



Market consultation

Research Information System (RIS)

Colophone

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No acquisition

Acquisition as a result of this procurement procedure is not appreciated.

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2. Introduction

2.1. Fontys University of Applied Sciences

Fontys University of Applied Sciences, hereinafter Fontys, is one of the largest institutions for higher education in the Netherlands, with more than 5,000 employees and nearly 46,000 students. Fontys houses 24 institutes that together provide 81 bachelor's programs in the variants full-time, part-time, dual and in-service, offering 28 master's programs and 13 associate degrees. Fontys also provides various courses and training. In addition to education, Fontys focuses – with 46 professorships among others – on research, knowledge innovation and contract activities. The educational courses and research activities are distributed over a number of locations in the Netherlands, mainly concentrated in the south of the country (including Eindhoven, Tilburg and Venlo).

Fontys is a foundation. The Executive Board is the competent authority and functions as a unit under the Supervisory Board that is responsible for results. The 24 institutes, each in their own market segment, have education and research as their core task. Like the contract activities carried out by the institutes, the research is aimed at strengthening education and contributing to the professional practice and society. Finally, seven services perform support activities, namely Personnel & Organisation, Student Service, Finance, Marketing & Communication, Education & Research, IT and Housing & Facilities.

If you would like more information about Fontys, please visit our website: <https://fontys.edu/>.

2.2. Our mandate

'Development' is a core concept at Fontys. Young people develop their talents with us as students, we develop relevant practical knowledge, working professionals can develop a lifetime of (professional) knowledge at Fontys, we respond flexibly to profound social developments, and last but not least, within our own community we develop ourselves by sharing knowledge and skills. Only in this way can our students, professionals and graduates continue to make a meaningful contribution to society.

We operate at the heart of society. In so-called hybrid learning and research environments, students, lecturers, researchers and the professional field work together across borders; both education and research, as well as learning and working, are becoming increasingly intertwined. Our main 'social value' is therefore the development of talent and knowledge. Fontys is a multidisciplinary university of applied sciences in the south of the Netherlands. Together with and for the (regional) professional field, we provide high-quality higher vocational education and carry out innovative practice based research. In this way, we contribute to the power to develop a vital, inclusive and sustainable society [Fontys for society](#).

2.3. Education & Research department

Contract formation and contract management of research information system(s) takes place within Fontys's Education & Research Department (hereinafter: E&R).

The E&R Department wants to be the natural partner for teachers, employees and management of Fontys in realising education and research ambitions. It does so by supplying knowledge and support in the field of education, research, impact and quality assurance from a Fontys-wide perspective—always with society, the professional field and student in mind. We are developing the new ways of service, in line with the growing attention for regionalization, flexibility, cooperation in education and research and the current development phase of the Fontys organization, characterised by 'from numbers to values'. With this course of action we are strengthening our services in the areas of:

- Strategy and policy development and advice for the board of directors, services and the institutes of Fontys.
- Support for complex and multidisciplinary innovation and improvement processes.

- Process guidance in the development and realisation of cross-institute ambitions and collaborative initiatives.

The following areas of expertise are part of the E&R department:

Research, Educational Development, Quality Management, Internationalisation and Legal Affairs.

3. Procedure and planning

3.1. Principles

In order to guarantee the principle of equality, Fontys uses the following principles in this market consultation:

1. This market consultation is one of the instruments that play a role in the further decision-making process regarding a possible tender.
2. Market parties may not be placed in an advantaged position by participating in this market consultation at the time of the upcoming tender.
3. Market parties (therefore also) do not have access to draft tender documents, nor do they receive other information from Fontys that is contrary to the principle of equality.
4. This market consultation is entirely without obligation for all parties.
5. Information provided by market parties will be treated confidentially.
6. It is not possible to derive any rights from the information provided in the market consultation.
7. It is not possible to honor claims from market parties about the use of information or confidentiality.
8. Market parties do not receive any compensation for participating in the market consultation.

3.2. Reporting

1. A short, summarising and anonymized report will be made of the answers to the questions and any discussions that may have taken place in the context of this market consultation.
2. The report states the purpose of the market consultation and the questions asked or topics discussed.
3. Disclosure of an anonymised report can form part of the tendering procedure in order to demonstrate that the principle of equality has not been violated.

3.3. Communication and contact person

Communication about this market consultation preferably takes place via TenderNed (www.tenderned.nl).

Via this site, interested parties can ask any questions about this document and the market consultation (dashboard tender/market consultation, 'messages' section) and upload their answers to the questionnaire (appendix 1).

Only interested parties who do not have an account on TenderNed have the option to communicate via inkoop@fontys.nl. In this case, both questions about this document and answers to the questionnaire (appendix 1) can be sent to inkoop@fontys.nl, stating: Market consultation Research information system. It is advisable to create a Tenderned account, as contracting authorities are obliged to tender digitally. Creating an account takes some time because of applying for E-recognition.

If a malfunction occurs on TenderNed, this can be made known via inkoop@fontys.nl.

The contact person for this market consultation is:

Name:	Miriam Hoefmans
Phone number	+31 (0)885082704 (if no answer: +31 (0)8850-71444)
E-mail address:	inkoop@fontys.nl

3.4. Planning

Through this market consultation, market parties can respond to the questions posed in this market consultation. If Fontys, in response to the written responses, would like clarification of the answers given, we would like to keep the option open to invite some or all parties for an in-depth discussion. The initiative for this lies solely with Fontys.

Activity	Date
Publication date market consultation	Tuesday 28 November 2023
Deadline for asking written questions	Wednesday 13 December 2023
Deadline for answering questions by means of the latest Memorandum of Information	Tuesday 19 December 2023
Deadline for response to market consultation	Friday 12 January 2024
If necessary: (scheduling) interviews	Jan – Feb 2024

* This schedule is subject to change and is subject to change.

4. Objective and vision

4.1. Reason and vision

Fontys is a broad-based university of applied sciences. In our strategy Fontys for Society we aim to be an even more research-oriented organization by 2025. We strive to be an organization where education and research are equivalent, and they are closely linked within each study programme. In fact, education and research often merge almost seamlessly, for example in our authentic and hybrid learning and research environments, on our campuses, or close to (or at) the future workplace. Here, students, lecturers, researchers, and professionals come together to learn and do research. The social issues we are looking to resolve are increasingly occurring where disciplines intersect. These so-called 'wicked problems' require a multidisciplinary approach. That is why we make as many connections as possible between the many substantive specialisms we have in-house. In learning communities – the authentic and hybrid learning and research environments mentioned above, but certainly also in our centres of expertise (coe) and knowledge centres (kc) – education, research, and the professional field come together physically or online to conduct multidisciplinary research into complex social issues.

Fontys wants to build a strong reputation as a knowledge institution that is broadly recognised. By 2025 we aim to be an even more relevant partner in knowledge development concerning major social and societal developments. Our knowledge is of relevance for the professional field, is highly contributing to social and societal innovation and is showcased and (open source) available.

In summary, research is of increasing importance in showcasing our contribution to society/the professional field, education and research. Therefore Fontys wants improve the way of documentation and use of research information in order to achieve the following objectives:

- Fontys wants to showcase applied research through among others www.fontys.nl and www.publinova.nl.
- Fontys has to comply with “Brancheprotocol Kwaliteitszorg Onderzoek (BKO)” quality standards.
- Fontys is obliged to report on the expenditure of (public) funds and the development of applied research in our annual board report.
- Fontys wants to have reliable and complete steering information regarding the development of applied research within the organization.

Currently the available research information is spread over different sources, sometimes automated but mostly registered in MS Excel forms. Another data source is the www.fontys.nl website. It showcases our research focus (themes), our research, research activities, researchers, research organization units, research output etcetera, but the data has to be filled in manually (only by a select group of employees) and is therefore not consistently, complete and up to date. In addition, multidisciplinary collaboration increases the need for uniformity in data registration.

Based on our objectives in regards to research information, the current situation is inadequate. Therefore Fontys is exploring the possibilities to improve the registration of research information.

Our vision on research information is:

1. To optimally facilitate researchers and research supporters in the process of the registration, validation and publication of applied research information. Our goal is reliable and complete research information.
2. To optimally support researchers in showcasing their applied research and facilitating reporting without the burden of filling out several MS Excel forms and ad hoc information requests. Users of the system are facilitated to register relevant research information once, which then can be used for a variety of purposes.
3. Make optimal use of open persistent identifiers and proven market standards.

Our view on applied research processes

The Fontys generic process model below provides a high level overview of processes related to Fontys applied research. The top row shows “steering processes”, the boxes in the middle row show the “primary process of applied research” and the bottom row shows the “supporting processes”. The green coloured activity boxes represent the high level processes that have a direct relation to research information within scope of this inquiry.

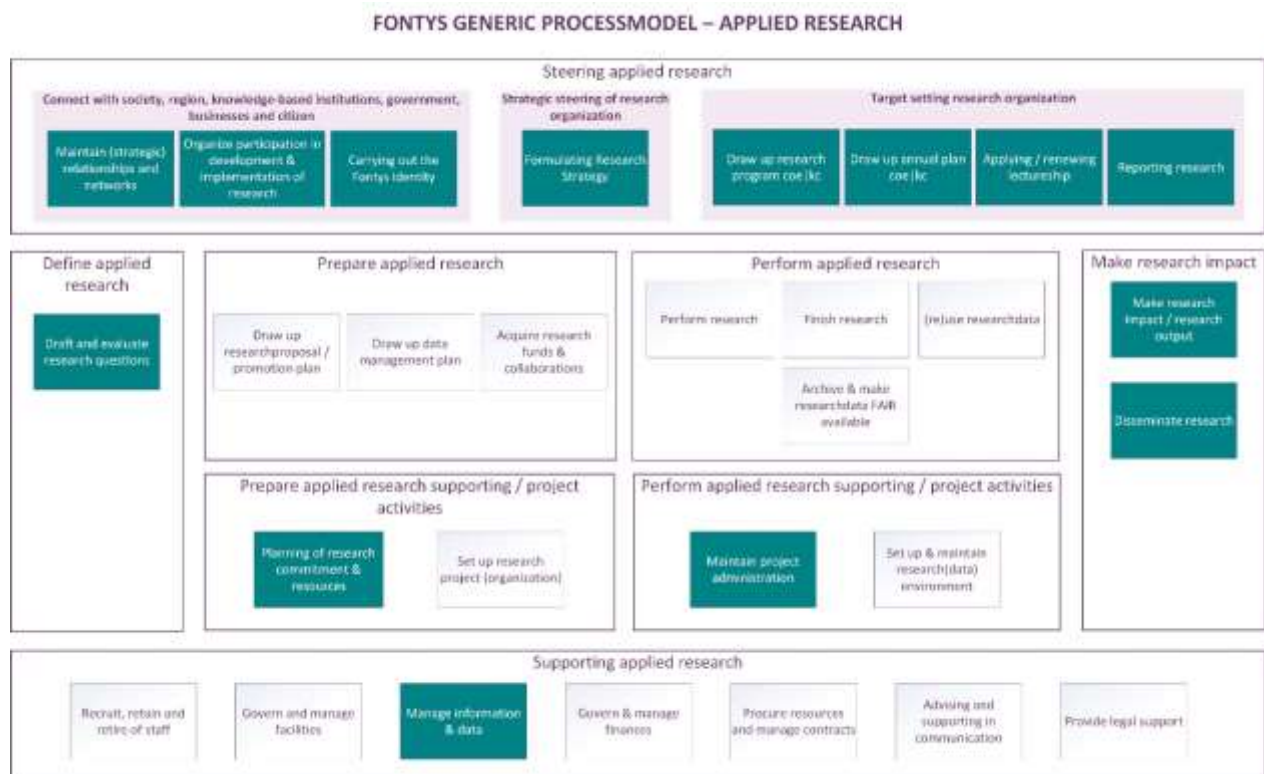


Figure 1 Fontys Generic Processmodel - Applied Research

The primary objective of registering research information is making impact with our applied research visible and to disseminate research outcomes. The availability of accurate research information should also support strategic steering processes, target setting processes including reporting / dashboarding, connection with (strategic) partners and quality management processes. Additionally, a solution should support the storage of e.g. documents and links to resourcing, financial and data management processes.

Our view on research information

Our view on research information data to be registered is presented in the entity relationship diagram below.

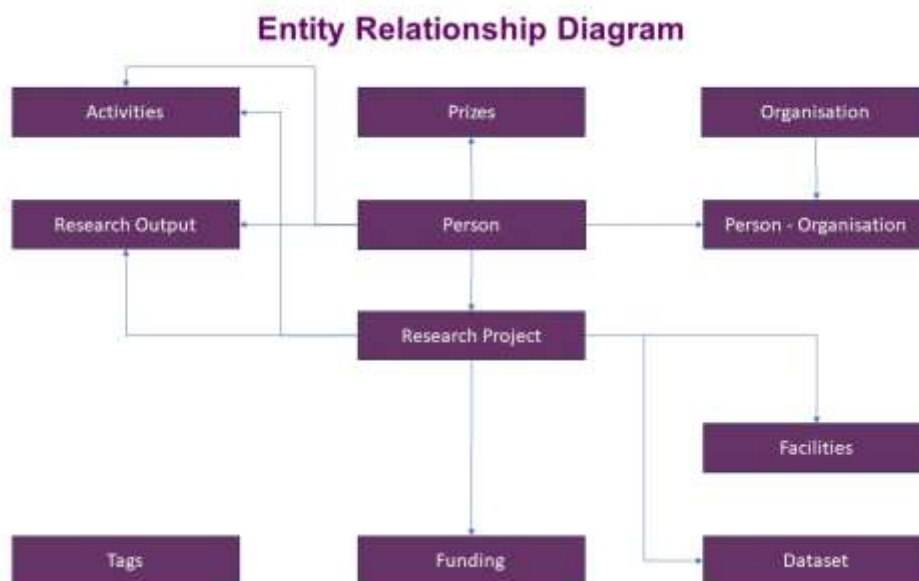


Figure 2 Research information entity relationship diagram

The Entity Relationship Model in Figure 2 only shows direct relationships. However, the ability to view the indirect relationships between tables is required. For example, all research projects that are linked to a certain organisation through the person – organisation table, are available in the view on that certain organisation.

Person

The profile of a person needs to contain personal and contact information (e.g. name, job-title, role, e-mail address), expertise, link to LinkedIn profile and cv information. A person is related to one or more organisation units (e.g. a researcher is part of a research group, employed at a faculty and their research is linked to a coe or kc). Additionally, the link with projects, research output, data sets, activities, awards and partners (external organisations) related to this person is necessary. Finally, it should be possible to classify a person based on certain tags, in order to support search functionality based on these tags.

- Integration with Fontys systems is desirable
- Relationships: organisation(s), research projects, activities, research output, prizes

Organisation

The profile of an organisation needs to contain generic information and contact information (e.g. name, description, research ambition, research programme). Because there is a distinction between different types of organisation, it is required to be able to register these different types (e.g. internal faculty and coe|kc, external business partner, public partner, knowledge institution). Additionally, links to the organisation website, twitter and/or LinkedIn are required. Finally, it should be possible to classify an organisation based on certain tags, in order to support search functionality based on these tags.

- Relationships: primary contact person, related person(s), organisation(s), research project(s)

Research Project

The profile of a research project is required to contain project information such as name, description, project manager, start and end date, project

	type (internal, commercial and grant), project status, achieved results, impact description, contribution to education and a link to a web page or website. Additionally, the link with other projects, research output, data sets, activities, awards, funding (e.g. grants), infrastructure and partners (external organisation) related to this project is necessary. Finally, it should be possible to classify a research project based on certain tags, in order to support search functionality based on these tags. - Integration with Fontys project management system is desirable - Relationships: primary researcher, related person(s), organisation(s), research project(s), research output(s) and activities, facilities, funding
<i>Research Output</i>	Manual registration and automated import of information concerning research output is required. The import functionality must support the integration with Fontys repositories, such as Surf Sharekit. Additionally, the import from external data sources should be supported. Basic required metadata related to research output consists of e.g. title, description, output type (e.g. popular article, book), date, status, target audience, relevant type of medium (text, audio, video, web), language, link to the research output source and if applicable technology/social readiness level. Finally, it should be possible to classify a research output based on certain tags, in order to support search functionality based on these tags. - Relationships: related person(s), organisation(s), research project(s)
<i>Activities</i>	Registration of a broad range of research activities such as speaker at a conference, visiting fellowship, workshop(s), peer review are supported. Manual input and automated import of research activities information is required. Basic required metadata related to research activities consists of e.g. title, description, activity type, date, target audience, language and link to the research activity (e.g. a link to the conference website). Finally, it should be possible to classify a research activities based on certain tags, in order to support search functionality based on these tags. - Relationships: related person(s), organisation(s), research project(s)
<i>Prizes</i>	Registration of prizes should contain the (recipient's) name, a description of the prize and the year of the awarding. Finally, it should be possible to classify a prize based on certain tags, in order to support search functionality based on these tags. - Relationships: awarded researcher, related person(s), organisation(s), research project(s)
<i>Facilities</i>	Registration of research facilities such as laboratory's, machines, VR-glasses should be available. Basic required information e.g. name of the facility, description, type of facility and location can be registered. Finally, it should be possible to classify a research facility based on certain tags, in order to support search functionality based on these tags. - Relationships: related person(s), organisation(s), research project(s)
<i>Funding</i>	External funding such as awarded grants can be registered. The information should at least contain the name of the funding organisation, fund name (e.g. grant name), funding type (e.g. grant, commercial), principal researcher or contact person, duration. - Relationships: related person(s), organisation(s), research project
<i>Dataset</i>	Metadata of available datasets should contain title, author, contact, description, subject, deposit date, version number, document format, terms and a link to the dataset. This data is preferably automatically updated from DANS dataverseNL. Finally, it should be possible to classify a dataset based on certain tags, in order to support search functionality based on these tags. - Relationships: related person(s), organisation(s), research project(s)

In addition to the described research information requirements, these other functionalities are required:

- An overall search function available with the possibility to select fields that should be searchable.
- An import function in order to enable to add new data in bulk.
- A data analysis function containing filters so an overviews can be created. These overviews can be preferably exported in the shape of a report.
- Reporting and dashboard functionality to support e.g. reporting and quality management processes.

4.2. Method used

Fontys has invested in the preparation of procurement of a research information system of research information modules. In a joint effort with researchers, research supporters, managers and several other stakeholders we developed a joint view on:

- A. applied research processes,
- B. research information and
- C. high level requirements in regard to research information

This information provides a generic overview of the Fontys perspective on the types of research information that should be supported in a research information system.

Next step in the process leading to procurement is to form an idea of possible solutions that would match the Fontys view on research information. An important step is this market consultation. Based on the results of this market consultation, solution scenarios are sketched in order to support decision making processes. Based on the scenario selection a tender will be prepared.

4.3. Objective

The main objectives of this market consultation are:

- To gain insight in currently available solutions; in order to form a clearer idea of how research information can best be organised within Fontys. Are there applications or modules that can process research information to achieve our goals.
- To use the expertise of the market to obtain new or unknown insights that can help us in the further course of this endeavour.

5. Market consultation questions

General

Question 1	What is your knowledge of solutions or modules available on the market that meet (part of) the desired functionalities and information & process capabilities as described in chapter 4. Objective & vision?
Answer 1	
Question 2	Please indicate which functionalities and information & process capabilities your solution(s) provides.
Answer 2	
Question 3	Which functionalities are not available within your standard modules and which course(s) of action would you suggest for Fontys regarding these functionalities?
Answer 3	
Question 4	What other possibilities do you see besides using available modules on the market that provide (part of) the functionality? Such as configurable systems or no-code/low code platforms that can (partially) realize the requested functionality. What is your advice regarding these kinds of more generic systems versus systems that include specific support for research information?
Answer 4	

Specific

Question 5	What is your view on the integration of research information modules with each other, compatibility with external data sources and integration with internal systems (e.g. personnel, finance)? Which external data sources are integrated with your suggested solution? Which integration protocols do you advise?
Answer 5	
Question 6	Does your suggested solution provide options to distinguish between publicly accessible research information and restricted research information for internal use?
Answer 6	
Question 7	How does your suggested solution provide options to register external relations (organisation and related persons)?
Answer 7	
Question 8	How does your suggested solution provide workflow management and moderation to validate the content of the research information?
Answer 8	
Question 9	Does your suggested solution include a research repository? If so, which document types and possible size limits are supported? If not, what are recommended research repository solutions?
Answer 9	
Question 10	What is your perspective on the possibility to add and/or to customise fields and related business rules (e.g. show or hide fields based on a business rule)?
Answer 10	
Question 11	Does your suggested solution provide the option to integrate external persistent identifiers? If so, which persistent identifiers are supported?
Answer 11	
Question 12	What is your view on the central management of user profiles (by a functional application manager or moderators)? How does your suggested solution provide role based access rights to tables and fields?
Answer 12	
Question 13	In regards to implementation of the suggested solution. What implementation approach do you recommend and what role can your organisation play in supporting Fontys during the implementation?
Answer 13	

Other

Question 14	Lots: looking at the functional requirements as described in chapter 4, is it necessary to offer the contract to the market in multiple lots? If so, please elaborate on which lots and why.
Answer 14	
Question 15	Which pricing models are common for such solutions? Which pricing models do you prefer and why? Which factors contribute to higher or lower prices?
Answer 15	
Question 16	Which factors are important in considering whether or not to bid for a tender?
Answer 16	
Question 17	Which information is needed to make a good bid?
Answer 17	
Question 18	What would you like to add from your knowledge, experience and expertise in addition to what has already been asked in the above?
Answer 18	

You can include the answers to the questions in Appendix 1 Answer Model. In section 3.3. of this market consultation document it is indicated where you can send this appendix. The number of pages is not formally limited: for the sake of efficiency, we ask you to limit it as much as possible to concrete information, where the answers are substantiated (SMART).