) is defined as data, know-how or information (...) and is needed to implement the action or exploit the results.
Consortium Agreement	The written agreement among the partners in the Consortium.
Grant Agreement	The written agreement with the Commission for the carrying out of the Action, including any agreed amendment to such written agreement that may from time to time be in force.
Green Access	“The final peer-review publication is deposited in an online repository of choice, often after an embargo period set by the publisher”. (Source: The European IPR Helpdesk)
Gold Access	“Publication in Open Access journals. Open access to the peer-reviewed publication is provided immediately, often by paying a fee to the publisher”. (Source: The European IPR Helpdesk)
KPI	Key Performance Indicator
Results	Any tangible or intangible output.

Appendix B Publication info

1. DOI (optional)
<p><i>If possible, please provide a DOI (digital object identifier):</i></p> <p><number></p>
2. Is this publication available in Open-Access, or will it be made available? (mandatory)
<p>Choose:</p> <ul style="list-style-type: none"> Yes, available in Green Open Access Yes, available in Gold Open Access No
3. Is this a joint public/private publication? (mandatory)
Yes/No

Only needed if no DOI was provided in step (1)	
Only needed if no DOI was provided in step (1)	Type of Publication (mandatory)
	<p>Choose:</p> <ul style="list-style-type: none"> Article in Journal Publication in Conference proceedings/Workshop Book/Monograph Chapter in a book Thesis/Dissertation Other
	Title (mandatory)
	(text)
	Authors (mandatory)
	(text)
	Publisher (mandatory)
(text)	
Place of Publication (mandatory)	

(text)
Year of Publication (mandatory)
(text)
Is this a peer-reviewed publication? (mandatory)
Yes/No
Repository link
(text)
Link to the publication
(text)
Title of the Journal/Proceedings/Books series/Book (for book chapters)
(text)
Number, date or frequency of the Journal/Proceedings/Book
(text)
Relevant Pages
(text)
ISSN/eISSN/ISBN
(text)
Impact factor
(text)
Decile / Quartile
(text)