MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY

EVALUATION REPORT FOR EVALUATING RESEARCH ORGANISATIONS IN THE UNIVERSITIES SEGMENT IN 2020

MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY

UNIVERSITY: Masaryk University

COMPANY REGISTRATION NUMBER (CRN): 00216224

THE LIST OF EVALUATED UNITS IN MODULE 3:

Faculty of Arts (MUNI ARTS), Faculty of Economics and Administration (MUNI ECON), Faculty of Education (MUNI PED), Faculty of Informatics (MUNI FI), Faculty of Law (MUNI LAW), Faculty of Medicine (MUNI MED), Faculty of Science (MUNI SCI), Faculty of Social Studies, (MUNI FSS), Faculty of Sports Studies (MUNI SPORT), Central European Institute of Technology (CEITEC MU), Institute of Computer Science (MUNI ICS)

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In: Prague Date: 26th January 2021 Signature _____

(IEP Chairperson)

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MODULE 3 SOCIAL RELEVANCE

EVALUATED UNIT: Faculty of Arts, Masaryk University

FORD: 6. Humanities and Arts

SOCIAL RELEVANCE / SOCIAL BENEFIT OF THE EVALUATED UNIT

3.1 General self-assessment of the social benefit of R&D&I in the fields of research at the evaluated unit, and of the evaluated unit as a whole
This criterion has not indicative value. It represents a general introduction describing the social benefit of R&D&I in the fields developed by the evaluated unit, and the evaluated unit as a whole.
Qualitative assessment: Regarding the social relevance of this faculty' activities, faculty members mainly concentrate on methodology of monument protection, software or research reports for innovation in diagnostics and education. It seems that these activities have a very positive and significant impact on wider social aspects. This attitude complies with the very essence of such faculty.

APPLIED RESEARCH PROJECTS

3.2 Applied research projects	
Evaluate five most significant (from the perspective of the evaluated unit) applied research projects from the complete list in the appendix (tables 3.2.1 and 3.2.2 of Self-evaluation report), consider particularly results achieved or a project's potential for application.	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: In general, the number of applied research projects in this faculty is extremely low. Of these, only three seems to have a real potential: Geographical information system for traditional folk culture; Between Great and Premyslid Moravia; For temple, city and country: Olomouc Bishop Karl von Lichtenstein. However, all these projects focus on local or regional aspects, while the broader context, both geographical and cultural, is almost completely absent.	

3.3 Contract research	
Evaluate revenues from contract research for the 2014–2018 reporting period from the complete list in the appendix of Self-evaluation report (tables 3.3.1 and 3.3.2).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: Although the number of contract researches is relatively large [about 70], the overall revenue is relatively low. However, this situation is typical of researches conducted in the fields of knowledge of this faculty.	

3.4 Revenues from non-public sources (besides grants or contract research) from research work	
Evaluate revenues for the 2014–2018 reporting period for R&D&I from non-public sources, besides grants or contract research (e.g. licences sold, spin-off revenues, gifts, etc.) presented in a complete list in the appendix of Self-evaluation report (table 3.4.1).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: Apart from donations, the only revenue reported in this section is from supply of a software to the central military hospital. However, such an institute is, to the best of my knowledge, is a public source... faculty members at a research university are expected to act more vigorously and significantly in this area.	

Recommendation 3.2, 3.3 a 3.4:
1. Strongly encouraging faculty members to apply for competitive research grants. 2. Encouraging faculty members to apply for research grants from foundations outside the Czech Republic. 3. Initiated activity to increase the potential of possible revenues from contract researches and non-public sources in relevant areas of knowledge, such as Psychology, Cognitive sciences, Media and Communication.

APPLIED RESEARCH RESULTS

3.5 Applied research results with an existing or prospective economic impact on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results that have already been applied in practice, or that will realistically be applied, in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.5.1).	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: Despite the unique nature of most fields of knowledge in this faculty, which are generally non-applied oriented, during the period in question two researches with a potential of economic impact on society were performed in the faculty. Thus, given the fact that there are departments in this faculty in which the research carried out has application potential due to the disciplinary diversity of the faculty, it turns out that even in a mainly theoretical research framework there is room for more applied researches with potential economic impact on society.	

3.6 Significant applied research results with an other than an economic impact one on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results with the other than the economic impact on society in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.6.1).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: All five studies presented by the faculty as of the most significant applied research results [not economic] are not only highly evaluated, but also illustrate the highly social relevance of a faculty, that despite its research essence manages to cross the walls of academia in the areas of education, popular memory and music. Of particular note is the activity of the Department of Education in the field of composing history text books for secondary schools' students. The involvement of professional historians in compiling textbooks contributes both to the high level of history studies in schools, as well as to the dissemination of the latest historical research results both in the education system and in wider social circles.	

Recommendation 3.5 a 3.6:
Deepening and extending the scope of society-oriented researches and projects, even if this comes at the expanse of other pure academic activities, such as pure theoretical researches, publications of monographs and in WOS etc. Interacting with various components of the surrounding society and directing research resources for that purpose, may have a very important contribution both to the researcher's self-perception and to the degree of public legitimacy on which the academy mostly relies.

COOPERATION WITH THE NON-ACADEMIC ENVIRONMENT AND TECHNOLOGY TRANSFER

3.7 The evaluated unit's most significant interactions with the non-academic application/corporate sphere	
Evaluate the most significant interactions with the non-academic application/corporate sphere, comment on the most typical users of the evaluated unit´s outcomes. Please take into consideration how the evaluated unit looks up for these users and how the evaluated unit cooperates with them. Use provided examples of interactions for your evaluation.	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: The most prominent activities of the faculty in this context are in the field of education and research of the immediate environment [Brno, South Moravia]. However, the relevant activities of the departments dealing with other fields of knowledge [philosophy, psychology, communication, languages and literature] in the non-academic sphere are very few, certainly in relation to the size of the faculty and the human and research resources available to it.	

3.8 System and support of technology transfer and intellectual property protection (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate the system of technology transfer of the evaluated unit. Consider the quality of the applied research and the effectiveness of technology transfer using the description and the data presented in the appendix of Self-evaluation report (table 3.5.1). Focus particularly on the number of filed and granted patents (Czech and international) and licences sold.	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: Technology transfer is irrelevant to the fields of knowledge of this faculty.	

3.9 Strategy for setting up and support of spin-off firms or other forms of commercialisation of R&D&I results (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate practical use of the intellectual property of the unit in the form of setting up spin-off companies or other forms of commercialising R&D&I results (both with and without the participation of the unit) established by the evaluated unit (university), or by another entity controlled by the evaluated unit (university), or an employee of the evaluated unit. Consider the model of functioning and coordination and control of intellectual property management of the evaluated unit (university).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: Irrelevant.	

Recommendation 3.7, 3.8 a 3.9:
Despite the irrelevancy of technology transfer and commercialisation of R&D&I results to the current nature and research in this faculty, still, it is to be expected that scholars in the fields of philosophy and ethics will play an active role in formulating ethical principles of intellectual property protection and technology transfer.

RECOGNITION BY THE SCIENTIFIC COMMUNITY

3.10 The most significant individual awards for R&D&I	
Evaluate the ten most significant R&D&I awards received (in the Czech Republic and in other countries) in the 2014–2018 reporting period.	
Score [0–5 points]:	**3 - Good**

Qualitative assessment: According to the faculty's report, the average number of annual awards for the years 2015-2019 was only 5. Moreover, quiet many of these awards were given not for outstanding research

achievements, but for some other purposes, such as “spreading awareness of the culture of Swedish Finns”; “contribution to the popularization of Bulgarian culture abroad”; “spreading the good name of Norwegian culture”; “dissemination of Greek literature”, etc. Without underestimating the importance of the above-mentioned activities, from the “pure” academic point of view, as well as that of the expectations form such a big and disciplinary diversified faulty, in this highly significant parameter of the faculty members activity the achievements are rather disappointing.

3.11 Recognition by the international R&D&I community (elected membership in international scientific societies, participation on the editorial boards of international scientific journals, invited lectures at the institutions abroad etc.)	
Evaluate the recognition of the evaluated unit by the international scientific R&D&I community, based on a commentary presented in the appendices of Self-evaluation report (table 3.11.1, table 3.11.2, table 3.11.3 and table 3.11.4).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The representation of members of the faculty’s academic staff in international scientific societies; in editorial boards of international scientific journals at the highest level, and as invited to lecture at first-rate academic institutions [Humboldt-Universität zu Berlin; MIT; University of Heidelberg; University of Pennsylvania; University of Tübingen], indicates an international research orientation that conforms to what is accepted in leading academic institutions around the world. The same is true of invited lectures by well-known visiting researchers from leading universities in the world [Yale University; Trinity College; University of Maryland].	

Recommendation 3.10 a 3.11:
Expanding the areas of interest and research in a global orientation, in the various faculty’s departments, and especially those focusing on local and regional research, will undoubtedly contribute to strengthening the research ties with other researchers around the world; for the possibility of using additional new research resources, and to the improvement of the level of research, resulting in significant international recognition and the chance to win prestigious international research awards. In regard to the recognition by the international R&D&I community, it is strongly recommended that research students also be encouraged to create research collaborations with young researchers in other countries. This is conditional on a significant increase in knowledge of English among the faculty’s students, already in undergraduate studies.

POPULARISATION OF R&D&I

3.12 The most significant activities in the popularisation of R&D&I and communication with the public	
Evaluate the main activities of the evaluated unit in the area of popularisation of R&D&I and communication with the public, based on a maximum of ten significant examples from the evaluated unit perspective.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: This aspect is one of the strongest in the faculty's activities. As mentioned in the self-evaluation report, members of the faculty are involved in many different and diversified projects, such as Public readings; Dramatic productions of works by ancient or German-language (Moravian) authors; Literary translations; Television and radio programs; Concerts; Surburban camp; Exhibitions; Courses for the public and RPG game. These extensive and high public exposure diversified activities, in which involved many of the faculty departments, indicates to a pro-social orientation, which is, alongside the research activity [and derives from it], one of the cornerstones of the university institution as an organic part of the social environment.	

Recommendation 3.12:
Excellence in this area may result in an understandable, yet undesirable sense of satisfaction, and thus might cause a possible stagnation. Therefore, it is highly desirable that the faculty leadership encourage the various departments and researchers to continue, expand and initiate new various activities in this field.

MODULE 3 - OVERALL ASSESSMENT	
After evaluation of the individual criteria of the M3 module, please summarise your assessment in the context of the whole module (social benefits, applied research projects, results of applied research, cooperation with the non-academic environment and technology transfer, recognition by the research community and the popularisation of R&D&I) and describe and justify the strengths and weaknesses of the evaluated unit.	
Overall score [Calibrated]:	**114**
Overall grade [Excellent– Inadequate]:	**4 - Very good**

General qualitative assessment (summary):

Despite the extensive and impressive activities in the fields of teaching and in the social domain, the impression in the meeting with the faculty leadership was that there was no real internalization of the evaluation committee member's comments, mainly in regard to the scope and variety of research projects, as well as regarding the desire to improve the situation. It is extremely important that the faculty leadership formulates a long-term strategy when it comes to integrating new areas of knowledge, especially in the humanities departments, as is customary in similar faculties around the world. The human and research potential for this exists in the faculty, and it is a pity not to make use of it. As the evaluation committee members commented, it is strongly recommended to invest more resources in advancing research and development in line with what is accepted in the international academic community, in submitting much more proposals for research grants from international foundations, and in re-examining the structure of the faculty.

1. Regarding the high percentage of dropout of Ph.D. students, as well as the too long period that many of the Ph.D. students complete their studies in comparison to what is desirable, as well as what is accepted in different universities around the world, it is highly recommended that the faculty re-examine its overall policy with regard to the doctoral programs, and especially with regard to the admission requirements for these programs.
2. One of the prominent problems in the structure of this faculty is the large number of departments, some of which are very small. I am not convinced that this structure, even if it is based on the criteria of specific specialization in unique areas of knowledge, contributes to the academic activity of the faculty. On the contrary, and without regard to the financial aspects of such a structure and the difficulties that this may cause to the management of the faculty, such a structure may make it difficult for collaborations and knowledge sharing, both at the level of faculty members and certainly at the level of students.
3. Another problem, which is not unique to this faculty, is the overlap in the areas of academic knowledge, activity, research and teaching, with parallel activities in other faculties [Education, etc.]. There is room for re-examination as to the problems caused by this overlap, as well as to possible solutions, even if it involves structural changes and understandable resistance of certain members of the faculty.
4. Another aspect, which many of the panel members addressed, and which is also not unique to this faculty, is the gender imbalance between the number of men and women among faculty members. In many of the academic institutions around the world, the Faculty of Arts is actually a leader in the field of gender equality, and the Faculty of Arts in MUNI can certainly be integrated into this trend and serve as an example to the rest of the faculties at the university.

The "very good" score received by the faculty, which stems from a calibration methodology, does not reflect the impression of the panel members regarding different key aspects of the faculty's activities, as expressed in the detailed report. In light of the above, the panel strongly recommend that in order to advance the faculty to a proper level in the relevant disciplines, the faculty leadership should concentrate in investing much more resources in advancing the research aspect in line with what is accepted in the international academic community; formulate a long-term strategy regarding the scope and variety of research projects; integrate new areas of knowledge [especially in the humanities departments]; encourage faculty members to submit much more proposals for research grants offered by international foundations, and re-examine the structure of the faculty.

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MODULE 3 SOCIAL RELEVANCE

EVALUATED UNIT: Faculty of Economics and Administration, Masaryk University

FORD: 5. Social Sciences

SOCIAL RELEVANCE / SOCIAL BENEFIT OF THE EVALUATED UNIT

3.1 General self-assessment of the social benefit of R&D&I in the fields of research at the evaluated unit, and of the evaluated unit as a whole
This criterion has not indicative value. It represents a general introduction describing the social benefit of R&D&I in the fields developed by the evaluated unit, and the evaluated unit as a whole.
Qualitative assessment: The Faculty of Economics and Administration has a strong research orientation and has a tradition in combining more fundamental research with a long-standing track record in applied research for, and in cooperation, with both public organisations (governmental and NGOs) and private/corporate organisations and enterprises. This is visible on multi levels; on the local/regional level as well as on the national (and partly international) level. Although covering the broad domain of economics, the faculty conducts its research in 5 departments and 10 research institutes. At the one hand connected with broader themes as the Czech economy, finances, corporate development and management, and regional development. And at the other hand it concentrates research in 5 key areas that are also reflected in its applied research, including H2020 projects, and contract research portfolio (Transportation economics, Sustainability and circularity, Complex financial systems, Experimental economics, Non-profit sector. Parts of the fundamental research has a clear social relevance too, especially in the domain of mobility and migration. The social benefit of R&D&I is clearly visible in contract research being an integral part of the faculty's activities and is visible in the broad repertoire the faculty shows in disseminating its expertise to practice and practitioners.

APPLIED RESEARCH PROJECTS

3.2 Applied research projects	
Evaluate five most significant (from the perspective of the evaluated unit) applied research projects from the complete list in the appendix (tables 3.2.1 and 3.2.2 of Self-evaluation report), consider particularly results achieved or a project's potential for application.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The Faculty lists four projects out of a broader and varied portfolio. Three of these four projects are projects in the context of H2020 projects. The fourth project, like many of the other listed	

projects in table 3.2.1, is financed by the Technology Agency of the Czech Republic. All four projects show a clear result and/or potential in -societal and/or economic relevant- application.

The four projects fit with the key research areas of the Faculty, here especially sustainability: Project 1 (RECIPSS) focusses on new business models for circularity (white goods, automotive parts. Project 2 (Shift2Rail) focusses on governance models to support multi-model travel services. And project 4 focusses on local level expenditure effectiveness in waste management.
Project 3, the third H2020 project, is of a different nature but with a clear economic relevance and is a feasibility study in the field of medicine development.

3.3 Contract research	
Evaluate revenues from contract research for the 2014–2018 reporting period from the complete list in the appendix of Self-evaluation report (tables 3.3.1 and 3.3.2).	
Score [0–5 points]:	**3 - Good**

Qualitative assessment:

The Faculty has been engaged in a substantial and interesting set of small scale projects for different local, regional, national as well as international clients mostly in the public sphere (analysis, evaluation, strategy development, surveys, etc.).

The revenues from the contract-research are potentially significant, but fluctuate significantly per year and are so far relatively small. One would expect a more substantial contribution to the budget of the Faculty.

3.4 Revenues from non-public sources (besides grants or contract research) from research work	
Evaluate revenues for the 2014–2018 reporting period for R&D&I from non-public sources, besides grants or contract research (e.g. licences sold, spin-off revenues, gifts, etc.) presented in a complete list in the appendix of Self-evaluation report (table 3.4.1).	
Score [0–5 points]:	**2 - Average**

Qualitative assessment:

The Faculty does not report any revenues from non-public sources other than grants or contract-research. As donations, the supply of plants or selling licences through firms are very rare for faculties in the sphere of social sciences, this is an average situation. For that reason the score 'average' is noted.

Recommendation 3.2, 3.3 a 3.4:
The Faculty of Economics and Administration performs well in applied and, to a certain extend also, in contract research. Nevertheless, it looks as if the Faculty could extend, diversify and by doing so, improve its activities, especially in the field of contract research. The following recommendations could offer a way forward:

- Develop a Faculty strategy together with the departments in which also targets are set, both in content, volume, domains of interest, research designs, methods et cetera. Relevant for specialisation, enhancing research qualities and for social relevance. Otherwise, the faculty might just go with the flow.
- Develop a specific set, a repertoire, of contract research that can be delivered and showcased to public and private clients.
- Blend contract research options into graduate programs.

APPLIED RESEARCH RESULTS

3.5 Applied research results with an existing or prospective economic impact on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results that have already been applied in practice, or that will realistically be applied, in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.5.1).	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

The Faculty of Economics and Administration presents an excellent set of applied science projects here. All (4) reports show direct social relevance in a variety of ways: from contributing to a 'smart' circular economy, via cost reduction in public transport and effective waste management to preventing collusion and corruption. In all of these projects the prospective economic impact is clearly visible.

Furthermore, the report and especially table 3.5.1 shows a substantial portfolio of applied research output in (more than 30) projects in the period 2014-2018. These projects show that researchers at the Faculty are in close contact with public organisations and businesses, although it is a bit difficult to see whether this is a wide spread research practice or is limited to a smaller number of researchers/departments.

To what extend and with what results the research outcomes are applied in practice is a bit less visible. Given the nature of the applied research projects, closely related to business processes, it seems likely that the results will be applied, but more evaluative data are missing here.

3.6 Significant applied research results with an other than an economic impact one on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results with the other than the economic impact on society in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.6.1).	
Score [0–5 points]:	**3 - Good**

Qualitative assessment:

For a Faculty of Economics and Administration it is difficult to discriminate between 'economic' and 'other than economic' impact as the research projects almost by default relate to economic

issues. This shows in the projects mentioned in this category all of which have a clear social relevance.

The two showcased projects as well as the projects presented in table deal with issues like for instance the quality of administration, quality of governance, quality of evaluation and free access of information. The number of projects is a bit more limited than one would expect.

Recommendation 3.5 a 3.6:

In general, the Faculty performs very well in the domain of applied research. Looking at the number of projects there are no comments.

However, the Faculty could benefit from evaluating more systematically the outcome of their applied research projects (to what extend is the research output applied and with what results).

After having assessed the presented materials the impression is that here the Faculty can do more with the assets it has here. The applied research projects seem to be a bit ad hoc and the Faculty might run the risk of losing research expertise in the mentioned areas.

The Faculty can capitalise on the research experience that comes with the experience in the applied research projects. This requires on both the departemental and the faculty level a clear applied research strategy in which departments (and research groups) cooperate. In the self-evaluation such a strategy is not visible nor is future perspective

The Faculty should be able to create a sustainable context in which applied research and other reearch mutually reinforce each other and future generations of students and scholars can build on.

COOPERATION WITH THE NON-ACADEMIC ENVIRONMENT AND TECHNOLOGY TRANSFER

3.7 The evaluated unit's most significant interactions with the non-academic application/corporate sphere

Evaluate the most significant interactions with the non-academic application/corporate sphere, comment on the most typical users of the evaluated unit´s outcomes. Please take into consideration how the evaluated unit looks up for these users and how the evaluated unit cooperates with them. Use provided examples of interactions for your evaluation.

Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

The Faculty shows both in the self-evaluation reports as well in their on-site presentation a long list with a broad variety and a broad repertoire in forms and formats of interaction with a diverse group of users of the research outcomes.

The diversity of the interactions - from seminars, small sub-projects, workshops to lifelong learning programs – as a regular part of the primary process of the Faculty, is highly valued. Lifelong

learning programs seem to be well used for interacting and disseminating expertise and research outcomes to professionals.

Furthermore, it is appreciated that the Faculty reaches a diverse audience as well: from professionals working in different societal sectors (the financial world, transport, tourism and businesses) to socially vulnerable citizens (workshop financial literacy).

3.8 System and support of technology transfer and intellectual property protection (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate the system of technology transfer of the evaluated unit. Consider the quality of the applied research and the effectiveness of technology transfer using the description and the data presented in the appendix of Self-evaluation report (table 3.5.1). Focus particularly on the number of filed and granted patents (Czech and international) and licences sold.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: As described in the self-evaluation report, The Faculty relies on and is well connected with the University infrastructure for support and technology transfer with the MUNI TTO. On top of that institutionalised support is available on the Faculty level (development programs, project counselling and administrative support). Dissemination and transfer of research output is guaranteed through the divers and close relations and interactions with relevant actors. Given te nature of the applied research projects patents and licences are not a regular category of research output of faculties in the domain of social sciences.	

3.9 Strategy for setting up and support of spin-off firms or other forms of commercialisation of R&D&I results (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate practical use of the intellectual property of the unit in the form of setting up spin-off companies or other forms of commercialising R&D&I results (both with and without the participation of the unit) established by the evaluated unit (university), or by another entity controlled by the evaluated unit (university), or an employee of the evaluated unit. Consider the model of functioning and coordination and control of intellectual property management of the evaluated unit (university).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: Setting up spin-off firms and commercialisation of R&D&I results is not a common practice within faculties within the social sciences domain. Relying on the MUNI TTO on this is for that reason a logical choice for the Faculty. The Lifelong learning program can be seen or can develop into a commercialisation of R&D&I results.	

Recommendation 3.7, 3.8 a 3.9:
The Faculty has a vested position and shows an outstanding performance in working together with (public, private and civil society) actors in society. By nature, spin off firms and the commercialisation of activities are limited in faculties in the social sciences domain. However, there seem to be several options for the Faculty of Economics and Administration to become more engaged in this: • Through the further development of sustainable and institutionalised lifelong learning programs (to be delivered for market conform rates); • By embedding lifelong learning in a transparent way in the faculties financial, administrative and HR procedures; • By making applied contract research and consultancy a regular and market conform activity; • That is supported by a clear faculty strategy, practice and support system for technology transfer, and the valorisation of R&D&I results.

RECOGNITION BY THE SCIENTIFIC COMMUNITY

3.10 The most significant individual awards for R&D&I	
Evaluate the ten most significant R&D&I awards received (in the Czech Republic and in other countries) in the 2014–2018 reporting period.	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: The Faculty clearly shows some significant awards for their scientific output. Two national and one international: twice a fist place for the Prof. František Vencovský award for Young Economists up to 35 years and once the Donald Stone Award for outstanding contribution to the advancement and well-being of IASIA. This limited number is maybe a bit too average given the size and scope of activities of the Faculty.	

3.11 Recognition by the international R&D&I community (elected membership in international scientific societies, participation on the editorial boards of international scientific journals, invited lectures at the institutions abroad etc.)	
Evaluate the recognition of the evaluated unit by the international scientific R&D&I community, based on a commentary presented in the appendices of Self-evaluation report (table 3.11.1, table 3.11.2, table 3.11.3 and table 3.11.4).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The Faculty scores very well in all relevant domains. The academic staff is highly involved and clearly recognised in international boards, is invited for lectures in other countries on a regular	

basis, and is visible in several elected memberships of international professional societies in research.

Furthermore, there is a clear reciprocity visible looking at incoming guest lecturers from several high performing research universities in Europe and the USA.

Recommendation 3.10 a 3.11:

The Faculty as a whole performs relatively well when looking at the combined scores. The impression is however that the Faculty as a whole could benefit from sharing expertise more systematically as well as good practices. A recommendation for the dean and the leadership on the level of departments and research institutes could be to develop a joint and coherent strategy here. More specifically

- Formulate ambitions and targets for both the faculty as a whole and departments
- Make this part of the HR-policy on the level of individual staff members.

POPULARISATION OF R&D&I

3.12 The most significant activities in the popularisation of R&D&I and communication with the public

Evaluate the main activities of the evaluated unit in the area of popularisation of R&D&I and communication with the public, based on a maximum of ten significant examples from the evaluated unit perspective.

Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

The Faculty wide area of many activities for various target groups. Not only in all kind of university wide or national popularisation events, but also by reaching out in various forms to (elementary and secondary) schools as well as to students, citizens in their third age or people with a specific interest in for instance investing (Klub Investoru) or for young entrepreneurs.

The activities are shown, but the idea behind it is somewhat less visible.

Recommendation 3.12:

The Faculty preforms well, but, again, could benefit from a clear strategy on creating social impact in which these activities can be embedded. It might help to:

- formulate clear ambitions on the level of the faculty, departments and individuals;
- evaluate the popularisation at least every 2 years;
- install a coordinator or even vice dean for social impact.

MODULE 3 - OVERALL ASSESSMENT	
After evaluation of the individual criteria of the M3 module, please summarise your assessment in the context of the whole module (social benefits, applied research projects, results of applied research, cooperation with the non-academic environment and technology transfer, recognition by the research community and the popularisation of R&D&I) and describe and justify the strengths and weaknesses of the evaluated unit.	
Overall score [Calibrated]:	**133**
Overall grade [Excellent– Inadequate]:	**4 - Very good**

General qualitative assessment (summary):

The Faculty of Economics and Administration is a productive and well performing faculty that fits well with and contributes to the aspirations and the ambitions of Masaryk University as a whole. Overall, the Faculty expresses enthusiasm and an entrepreneurial attitude.

The research conducted by the 5 core departments and in the 10 research institutes is overall closely connected with societal issues and actors. Applied research in fields as transport, circularity, financial systems and the functioning of the non-profit sector shows direct social benefits and often at least a potential for economic benefits.

The dissemination or research output and expertise and research out is an organic part of the Faculty's activities. The different forms of outreach, interaction and popularisation for a wide range of audiences and target groups and activities, especially the lifelong learning programs for professionals, add substantially to the social relevance of the Faculty.

The Faculty management is able to manage the 7 departments and 10 research groups is such a way that the social relevance of the Faculty remains sustainable (lower case load in teaching, evaluation of research units after 3 years, significant success in getting grant proposals accepted).

Still there is room for improvement:

- A more focussed Faculty wide strategy in which the departments cooperate and commit themselves is needed to prevent the Faculty to become too dependent of the demand of its relevant environment;
- The large number of PhD-programs, PhD dropout, PhD supervision & mentoring, PhD grant system may lead to fragmentation which may hinder the development of the faculty as a whole;
- Investing in knowledge circulation on, sharing best practices of and training staff in applied & contract research and in dissemination will contribute to the social relevance of the Faculty.
- The expertise in applied and contract research in combination with the expertise in dissemination, interaction and lifelong learning for professionals can more systematically be used for the benefit of the faculty. On that basis a coherent package of research an training services can be delivered for market prices. This will contribute not only to the social relevance but may also benefit the Faculty's budget. Establishing a Contract Research and Executive Education unit in which these activities are concentrated (without losing touch with the departments and research units) might be considered.

MODULE 3 SOCIAL RELEVANCE

EVALUATED UNIT: Faculty of Education, Masaryk University

FORD: 5. Social Sciences

SOCIAL RELEVANCE / SOCIAL BENEFIT OF THE EVALUATED UNIT

3.1 General self-assessment of the social benefit of R&D&I in the fields of research at the evaluated unit, and of the evaluated unit as a whole
This criterion has not indicative value. It represents a general introduction describing the social benefit of R&D&I in the fields developed by the evaluated unit, and the evaluated unit as a whole.
Qualitative assessment: In the evaluated period the Faculty of Education (PED) developed activities in R&D&I with social impact and benefits which follow directly from its mission in the field of research-based education for teachers and other pedagogical professionals. Doing this PED achieved significant results of applied research focussing on educational systems, curriculum and instruction in school subjects, and inclusive education and social inclusion. Being aware of its mission PED covers wide range of research activities with societal benefit. Practically-oriented research is conducted primarily at the departments, more focused, developed and using interdisciplinary approaches it is realized at two research institutes – The Institute for Research in School Education and The Institute for Research on Inclusive Education.

APPLIED RESEARCH PROJECTS

3.2 Applied research projects	
Evaluate five most significant (from the perspective of the evaluated unit) applied research projects from the complete list in the appendix (tables 3.2.1 and 3.2.2 of Self-evaluation report), consider particularly results achieved or a project's potential for application.	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: PED lists just four projects supported by a national provider and one by EU (H2020). These projects cover both general problems (e.g. system of education) and particular topics (e.g. Influence of cartographic visualisation methods) of applied research in the field of PED. They are focused both on systematic enhancement and tangible improvement of various aspect of educational environment and praxis. The projects are touching all levels of personal, institutional and social dimensions of educational performance and are in accord with the R&D&I long term priorities of PED (research on school education and research on inclusive education and social inclusion). In the period 2014–2018 PED was able to gain some notable grant projects financed by national and international providers, e.g.: • TAČR: System of field education for elementary schools • GAČR: What is the context: objective determinants of socialization of teachers as beginners	

- H2020: Inclusive Education and Social Support to Tackle Inequalities in Society

Results of these applied projects obviously contribute to disseminate expert knowledge and improve the quality of education in many substantial aspects and have significant potential for utilization in the wide field of education.

3.3 Contract research	
Evaluate revenues from contract research for the 2014–2018 reporting period from the complete list in the appendix of Self-evaluation report (tables 3.3.1 and 3.3.2).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: PED is quite productive in applied research activities and promotes long-term institutional cooperation with a broad scale of educational, public and state authorities (a. o. schools of all levels or departments of Ministry of Education, Youth and Sports). It is not a shame to PED that these efforts are not rewarded properly in financial terms but rather are considered to be part of its public mission.	

3.4 Revenues from non-public sources (besides grants or contract research) from research work	
Evaluate revenues for the 2014–2018 reporting period for R&D&I from non-public sources, besides grants or contract research (e. g. licences sold, spin-off revenues, gifts, etc.) presented in a complete list in the appendix of Self-evaluation report (table 3.4.1).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: In the domain of public education in the Czech environment it is quite normal that PED did not recorded any revenues of this type.	

Recommendation 3.2, 3.3 a 3.4:

- To keep cultivating distinct long-term R&D&I priorities in basic and applied research in accord with the mission of PED and with respect to national and international environment („flagships“).
- To support innovative approaches and methods in education aiming to meet new demands of the changing environment („teaching for future“).
- Considerable progress in acquiring external R&D&I grant projects, development of tools to support R&D&I project activities.
- Further development of pronounced international cooperation in R&D&I work.

APPLIED RESEARCH RESULTS

3.5 Applied research results with an existing or prospective economic impact on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results that have already been applied in practice, or that will realistically be applied, in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.5.1).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: PED did not record any revenues of this type. The definition of research results types does not meet the research domain of education.	

3.6 Significant applied research results with an other than an economic impact one on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results with the other than the economic impact on society in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.6.1).	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: In 3.6 (tab 3.6.1) altogether five results of this type are documented. As a whole they do not seem to express the complete potential of PED's capacities in this area. These results represent „accumulated wisdom of practice" which was elaborated by research endeavour. They are presented in diverse types of outcomes (handbook, scientific article, interactive map, certified methodology, documentary with related expert study). Topically they correspond to the R&D&I domain of PED and contribute to develop its research profile. They represent solid applied research outcomes and are significantly conductive to the domain of education.	

Recommendation 3.5 a 3.6:
• In accord with the mission of PED to enhance the number and quality of applied research activities. To reach this goal ambitious institutional strategy would be recommendable specifying mid-term goals, priorities and tools. • Team-work culture in R&D&I is to be supported along with interdisciplinary and international cooperation. • Critical consideration and reassessment of the own position and the role of PED in R&D&I activities should reveal hidden (or not properly presented) potential in applied research activities.

COOPERATION WITH THE NON-ACADEMIC ENVIRONMENT AND TECHNOLOGY TRANSFER

3.7 The evaluated unit's most significant interactions with the non-academic application/corporate sphere	
Evaluate the most significant interactions with the non-academic application/corporate sphere, comment on the most typical users of the evaluated unit´s outcomes. Please take into consideration how the evaluated unit looks up for these users and how the evaluated unit cooperates with them. Use provided examples of interactions for your evaluation.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: Cooperation of PED with the non-academic environment (as described in part 3.7) represents a wide range of (mostly long term) activities which prove a strong commitment of PED in this area. These activities are to be perceived as a broader perimeter of applied research domain and cooperation target area of PED in accord with its mission. Especially schools of all types and various institutions in the educational area (including state, provincial and municipal bodies) are the first partners of cooperation and first addressee of applied research outputs. Particular appreciation deserve long-term activities on the issue of people with disabilities and the disadvantaged ones. In the list contractual and long-term cooperation activities are included which is a mark of importance and seriousness of these interactions.	

3.8 System and support of technology transfer and intellectual property protection (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate the system of technology transfer of the evaluated unit. Consider the quality of the applied research and the effectiveness of technology transfer using the description and the data presented in the appendix of Self-evaluation report (table 3.5.1). Focus particularly on the number of filed and granted patents (Czech and international) and licences sold.	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: PED has recorded no results of this type (tab. 3.5.1). The system is set up centrally, supported by the Technology Transfer Office.	

3.9 Strategy for setting up and support of spin-off firms or other forms of commercialisation of R&D&I results (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate practical use of the intellectual property of the unit in the form of setting up spin-off companies or other forms of commercialising R&D&I results (both with and without the participation of the unit) established by the evaluated unit (university), or by another entity controlled by the evaluated unit (university), or an employee of the evaluated unit. Consider the model of functioning and coordination and control of intellectual property management of the evaluated unit (university).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: PED has produced no spin-offs or other forms of commercialisation.	

This type of research outcomes does not fit to the R&D&I area and to the mission and the profile of the evaluated unit.

Recommendation 3.7, 3.8 a 3.9:
• Cooperation with non-academic sphere represents obviously an important part of PED's activities which contributes essentially to its mission and profile. These types of cooperation provide PED with needful feedback. To coordinate and cultivate further these activities according to its own research priorities and to the benefit of R&D&I development is recommended. PED should be aware of being positioned to a role of mere „expert service organisation" which is working for the partner organisations. • To explore possible opportunities for transforming some of the long-term institutional cooperation cases to contractual ones? Or to find new ones? Without any doubt at PED there is great potential of expert knowledge with considerable transfer capacity.

RECOGNITION BY THE SCIENTIFIC COMMUNITY

3.10 The most significant individual awards for R&D&I	
Evaluate the ten most significant R&D&I awards received (in the Czech Republic and in other countries) in the 2014–2018 reporting period.	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: PED reports considerable collection of awards ranging from local (Brno City Award) to national and international level, both research and scientific, state and public types of recognition. Awards granted by high profile scientific, professional, public and state institutions display significant level of recognition of PED experts.	

3.11 Recognition by the international R&D&I community (elected membership in international scientific societies, participation on the editorial boards of international scientific journals, invited lectures at the institutions abroad etc.)	
Evaluate the recognition of the evaluated unit by the international scientific R&D&I community, based on a commentary presented in the appendices of Self-evaluation report (table 3.11.1, table 3.11.2, table 3.11.3 and table 3.11.4).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: In its report PED gives very respectable evidence of recognition by the international scientific R&D&I community. Staff members of PED are members of high profile international scientific journals (7 journals of Sc / Wos category are listed). They are regularly invited to lecturing at institutions in other countries (universities and conferences in the USA, UK, France, the Netherlands, Belgium, Germany, Austria, Hungary and Poland). They also keep vivid ties with research partners abroad and regularly invite experts to give lectures at PED (lecturers from the	

USA, UK, Canada, Germany, Switzerland, Austria and Israel). The list of elected memberships in foreign or professional societies documents not only strong involvement of PED experts in Czech professional associations but also their important positions in some international ones (e. g. Ass. Prof. O. Sládek being chairman of the Steering Committee of the European Narratology Network). Chosen examples give convincing evidence of intensive international cooperation and high-profile recognition of PED experts by the international community of experts in the field.

Recommendation 3.10 a 3.11:
Through continuous expert activities, supporting research, international cooperation and high-quality publications PED could strengthen awareness and recognition of PED experts.

POPULARISATION OF R&D&I

3.12 The most significant activities in the popularisation of R&D&I and communication with the public	
Evaluate the main activities of the evaluated unit in the area of popularisation of R&D&I and communication with the public, based on a maximum of ten significant examples from the evaluated unit perspective.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: PED takes advantage of various possibilities to spread expert knowledge and to be active in popularisation of its expertise. Besides public lectures or presentations in mass media many specific ways of disseminating specialist knowledge and professional skills are regularly used, e.g. organization of competitions for pupils and students (popular Olympiads), festivals, memorials, sport days etc. In several of these regular activities PED develops long term cooperation with partner institutions and companies (especially with schools and institutions active in educational domain). Also new media are utilized to spread these outcomes in innovative ways and to enrich the forms of enhancing knowledge and skills of interested people (mobile versions of textbooks and educational tools, electronic platforms, specialized web pages).	

Recommendation 3.12:
In accord with its mission PED should further develop and cultivate its communication with public and strive to gain attention to its activities. Existing good practices should be strengthened and developed, innovative approaches and new forms should be searched and used to meet the demands and expectations of the existing addressees. Initiatives aiming to open new fields of recipients or new forms of communication with the public should be supported.

MODULE 3 - OVERALL ASSESSMENT	
After evaluation of the individual criteria of the M3 module, please summarise your assessment in the context of the whole module (social benefits, applied research projects, results of applied research, cooperation with the non-academic environment and technology transfer, recognition by the research community and the popularisation of R&D&I) and describe and justify the strengths and weaknesses of the evaluated unit.	
Overall score [Calibrated]:	**116**
Overall grade [Excellent– Inadequate]:	**3 - Good**

General qualitative assessment (summary):

In the evaluated period PED was developing research activities with social impact and societal benefits which were in accord to its mission and contributed to its profile of research-based educational institution training teachers and other pedagogical professionals. PED achieved significant results of applied research, especially in two areas of its special interest (focussing on educational systems, curriculum and instruction in school subjects, and inclusive education and social inclusion). Being aware of its mission and of its function for non-academic partners in the domain of education (all types of schools, public or state institutions and companies active in the educational domain) PED covers wide range of applied research activities with obvious societal benefit. The outcomes of these activities obviously serve well to broad scale of direct and indirect beneficiaries.

MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY

MODULE 3 SOCIAL RELEVANCE

EVALUATED UNIT: Faculty of Informatics, Masaryk University

FORD: 1. Natural Sciences

SOCIAL RELEVANCE / SOCIAL BENEFIT OF THE EVALUATED UNIT

3.1 General self-assessment of the social benefit of R&D&I in the fields of research at the evaluated unit, and of the evaluated unit as a whole
This criterion has not indicative value. It represents a general introduction describing the social benefit of R&D&I in the fields developed by the evaluated unit, and the evaluated unit as a whole.
Qualitative assessment: The evaluation panel found the faculty of informatics at Masaryk University very well positioned, very active, and very visible. The multitude of research projects, industrial collaborations, and flexible organisation are impressive and convincing. One can argue their world-leading innovation in cybersecurity as well as natural language processing aspects.

APPLIED RESEARCH PROJECTS

3.2 Applied research projects	
Evaluate five most significant (from the perspective of the evaluated unit) applied research projects from the complete list in the appendix (tables 3.2.1 and 3.2.2 of Self-evaluation report), consider particularly results achieved or a project's potential for application.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: There is a multitude of projects, with a clear strength in cybersecurity, natural language processing as well as imaging. Such a focus is great and perhaps could be extended to enable European or international leadership in these areas. In that regard, international cooperation (Table 3.2.2.) could be strengthened. However, averaging almost 540k EUR per year in funding is fantastic.	

3.3 Contract research	
Evaluate revenues from contract research for the 2014–2018 reporting period from the complete list in the appendix of Self-evaluation report (tables 3.3.1 and 3.3.2).	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: The revenue from contract research averages almost 70k EUR per year. This is good, especially considering that it is the hardest money to get from an industrial partner. The setup with the CERIT science part, the Cybersecurity Innovation Hub, as well as associated industrial partners is	

outstanding. Hence, it should be possible to convert these connections into additional contract research work as well.

3.4 Revenues from non-public sources (besides grants or contract research) from research work	
Evaluate revenues for the 2014–2018 reporting period for R&D&I from non-public sources, besides grants or contract research (e.g. licences sold, spin-off revenues, gifts, etc.) presented in a complete list in the appendix of Self-evaluation report (table 3.4.1).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: The revenue from non-public sources is amazing! It is steadily increasing from EUR 350k in 2014 to almost 700k EUR in 2018. The majority of revenue is coming from some of the spin-offs, as well as the Association of Industrial Partners. This is exemplary for many other faculties around Europe and around the globe. Bravo!	

Recommendation 3.2, 3.3 a 3.4:
Overall, our recommendation is: keep on doing this great work, perhaps share some of your wisdom and best practices with other colleagues around the world. What you are doing is great.

APPLIED RESEARCH RESULTS

3.5 Applied research results with an existing or prospective economic impact on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results that have already been applied in practice, or that will realistically be applied, in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.5.1).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: Again, the work here is exemplary with the plagiarism checker as well as the cybersecurity tools already creating revenue with a large impact on society.	

3.6 Significant applied research results with an other than an economic impact one on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results with the other than the economic impact on society in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.6.1).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: Again, there are several highlights – from an educational spinoff Umimeto.org to software tools in biochemistry and NLP and cybersecurity tools, the work here is amazing.	

Recommendation 3.5 a 3.6:
Again, we can only congratulate the faculty for their achievements.

COOPERATION WITH THE NON-ACADEMIC ENVIRONMENT AND TECHNOLOGY TRANSFER

3.7 The evaluated unit's most significant interactions with the non-academic application/corporate sphere	
Evaluate the most significant interactions with the non-academic application/corporate sphere, comment on the most typical users of the evaluated unit´s outcomes. Please take into consideration how the evaluated unit looks up for these users and how the evaluated unit cooperates with them. Use provided examples of interactions for your evaluation.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: Both, the CERIT science park as an incubator unit as well as the Association of Industrial Partners are fantastic vehicles to interact and collaborate with industry, even attracting industry to the Brno region.	

3.8 System and support of technology transfer and intellectual property protection (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate the system of technology transfer of the evaluated unit. Consider the quality of the applied research and the effectiveness of technology transfer using the description and the data presented in the appendix of Self-evaluation report (table 3.5.1). Focus particularly on the number of filed and granted patents (Czech and international) and licences sold.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: This seems to be centralized at the university's TTO office. It seems to work well as there are many patents and many licenses to show, creating a large revenue stream (as detailed above).	

3.9 Strategy for setting up and support of spin-off firms or other forms of commercialisation of R&D&I results (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate practical use of the intellectual property of the unit in the form of setting up spin-off companies or other forms of commercialising R&D&I results (both with and without the participation of the unit) established by the evaluated unit (university), or by another entity controlled by the evaluated unit (university), or an employee of the evaluated unit. Consider the model of functioning and coordination and control of intellectual property management of the evaluated unit (university).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: Again, this is centralized at the university and, again, there are numerous examples of successful spinoffs. The only possible improvement is to also "conquer" the international market.	

Recommendation 3.7, 3.8 a 3.9:
Again, a great performance.

RECOGNITION BY THE SCIENTIFIC COMMUNITY

3.10 The most significant individual awards for R&D&I	
Evaluate the ten most significant R&D&I awards received (in the Czech Republic and in other countries) in the 2014–2018 reporting period.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: After looking a full list of 10 awards at the supplemental material, we appreciate the international visibility. We appreciate the best paper awards as well as the awards from the research community and the ministries. However, we believe there is room for improvement. It is questionable whether a somewhat dubious AMiner Most Influential Scholar should be listed here.	

3.11 Recognition by the international R&D&I community (elected membership in international scientific societies, participation on the editorial boards of international scientific journals, invited lectures at the institutions abroad etc.)	
Evaluate the recognition of the evaluated unit by the international scientific R&D&I community, based on a commentary presented in the appendices of Self-evaluation report (table 3.11.1, table 3.11.2, table 3.11.3 and table 3.11.4).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: Considering the constraints of the form, we appreciate the much wider international visibility of the faculty than is represented in the form. We encourage further activity here and would also	

encourage to become visible in the top journals in computer science, which are usually ACM or IEEE journals.

Recommendation 3.10 a 3.11:
Certainly, the visibility in the international research community should be improved. One of the main instruments here is to consider your publication strategy and reward so-called A-list publications over others.

POPULARISATION OF R&D&I

3.12 The most significant activities in the popularisation of R&D&I and communication with the public	
Evaluate the main activities of the evaluated unit in the area of popularisation of R&D&I and communication with the public, based on a maximum of ten significant examples from the evaluated unit perspective.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: There is certainly visibility in terms of TV and radio, which is great. But especially the engagement in outreach activities like Researchers Night at MUNI or the support of Informatic Olympiads is commendable.	

Recommendation 3.12:
Overall, there is not much to improve. Perhaps you could capitalize your commercial success in cybersecurity as well as NLP in public outreach activities as well.

MODULE 3 - OVERALL ASSESSMENT	
After evaluation of the individual criteria of the M3 module, please summarise your assessment in the context of the whole module (social benefits, applied research projects, results of applied research, cooperation with the non-academic environment and technology transfer, recognition by the research community and the popularisation of R&D&I) and describe and justify the strengths and weaknesses of the evaluated unit.	
Overall score [Calibrated]:	**217**
Overall grade [Excellent– Inadequate]:	**5 - Excellent**

General qualitative assessment (summary):

The commercialization aspects of the Faculty of Informatics are really outstanding and comparable with the best in the world. However, the academic recognition lacks, surprisingly, behind. There is room for improvement. Possible avenues of attack could be a stronger publication culture and awarding high-impact journal/conference publications over others.

Further, we were impressed with some of the flexibility in the internal organizational structure. Forming and disbanding research groups seems rather dynamic and ad-hoc. It seems to work well for the unit, and their granting success proofs the validity of such an approach. Still, it would be good to either articulate and share with colleagues (across campus) what some of the "secret sauce" might be. Alternatively, it might be worthwhile to think about whether existing structures could be further improved by tying resources to research groups and their performance. If there are any changes at all, we would urge the leadership of the faculty to make the rules for forming and disbanding such research groups transparent to all members of the faculty, such that possible abuse by future less-well-meaning deans can be limited.

While the review has been focused on grantsmanship as well as outreach to the society in general, we would like to comment on the importance of outreach to faculties across Masaryk University. We believe that, in the context of digitalization, the relevance of computer science skills is steadily increasing for all graduates across campus. We have seen that some faculties (Economics) created their own "Department of Applied Statistics and Computer Science" and others (like Arts) have increasing needs ("Digital Humanities). In addition, while the case was made for having a separate unit "ICS", we are not convinced that this is the best approach. We strongly support the idea: better service through innovation! However, we believe that an integration of this unit within computer science can have many benefits:

- The researchers of ICS would be surrounded by a research culture that strives for international research standards
- Better access to and for students (to better tie research to an educational setting)
- A competitive / attractive environment for hiring of researchers / renewal for both units
- An intellectually nourishing culture (driving by applications on the one end and driven by academic standards on the other hand)
- A better tie-in to the Association of Industrial Partners

In general, we are missing a strategy for outreach of the faculty of Informatics to the other academic units across campus. Part of this strategy could be

- Service teaching

- Joint programs. We see many potentials from Business Analytics (with ECON), Digital Humanities (with Arts), Digital Law and Security (with Law) and Computational Social Science (with Social Studies) to Bioinformatics and Computational Science (with Science).
- Other service units, e.g. so-called Data Stewarts and a data analysis service unit, etc.

We believe Masaryk University has all the right players to become a European, if not world leader in some of these areas.

Last, but not least, we encourage the unit to work on improving graduation rates and graduation times of their PhD students. We see a lot of positive efforts being spend here (good stipents, etc.). However, you really need to improve your graduation rates, despite the “brain-drain” towards industry.

MODULE 3 SOCIAL RELEVANCE

EVALUATED UNIT: Faculty of Law, Masaryk University

FORD: 5. Social Sciences

SOCIAL RELEVANCE / SOCIAL BENEFIT OF THE EVALUATED UNIT

3.1 General self-assessment of the social benefit of R&D&I in the fields of research at the evaluated unit, and of the evaluated unit as a whole
This criterion has not indicative value. It represents a general introduction describing the social benefit of R&D&I in the fields developed by the evaluated unit, and the evaluated unit as a whole.
Qualitative assessment: The Faculty of Law was not set up with applied science as its focal point, but due to the inherent societal importance of its object of study, the Faculty of Law nevertheless is a key contributor to society with regard to matters related to regulation, constitutionalism and democracy and more generally public and private governance. We would like to emphasise the following areas of research which have developed specific research units (institutes) which clearly benefit society. • The Institute of Law and Technology • The Judicial Studies Institute. The Institute of Law and Technology provides insights into key aspects of the perhaps most central aspects of the growing digitalisation of society and its consequences for individuals and collectives of individuals. The Judicial Studies Institute provides cutting-edge research into operation of courts in society, a question which has gained enormous traction in recent years due to growing illiberal tendencies in a number of European countries, including in Central Europe. Beyond these two fields, the Faculty of Law provides research into a broad range of legal subjects of significant importance to society and economy.

APPLIED RESEARCH PROJECTS

3.2 Applied research projects	
Evaluate five most significant (from the perspective of the evaluated unit) applied research projects from the complete list in the appendix (tables 3.2.1 and 3.2.2 of Self-evaluation report), consider particularly results achieved or a project's potential for application.	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

The evaluation only lists three projects in this regard, each of which demonstrating high degree of applied research.

The project "The protection, transfer and application of R&D results at national and international levels" showcases the faculty's ability to deliver high-impact research within its area of expertise. The project's aim was to help develop a platform for the application processes administered by the Masaryk University Technology Transfer Office (MUNI TTO). Although this is strictly linked to university research, the transfer of technology, and its many legal issues, is of significant public interest and impact.

The Faculty of law has also engaged with the Technology Agency of the Czech Republic in two projects of significant societal importance.

The project "Research on the impact of current legislation and the European Commission's strategy for a Digital Single Market (DSM) on the Czech audiovisual industry" consisted of an evaluation of the copyright system and preparation of cultural policy within the Digital Single Market (DSM).

The other project concerned with the increasing the effectiveness of the enforcement of traffic law, using scientific insights into procedural obstruction tactics in administrative proceedings in this regard.

3.3 Contract research	
Evaluate revenues from contract research for the 2014–2018 reporting period from the complete list in the appendix of Self-evaluation report (tables 3.3.1 and 3.3.2).	
Score [0–5 points]:	**3 - Good**

Qualitative assessment:

The Faculty of Law has been involved in a number contract research projects concerning law and IT, including working for major companies such E.ON. and law firms.

The revenues from such contracts are not central to the economy of the Faculty and they do not amount to any significant amounts.

3.4 Revenues from non-public sources (besides grants or contract research) from research work	
Evaluate revenues for the 2014–2018 reporting period for R&D&I from non-public sources, besides grants or contract research (e.g. licences sold, spin-off revenues, gifts, etc.) presented in a complete list in the appendix of Self-evaluation report (table 3.4.1).	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: The Faculty of Law has received revenues from foundations for conducting two projects. Such projects are not currently central to the operation of the Faculty and its economics, but it is an avenue that could be explored further.	

Recommendation 3.2, 3.3 a 3.4:
The Faculty of Law does very well on applied science projects from the public realm. During the period under scrutiny, it does not have many project projects from non-public sources. It is our assessment that the Faculty of Law fairly easily could improve its record in these dimensions. Historically, law professors have often done a lot of contracted work but it has often been on the side of their formal job description and thus not been benefiting the institution. The information we have about the Faculty of Law suggests that the professors are very well-positioned to be engage for such work, both with regard to the public sector, law firms and private business. If the Faculty of Law will seek to improve its record in these dimensions, it will have to consider how it turns this body of work into publicly recognised contract research. We are aware this might entail changes in the culture of the Faculty but we nevertheless encourage the Dean's Office to look into this.

APPLIED RESEARCH RESULTS

3.5 Applied research results with an existing or prospective economic impact on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results that have already been applied in practice, or that will realistically be applied, in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.5.1).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The Faculty of Law does not provide a list of direct results in Table 3.5.1, but it makes a convincing case for the general societal and economic impact of its research in the extended version of the assessment. It goes without saying that the well-functioning of the legal system is of paramount importance to the economic performance of a state. The Czech Republic is in this regard the best performing EU13 country on all generally accepted indexes for the performance of legal systems and bypassing a number of the old member states.	

The Law Faculty at MUNI, because of its proximity to the highest country of the Czech Republic, is a major provider of research into the judiciary. It has the Institute for Judicial Studies set up by an ERC grant and now fully integrated into the Law Faculty which produces research at the highest international level. The position of the Faculty close to all major Czech courts, and with the high level of interchange with those courts and the faculty, makes it a central player in the maintenance of the Czech legal system with broad and significant benefits for economy and society.

More generally, the general output of the Faculty in terms of legal commentary and analysis of jurisprudence is applied on a day-to-day practice in the Czech legal system. It is impossible to evaluate the precise impact of this but it is undoubtedly considerable.

Researchers at the Faculty also participate in preparatory work with regard to new legislation whereby they feed in research insights develop at the Faculty to applicable law across the Czech Republic. In addition to the mentioned strengths in judicial studies, their other key strength is cyber security where they have impacted directly on applicable law.

3.6 Significant applied research results with an other than an economic impact one on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results with the other than the economic impact on society in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.6.1).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: As detailed above, legal research as conducted the Law Faculty impacts both economy and society and it is often difficult to distinguish the two forms of impact when it comes to law. In Table 3.6.1 the Faculty provides striking examples of research in the forms of legal commentary (typical very thick book) and specific journal articles that has impacted on developments of case law the courts. They do not provide a citation count, but their estimate that such works are cited in hundreds of court decisions is probably conservative.	

Recommendation 3.5 a 3.6:
The Faculty does exceptionally well in these regards and it the only recommendation we can make is to encourage the Faculty in developing ways of tracing and assessing these forms of impact. We have no reason to question their impact in this regard but it would be beneficial for the Faculty if it had the tools for better evidencing this impact.

COOPERATION WITH THE NON-ACADEMIC ENVIRONMENT AND TECHNOLOGY TRANSFER

3.7 The evaluated unit's most significant interactions with the non-academic application/corporate sphere	
Evaluate the most significant interactions with the non-academic application/corporate sphere, comment on the most typical users of the evaluated unit´s outcomes. Please take into consideration how the evaluated unit looks up for these users and how the evaluated unit cooperates with them. Use provided examples of interactions for your evaluation.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: The Faculty provides a long list of its many interactions with non-academic sectors of society. This attests to the broad impact of the Faculty. From our perspective, and also evidenced in above assessment, one of the Faculty's strengths is its focus on judicial studies. It has direct collaboration with judges of the Court of justice of the European Union, the Czech Constitutional Court and the Czech Supreme Administrative Court. In addition, the Faculty collaborate directly with the Council of Government of the Czech Republic, as well as engages with the drafting of laws at a multitude of levels. The Faculty also engages with the corporate sector, among other through its study programmes and training programmes. Overall, few European law faculties can pride itself of such intense collaboration with non-academic partners.	

3.8 System and support of technology transfer and intellectual property protection (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate the system of technology transfer of the evaluated unit. Consider the quality of the applied research and the effectiveness of technology transfer using the description and the data presented in the appendix of Self-evaluation report (table 3.5.1). Focus particularly on the number of filed and granted patents (Czech and international) and licences sold.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The Law Faculty is deeply integrated with the MUNI TTO, the central technology transfer office of the university in addition to having its own in-house resources in this regard. Considering the Faculty's available expertise in this regard, the most robust protection at MUNI is probably found here.	

3.9 Strategy for setting up and support of spin-off firms or other forms of commercialisation of R&D&I results (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate practical use of the intellectual property of the unit in the form of setting up spin-off companies or other forms of commercialising R&D&I results (both with and without the participation of the unit) established by the evaluated unit (university), or by another entity controlled by the evaluated unit (university), or an employee of the evaluated unit. Consider the model of functioning and coordination and control of intellectual property management of the evaluated unit (university).	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: Given its area of expertise, the Faculty is not a likely candidate to spin-off companies as seen in the natural sciences. Its focus is on other dimensions which are helping the succesful creation of spin-offs.	

Recommendation 3.7, 3.8 a 3.9:
The Faculty has extensive and pro-active collaboration with the non-academic world, and easily ranks among the very best European law faculties in this regard. Due to the research focus of the Faculty, it is not the obvious candidate for spinning-off companies (at least directly). We encourage, however, the Faculty to increase its ability to document indirect spin-offs such as the setting up of specialised legal consultancy based on for example PhD and postdoc work done at the Faculty.

RECOGNITION BY THE SCIENTIFIC COMMUNITY

3.10 The most significant individual awards for R&D&I	
Evaluate the ten most significant R&D&I awards received (in the Czech Republic and in other countries) in the 2014–2018 reporting period.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The most impressive awards given to the Faculty have been given to the central professors operating the Faculties institutions on respectively judicial studies and internet and law. The Canada Prize, a major award given by The International Academy of Comparative Law, was given to the monograph “Perils of Judicial Self-Government in Transitional Societies“ by David Kosař, (2018). This important award is granted only once every four years. Professor Kosar has also received the Lawyer of the Year award as well as the Neuron Prize for Young Talented Scientists from the Neuron Endowment Fund for the Support of Science. Professor Radim Polčák was awarded a “New Europe 100 Challengers” by the consortium of Res Publica, Google, the Visegrad Fund and the Financial Times.	

Moreover, the Lawyer of the Year has been given to other MUNI law academics during the period: Prof. Petr Průcha and prof Stanislav Kadečka, Ph.D. (2015); Doc. JUDr. David Kosař, Ph.D., LL.M., J. S. D. (2016).

This shows that the best legal researchers at faculty are both nationally and internationally recognised for their ability to be innovative in legal research.

3.11 Recognition by the international R&D&I community (elected membership in international scientific societies, participation on the editorial boards of international scientific journals, invited lectures at the institutions abroad etc.)	
Evaluate the recognition of the evaluated unit by the international scientific R&D&I community, based on a commentary presented in the appendices of Self-evaluation report (table 3.11.1, table 3.11.2, table 3.11.3 and table 3.11.4).	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

During the period under scrutiny are members of a significant number international editorial and scientific boards and are involved in substantial international peer review.

They are also frequently invited to give lectures at top foreign institutions. This goes both for institutions with similar legal systems and common law jurisdictions like the US, Australia and the UK.

We also note that the Faculty manages to attract top foreign lectures to swing by Brno.

Finally, faculty staff are on many central international academic societies.

Recommendation 3.10 a 3.11:
The Faculty of Law scores very good in this regard. We would however recommend the Dean to help spread the good practices beyond the faculty's top researchers. It is important that this becomes general practice for all researchers and not only the most recognised researchers at the faculty.

POPULARISATION OF R&D&I

3.12 The most significant activities in the popularisation of R&D&I and communication with the public	
Evaluate the main activities of the evaluated unit in the area of popularisation of R&D&I and communication with the public, based on a maximum of ten significant examples from the evaluated unit perspective.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: The Faculty of Law is deeply engaged in a host of activities that helps disseminate the research results of the faculty well beyond the academic community. This goes for a number of activities directed at students, as well as many outreach initiatives which even includes inter-active theatre performances concerning current legal problems by the faculty's theatre group. Target groups in this regard span from children to senior citizens. The faculty is also dedicated to making research available through open access and is digitalising its library collections. Although facing the disadvantage of not operating in a capital city, the staff is deeply involved with both mass media as commentators and as users of new media.	

Recommendation 3.12:
The Faculty does exceptionally well in this regard. If it was to have a higher grade it would have to also seek a more international impact in this regard. While that might be interesting, the Faculty seems to cleverly addressing its local environment and contributing to local culture. An internationalisation strategy should not be at the cost of this local embedment.

MODULE 3 - OVERALL ASSESSMENT	
After evaluation of the individual criteria of the M3 module, please summarise your assessment in the context of the whole module (social benefits, applied research projects, results of applied research, cooperation with the non-academic environment and technology transfer, recognition by the research community and the popularisation of R&D&I) and describe and justify the strengths and weaknesses of the evaluated unit.	
Overall score [Calibrated]:	**156**
Overall grade [Excellent– Inadequate]:	**4 - Very good**

General qualitative assessment (summary):

The Faculty of Law is a high performing unit that is is a key contributor to society particularly with regard to matters related to tech regulation, courts, constitutionalism and democracy, as well as more generally public and private governance. Its two research units - The Institute of Law and Technology and The Judicial Studies Institute - are particularly high performing and feature in many of the appendixes provided for this evaluation. These are both world class research environments with high academic and societal impact.

The Faculty of Law also more generally performs very well in terms of societal and economic impact and its deeply connected to many outside partners. The very object of study at the faculty has an immediate impact on judicial and legislative practices and the faculty is good at producing the sorts of outcomes relevant in this regard, from commentary to specialised journal articles. It also seems to be good at striking a balance between domestic and international intellectual production.

Overall, the Faculty scores very highly with regard to the M3 assessment as evident from the above evaluations.

Where there is room for improvement is in the generalisation of the best practices. While it is not to be expected that all units score equally high, we encourage the Faculty leadership to come up with strategies for disseminating the best practices to broader parts of the faculty. This will both generally heighten the quality of the faculty and make the faculty less dependent on particularly industrious and talented individuals. We also encourage the faculty leadership to find ways of better documenting its ability to impact society and economy. We are aware that its main forms of impact will be indirect, but these indirect impacts can be traced and assessed as suggested above.

That said, the overall impression of the Faculty is extremely good.

MODULE 3 SOCIAL RELEVANCE

EVALUATED UNIT: Faculty of Medicine, Masaryk University

FORD: 3. Medical and Health Sciences

SOCIAL RELEVANCE / SOCIAL BENEFIT OF THE EVALUATED UNIT

3.1 General self-assessment of the social benefit of R&D&I in the fields of research at the evaluated unit, and of the evaluated unit as a whole

This criterion has not indicative value. It represents a general introduction describing the social benefit of R&D&I in the fields developed by the evaluated unit, and the evaluated unit as a whole.

Qualitative assessment:

MUNI MED is a professionally-oriented faculty. In addition to education and research the staff participates in health care services in teaching hospitals. Teaching and its institutional conditions are regulated by legal standards, and MUNI MED is obliged to support research activities in all fields of medicine to maintain the accreditation of its study programmes.

While this enables the implementation of undergraduate education based on original academic research, it makes it difficult to develop only strategically important fields of excellence.

The faculty encompasses the fields of clinical medicine and basic medical research, and biomedical sciences (**R&D covers almost the entire spectrum of biomedical research**)**.** In many fields, its scientists rank among the national and international leaders (molecular biology and genetics, cellular biology and stem cell research, oncology and tumour biology, cardiology, neuroscience, innovative therapies, regenerative and reproductive medicine). The coexistence of research into clinical and basic medicine ensures direct translation of the results.

Excellent infrastructure supports the application potential of research (**clean facilities for the production of somatic-cell medicines** that have enabled unique clinical studies using patient dendritic cells in paediatric oncology, **CZECRIN - the national coordinator of the ECRIN network** for the support of academic clinical studies, **animal house** for R&D purposes - GMO animals, transgenic strains – and the **Medicinal Plant Centre**.

The most important social contribution is the development of innovative therapies and pharmaceuticals, the development of new clinical and therapeutic guidelines, diagnostic, therapeutic, preventive and educational activities and participation in humanitarian activities. Thanks to cooperation with the **Brno City Municipality** and **the South Moravian Region** in the field of medical and preventive care, its R&D is of regional importance.

The faculty has cooperated with intra and extramural partners within the **Brno Research Area (MUNI SCI, CEITEC MU, University Hospital Brno, FNUSA, ICRC, Masaryk Cancer Institute, BUT, University of Veterinary and Pharmaceutical Sciences, Mendel University in Brno, CAS)**.

Through the involvement of academics in international consortia and professional societies that formulate international recommendations and guidelines for diagnosis and treatment, the activities of the MUNI MED have a global impact.

APPLIED RESEARCH PROJECTS

3.2 Applied research projects	
Evaluate five most significant (from the perspective of the evaluated unit) applied research projects from the complete list in the appendix (tables 3.2.1 and 3.2.2 of Self-evaluation report), consider particularly results achieved or a project's potential for application.	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

MUNI MED participates in numerous applied research projects. The projects are mainly focused on medical research, the development of new drugs and innovative therapies.

- At the national level, the projects submitted to the Agency for the Czech Health Research Council (AZV ČR) and the Technology Agency of the Czech Republic (TA CR), which supports a wide range of applied biomedical research, are crucial.
- At the international level, the faculty participates in solving EU-funded projects, foundation grants or bilateral projects, particularly in the field of innovative approaches in cancer prevention, control and treatment, in research into and development of new vaccines and innovative therapies, etc.

An important achievement in 2017 was the acquisition of the Collaborative Awards in Science project from the Wellcome Trust in which MU was first institution in Central Europe to succeed.

The selected projects with significant application potential:

1. **Circulating nucleic acids as markers** of multiple myeloma progression (potential for a new non-invasive diagnostic test)
2. **Cellular-signature profiling**: leading to tailored treatment for Schizophrenic patients (preparation of pathological tissue for diagnostic and therapeutic use)
3. **New biotechnologies in prevention and treatment of biliary tract stenosis** (development of a new biodegradable self-expanding stent)
4. **Clinical grade human embryonic stem cells**: derivation and characterisation (standard operating procedures and stem cell quality assessment for clinical application)

3.3 Contract research	
Evaluate revenues from contract research for the 2014–2018 reporting period from the complete list in the appendix of Self-evaluation report (tables 3.3.1 and 3.3.2).	
Score [0–5 points]:	**3 - Good**

Qualitative assessment:

- Contractual research worth **€661k**, with **increasing tendency** in 2014-2018 period.
- The contractors included government bodies, healthcare facilities and private pharmaceutical companies. The services offered included biostatistical data processing, screening evaluation.

These were usually contracted biostatistical data processing services, screening evaluation, etc., which are part of the unique expertise of the MUNI MED (**Institute of Biostatistics and Analyses of the LF**), which is sought after for these scientific activities (analysis and interpretation of the so-called large data, modelling, population studies and translation into regional and national policies)

- the establishment of the **first spin-off company, IBA s.r.o.**

3.4 Revenues from non-public sources (besides grants or contract research) from research work	
Evaluate revenues for the 2014–2018 reporting period for R&D&I from non-public sources, besides grants or contract research (e.g. licences sold, spin-off revenues, gifts, etc.) presented in a complete list in the appendix of Self-evaluation report (table 3.4.1).	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

Revenues from the sale of licenses for medicinal technologies and products- approximately **€7.53k**.

This involved the sale of licenses for **the test set for diagnosis of invasive aspergillosis**, and oligonucleotides for use in this way (to the Generi Biotech Company). The cooperation with the **Beznoska company** resulted in the development of **expandable tumorous endoprosthesis** of the femur which has been protected by a Czech utility model since 2015. The revenues from the cooperation with the Mendel University of Forestry and Agriculture have been based on the Czech licensed patent concerning the process for producing thermo-macerated must with the addition of L-ascorbic acid.

Recommendation 3.2, 3.3 a 3.4:

With a very good infrastructure and state of the art equipment unique within Brno Research Area, more efficient and closer collaboration with other institutions (University Hospitals, CEITEC, biopharma and biotech companies) could be beneficiary not only for faculty but for all the players.

PhD industry-oriented programs in collaboration with companies could lead to the increase of monetary revenue and leading position in a research-based education.

APPLIED RESEARCH RESULTS

3.5 Applied research results with an existing or prospective economic impact on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results that have already been applied in practice, or that will realistically be applied, in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.5.1).	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

- B-cell activating factor for increasing mucosal immunity of infants and a preparation containing this factor - Czech and European international patent (38 countries)
- Absolute quantification method of miRNA expression, diagnostics of B-cell malignancies. The license agreement **with Artios Pharma Ltd.** promises financial benefits from the development of a new compound for cancer-based DNA damage response
- A prototype expandable tumorous endoprosthesis of the femur - allows the bone and soft tissues of the leg to grow (**Beznoska Ltd.**)
- A co-owned patent for process for producing thermo-macerated must (**Vinařství Velké Bílovice**).
- The test set for method of diagnosis of invasive aspergillosis (**Generi Biotech**)
- The license agreement of Lumír Krejčí and Kamil Paruch with the British company Artios Pharma Ltd. promises significant financial benefits in the future for the development of a new compound for cancer-based DNA damage response (via nuclease inhibition).

3.6 Significant applied research results with an other than an economic impact one on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results with the other than the economic impact on society in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.6.1).	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

The most significant results of applied research with a non-economic impact are reflected in the areas of disease prevention (involvement of **the Internal and Geriatric Clinic** in education about problems of old age, aging and **screening of Alzheimer's disease in primary care in the region**), enlightenment (involvement of the **Institute of Biology in EuroStemCell** - an information portal for the public on stem cell research), development of new, or modification of existing, clinical guidelines and international guidelines (**involvement of IHOK in the development of international guidelines management of leukaemia**), health care reform (**involvement of the Psychiatric Clinic in the reform of mental health care in the South Moravian Region**) and new public health guidelines, the development of new vaccines and medicines, new technologies and operational procedures, providing health care, and last but not least, humanitarian work (**MSF, UNICEF, WHO, International Red Cross).**

These include, in particular, publication results, results reflected in directives and regulations of a non-legislative nature, results reflected in approved strategic and conceptual documents of state

or public authorities, methodologies, treatment procedures, and marginally non-publication results (patents).

Recommendation 3.5 a 3.6:
Selection and developing of unique areas of excellence (benchmarks) (ageing, neurodegenerative diseases, leukeamia) could increase visibility, increase collaboration with the rest of institutions and probably reduce a local competition for the same human/financial resources. In general, achieving critical mass in the selected areas.

COOPERATION WITH THE NON-ACADEMIC ENVIRONMENT AND TECHNOLOGY TRANSFER

3.7 The evaluated unit's most significant interactions with the non-academic application/corporate sphere	
Evaluate the most significant interactions with the non-academic application/corporate sphere, comment on the most typical users of the evaluated unit´s outcomes. Please take into consideration how the evaluated unit looks up for these users and how the evaluated unit cooperates with them. Use provided examples of interactions for your evaluation.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: • The most important long-term cooperation with the application sphere: ICRC, University Hospital Brno, St. Anne's University Hospital, Masaryk Memorial Cancer Institute, Regional Centre for Applied Molecular Oncology, Czech Academy of Science, state, regional and private medical facilities (clinics of assisted reproduction, CKTCH, SurGal Clinic, Agel, etc.), South Moravian Region and Brno City Municipality. • Cooperation with healthcare providers in the region and the state administration authorities (joint research projects with application potential, knowledge transfer and education and contracted research). • Cooperation with state administration bodies, legislators and national professional societies (Ministry of Health, Institute of Health Information and Statistics, Czech Medical Chamber, Czech Dental Chamber and State Institute for Drug Control).	

3.8 System and support of technology transfer and intellectual property protection (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate the system of technology transfer of the evaluated unit. Consider the quality of the applied research and the effectiveness of technology transfer using the description and the data presented in the appendix of Self-evaluation report (table 3.5.1). Focus particularly on the number of filed and granted patents (Czech and international) and licences sold.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: • MUNI offers a concise and professional system of technology transfer for the entire university • MUNI Technology Transfer Office conducts an evaluation of the quality of the applied research and the effectiveness of technology transfer • **Three Czech and three international patents, one sold licence**, and other results were commercialized via TTO from MUNI MED.	

3.9 Strategy for setting up and support of spin-off firms or other forms of commercialisation of R&D&I results (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate practical use of the intellectual property of the unit in the form of setting up spin-off companies or other forms of commercialising R&D&I results (both with and without the participation of the unit) established by the evaluated unit (university), or by another entity controlled by the evaluated unit (university), or an employee of the evaluated unit. Consider the model of functioning and coordination and control of intellectual property management of the evaluated unit (university).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The process and conditions for the establishment of spin-offs are included in the MUNI Instruction "The Founding and Operation of Masaryk University Spin-off Companies" (effective from 1 April 2018). Between 2014 and 2018 a total of five spin-off companies were established, one of them, IBA, Ltd, in which MUNI holds a share of 7%, is closely linked to MUNI MED and focuses on clinical research project management and develops supporting software for customers.	

Recommendation 3.7, 3.8 a 3.9:
The MUNI level TTO should be accompanied by the Faculty level activity, with an increased students and PhD students pro-entrepreneurial education, and support for innovative training of R&I for staff and students.

RECOGNITION BY THE SCIENTIFIC COMMUNITY

3.10 The most significant individual awards for R&D&I	
Evaluate the ten most significant R&D&I awards received (in the Czech Republic and in other countries) in the 2014–2018 reporting period.	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

- Pavel Janíček - Czech Science Foundation Award - endoprosthesis for the growing femur
- Šárka Pospíšilová and Michael Doubek - Czech Medical Association of J. E. Purkyně - Presidium Award for the best professional publications (Cancer Cell, Leukemia, Lancet Haematology, Molecular Cell, Bone, Stem Cells, and Stroke)
- Ladislav Bařinka - Josef Hlávka Award for scientific literature in medical sciences
- Andrea Pokorná - The Wound Assessment and Diagnostics Award
- Significant awards for junior R&D researchers:
- Dáša Bohačiaková, Zuzana Holubcová, Marek Mráz and David Kosař – Neuron Endowment Fund Award
- Ondřej Volný - Danubius Young Scientist Award - stroke research
- Michaela Fojtů - Werner von Siemens price for the best disertation thesis
- Martina Kosinová - Best Paper Award in Int. J. of Obstetric Anesthesia
- Hana Sedláčková- Undergraduate Awards - Life Sciences ("Nobel Prize" for Young Scientists)
- Zuzana Holubcová - L'Oréal and UNESCO World Youth Award.

3.11 Recognition by the international R&D&I community (elected membership in international scientific societies, participation on the editorial boards of international scientific journals, invited lectures at the institutions abroad etc.)	
Evaluate the recognition of the evaluated unit by the international scientific R&D&I community, based on a commentary presented in the appendices of Self-evaluation report (table 3.11.1, table 3.11.2, table 3.11.3 and table 3.11.4).	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

- Academics are members of the editorial boards of the renowned scientific journals (Cancer Cell, Leukemia, Lancet Haematology, Molecular Cell, Bone, Stem Cells, and Stroke) and members of professional societies.)
- Leading researchers are regularly invited to give lectures at the most renowned international institutions and congresses.

The most important lectures of foreign scientists are presented during the Mendel Lectures Series (more than 10 Nobel Prize winners including Ada Yonath, Elena Conti, Aaron Ciechanover, Rudolf Jaenisch, Steven Benner, Tom Misteli) have visited MUNI.

Recommendation 3.10 a 3.11:
The efforts to get recognition by the international R&D&I community are appreciated, especially in promoting young researchers, visible a long-term policy.

POPULARISATION OF R&D&I

3.12 The most significant activities in the popularisation of R&D&I and communication with the public	
Evaluate the main activities of the evaluated unit in the area of popularisation of R&D&I and communication with the public, based on a maximum of ten significant examples from the evaluated unit perspective.	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

The faculty's members are often guests on television and radio broadcasts, regularly providing interviews and commentaries on current issues of public health, health care, and health prevention.

- public educational and preventive activities in the community (World Health Day, World Diabetes Day Brno Health Days – in co-operation with the Brno City Municipality, Rare Diseases Day, Children's Oncology Days, Cardio Day, Web portal Akutne.cz, Mental Health Days – destigmatisation and educational activities – in co-operation with the University Hospital Brno, Conference People, Healthcare and Law)
- MjUNI – Masaryk jUniversity (Children's University)
- Bioscope – science and popularization centre
- Etika on Run – a charity run aimed at Down Syndrome education
- Researchers' Night – Annual science and popularisation events
- Medicinal Plants Centre – excursions and exhibitions of medicinal plants
- Nutrition – Big Known or Unknown? – myths in nutrition, healthy lifestyle

Recommendation 3.12:
Impressive activity in the popularisation of medicine and medical sciences and communication with the public. However, more targeted activity with a focus of industry, companies and R&I SMEs could be recommended in building platforms of long-term collaboration built on trust and mutual interest (graduates responding to the demand of local and global market).

MODULE 3 - OVERALL ASSESSMENT	
After evaluation of the individual criteria of the M3 module, please summarise your assessment in the context of the whole module (social benefits, applied research projects, results of applied research, cooperation with the non-academic environment and technology transfer, recognition by the research community and the popularisation of R&D&I) and describe and justify the strengths and weaknesses of the evaluated unit.	
Overall score [Calibrated]:	**185**
Overall grade [Excellent– Inadequate]:	**4 - Very good**
General qualitative assessment (summary): In most of criteria the Faculty has performed very well to excellent (3.7 criterion), considering a strong competition for human and financial resources (University Hospitals with their research centres and CEITEC) in the BRNO RESEARCH AREA. The public mission of the Faculty has been fulfilled very well. The complex balance between a teaching, clinical activity and research activities set well. The support and promotion of young researchers is highly appreciated.	

MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY

MODULE 3 SOCIAL RELEVANCE

EVALUATED UNIT: Faculty of Science, Masaryk University

FORD: 1. Natural Sciences

SOCIAL RELEVANCE / SOCIAL BENEFIT OF THE EVALUATED UNIT

3.1 General self-assessment of the social benefit of R&D&I in the fields of research at the evaluated unit, and of the evaluated unit as a whole
This criterion has not indicative value. It represents a general introduction describing the social benefit of R&D&I in the fields developed by the evaluated unit, and the evaluated unit as a whole.
Qualitative assessment: The unit contributes to the scientific areas supporting sustainability in the fields of healthy, clean water, industry and innovation, climate and life sciences. The funding for applied research in the range is very good and ranges between 6,5 Mio EUR and 2,8 Mio EUR p.a. The funding for contracted research is a bit smaller and between 0,7 and 0.9 Mio EUR p.a. That difference is due to the different constraints for both lines of research (tax obligations, overheads). The R&D&I activities have a strong impact on processing technologies (solid state devices, plasma technology, environmental and medical research). The impact on policy makers is very strong involving local ministry, but also WHO and UN. The ratio of students vs. Staff is one of the lowest at MUNI allowing an excellent education and supporting thereby very good R&D&I.

APPLIED RESEARCH PROJECTS

3.2 Applied research projects	
Evaluate five most significant (from the perspective of the evaluated unit) applied research projects from the complete list in the appendix (tables 3.2.1 and 3.2.2 of Self-evaluation report), consider particularly results achieved or a project's potential for application.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: The applied research is a strong hold of the faculty with 23 Mio EUR (2014-2018) fundend mainly through TACR. The center of excellence RECETOX and the center CEPLANT are excellent examples for successful focussing of research. They impact on the United nations level UNEP. These flagships are the incubator for various grants and projects including FP7 and H2020. Projects with medical/biological focus on leukemia therapy, biosensors and biologically active compounds are very prominent.	

3.3 Contract research	
Evaluate revenues from contract research for the 2014–2018 reporting period from the complete list in the appendix of Self-evaluation report (tables 3.3.1 and 3.3.2).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: In the period 2014-2018 86 contract research projects have been carried out with a funding volume of 4.8 Mio EUR being a bit smaller than from public sources. The difference in funding volumes is due to tax and overhead obligations making it more attractive for companies to cooperate in the frame work of common publicly funded projects. Besides funded research, strong ties and corporations exist to the private sector in the framework of RECETOX in consultancy. Important projects are associated with earthquake monitoring (CEZ), pharmaceutical research (Artios) and environmental analysis (Heidelberg Cement).	

3.4 Revenues from non-public sources (besides grants or contract research) from research work	
Evaluate revenues for the 2014–2018 reporting period for R&D&I from non-public sources, besides grants or contract research (e.g. licences sold, spin-off revenues, gifts, etc.) presented in a complete list in the appendix of Self-evaluation report (table 3.4.1).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: The licensing revenues amounts to 171 k€ in 2014-2018 that complements the very impressive success in the field of services/contract research form non -public sources of almost 4.8 Mio EUR. This is excellent.	

Recommendation 3.2, 3.3 a 3.4:
• The research portfolio of the unit is impressive, especially the flagship projects RECTEOX and CEPLANT. It may be advised to transfer these best practice examples to other parts of the faculty to make those even better. • The revenue from non-public sources may be enhanced by a stronger interaction with MUNI TTO to identify possible new revenues.

APPLIED RESEARCH RESULTS

3.5 Applied research results with an existing or prospective economic impact on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results that have already been applied in practice, or that will realistically be applied, in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.5.1).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: Several licencing activities are documented in the field of pharmaceutical, plasma research and microelectronics. Patents exist in the field of biotechnology, plasma technology, microelectronics. The applied research led to various spin off companies (Inst. Biostatistika, Altimapo in 2014-2018, and recently in 2020 CasInvent, Enantis, Entrant). The applied research results led also to the granting of CETOCOEN being an expansion of RECETOX.	

3.6 Significant applied research results with an other than an economic impact one on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results with the other than the economic impact on society in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.6.1).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The knowledge support for policy makers is focused on air quality, environmental aspects, health (UNEP, WHO). Such a knowledge transfer occurs also the output of publicly funded projects.	

Recommendation 3.5 a 3.6:
• Patenting activities are dominated by the centers RECETOX and CEPLANT. This could be extended to other parts of the faculty.

COOPERATION WITH THE NON-ACADEMIC ENVIRONMENT AND TECHNOLOGY TRANSFER

3.7 The evaluated unit's most significant interactions with the non-academic application/corporate sphere	
Evaluate the most significant interactions with the non-academic application/corporate sphere, comment on the most typical users of the evaluated unit´s outcomes. Please take into consideration how the evaluated unit looks up for these users and how the evaluated unit cooperates with them. Use provided examples of interactions for your evaluation.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: Technological transfer occurs mainly in applied projects with industrial partners being involved. The significant funding volume can serve as a measure of its impact. Direct contract research with companies enable a direct technology transfer and led to licensing activities. In addition, internships of students' strength the ties to the industry. The transfer of knowledge to administrative institutions UNEP, WHO, NGOs is impressive. The many cooperations in applied and contracted research are complemented by also formalized interactions such as professional workshops and roundtables that reach out to industry (Business Research Forum).	

3.8 System and support of technology transfer and intellectual property protection (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate the system of technology transfer of the evaluated unit. Consider the quality of the applied research and the effectiveness of technology transfer using the description and the data presented in the appendix of Self-evaluation report (table 3.5.1). Focus particularly on the number of filed and granted patents (Czech and international) and licences sold.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: Tech transfer is organized on one hand via the central services of TTO (student education, workshops, round tables etc.), but one the other hand also supported directly by the unit by allocating local resources for proof of concept studies, support in legal protection etc. The tech transfer is accompanied by dedicated personnel of the unit to coordinate the activities in conjunction with TTO.	

3.9 Strategy for setting up and support of spin-off firms or other forms of commercialisation of R&D&I results (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate practical use of the intellectual property of the unit in the form of setting up spin-off companies or other forms of commercialising R&D&I results (both with and without the participation of the unit) established by the evaluated unit (university), or by another entity controlled by the evaluated unit (university), or an employee of the evaluated unit. Consider the model of functioning and coordination and control of intellectual property management of the evaluated unit (university).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: TTO services are being used to form a limited liability company or a joint stock company, where university holds a share or an independent company which license university IP. MUNI SCI is related to six spin off sin ICT, 4 in BioTech one in geography. A new Innovation strategy to also directly include potential investors or directly involve scientists	

Recommendation 3.7, 3.8 a 3.9:
• A strong integration/interaction of the local grants office with the TTO could even further improve the tech transfer. • Clear rules are required to include potential investors or directly involve scientists in spin offs

RECOGNITION BY THE SCIENTIFIC COMMUNITY

3.10 The most significant individual awards for R&D&I	
Evaluate the ten most significant R&D&I awards received (in the Czech Republic and in other countries) in the 2014–2018 reporting period.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The unit shows an impressive list of individual awards for R&D&I as expressed by the two Czech Awards (Prof. Damorsky and Mr. Skubnik), the Werner von Siemens Excellence awards on various academic levels, Student awards of the Czech Ministery of Education and Awards of the Czech Chemical Society. International awards and recognitions are not listed.	

3.11 Recognition by the international R&D&I community (elected membership in international scientific societies, participation on the editorial boards of international scientific journals, invited lectures at the institutions abroad etc.)	
Evaluate the recognition of the evaluated unit by the international scientific R&D&I community, based on a commentary presented in the appendices of Self-evaluation report (table 3.11.1, table 3.11.2, table 3.11.3 and table 3.11.4).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The scientists of the unit are recognized internationally by serving at numerous editorial boards and giving also numerous invited lectures at prestigious conferences and institutions. A highlight are the Mendel lectures with very prominent invited lectures.	

Recommendation 3.10 a 3.11:
• Stronger internationalization of the research would also generate broader recognition that eventually becomes visible in international awards.

POPULARISATION OF R&D&I

3.12 The most significant activities in the popularisation of R&D&I and communication with the public	
Evaluate the main activities of the evaluated unit in the area of popularisation of R&D&I and communication with the public, based on a maximum of ten significant examples from the evaluated unit perspective.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The unit provides very good popularisation activities such as the researchers night, childrens university, summer schools (now opened to online format with larger reach), an impressive UN center for training in environment issues as well as BIOSKOP as hands on experience for talented children.	

Recommendation 3.12:
• It is advised to use the experience that is now collected in using the online media to expand outreach to a larger community.

MODULE 3 - OVERALL ASSESSMENT	
After evaluation of the individual criteria of the M3 module, please summarise your assessment in the context of the whole module (social benefits, applied research projects, results of applied research, cooperation with the non-academic environment and technology transfer, recognition by the research community and the popularisation of R&D&I) and describe and justify the strengths and weaknesses of the evaluated unit.	
Overall score [Calibrated]:	**209**
Overall grade [Excellent– Inadequate]:	**4 - Very good**
General qualitative assessment (summary): MUNI is SCI is strongly interlinked with the public and private sector and societal relevance is generated in creating knowledge either in the framework of basic and applied research with the involvement of industry partners in publicly funded projects or via contracted research. The centers RECETOX and CEPLANT may serve as best practice models also for other parts of the faculty. Many licenses and spin-off companies contribute to the performance of the faculty. The non-academic sphere is prominently addressed in environmental and health sciences connecting to policy makers at the highest levels such as the UN and the WHO. The popularization follows a high standard.	

MODULE 3 SOCIAL RELEVANCE

EVALUATED UNIT: Faculty of Social Studies, Masaryk University

FORD: 5. Social Sciences

SOCIAL RELEVANCE / SOCIAL BENEFIT OF THE EVALUATED UNIT

3.1 General self-assessment of the social benefit of R&D&I in the fields of research at the evaluated unit, and of the evaluated unit as a whole
This criterion has not indicative value. It represents a general introduction describing the social benefit of R&D&I in the fields developed by the evaluated unit, and the evaluated unit as a whole.
Qualitative assessment: MUNI FSS values the societal benefit of R&D&I, grant revenues and societal relevance being among the rules of splitting the Faculty's budget, and applying for grants being included in the "golden standard" in research. The unit also has its own research and project support office. The Faculty maintains a long-term cooperation with various, mostly national, entities. While the social relevance of the unit as a whole is substantial, a certain imbalance can be observed in terms of specific disciplines' share. The Faculty covers various fields of social studies, some of which overlap with the disciplines represented at other units (psychology, economics and education). The social benefit of R&D&I is particularly prominent with respect to the research on children, with an emphasis on education and cyber security, and also in the fields of social policy and social work and energy policies. It is not self-evident to what extend this is a deliberate strategical choice of the Faculty's leaders, to what extend – a result of historical circumstances or of various level of motivation or entrepreneurship of the departments' leaders.

APPLIED RESEARCH PROJECTS

3.2 Applied research projects	
Evaluate five most significant (from the perspective of the evaluated unit) applied research projects from the complete list in the appendix (tables 3.2.1 and 3.2.2 of Self-evaluation report), consider particularly results achieved or a project's potential for application.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: MUNI FSS distinguished four most significant applied research projects (out of approx. 20 various initiatives supported by TA ČR, Ministry of Interior or Ministry of Culture). Each of these touches on an issue that is very important on the national level (the diagnostic system for identifying intellectually gifted children in primary schools; low carbon technologies; the project that aims at increasing the professional standards of social work in the Czech Republic) and some also on the international level (cyber security). The Faculty's involvement in the international research project EUKidsOnline seems particularly significant; within this framework a detailed report of a survey at	

primary and secondary schools was prepared, several papers were published and some recommendations were formulated (rather general though).
Interestingly, MUNI FSS does not regard the programs supported by the Ministry of Culture as significant, although these - comparing to some other projects - received substantial financial support.

3.3 Contract research	
Evaluate revenues from contract research for the 2014–2018 reporting period from the complete list in the appendix of Self-evaluation report (tables 3.3.1 and 3.3.2).	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: It is only rarely that the Faculty cooperates with the private sector and it does not place much emphasis on contract research, with an exception of analyses for state institutions. As a result of this strategy, the overall revenue is rather low, which is not surprising in this academic field.	

3.4 Revenues from non-public sources (besides grants or contract research) from research work	
Evaluate revenues for the 2014–2018 reporting period for R&D&I from non-public sources, besides grants or contract research (e.g. licences sold, spin-off revenues, gifts, etc.) presented in a complete list in the appendix of Self-evaluation report (table 3.4.1).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: The Faculty received no financial contributions for the listed activities in the reporting period.	

Recommendation 3.2, 3.3 a 3.4:

- Identify further fields, subjects and opportunities for applied research.
- Actively search for further national, but above all international partners.
- Consider collaboration or synergy with other MUNI units.
- Encourage PhD students to get involved in applied research projects.

APPLIED RESEARCH RESULTS

3.5 Applied research results with an existing or prospective economic impact on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results that have already been applied in practice, or that will realistically be applied, in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.5.1).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: The Faculty carried out no projects with an economic impact on society during the reporting period, which is typical of this academic field.	

3.6 Significant applied research results with an other than an economic impact one on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results with the other than the economic impact on society in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.6.1).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The Faculty distinguished three (out of five listed in table 3.6.1) most significant achievements (a software for measuring the mathematical skills of gifted children in 3rd-5th grade and two certified methodologies: a programme of multicultural education with a focus on Czech-Roma relations and a self-evaluation methodology in the area of environmental education in 6th-9th grades). All three results may have substantial impact on society. Yet it is striking that each of these involves school education issues, also one – admittedly important – field of the Faculty's activity, whereas other disciplines and subjects typical of the social studies remain less prominent (Brno gardening areas map and report on natural gas market integration in the V4 countries) or absent.	

Recommendation 3.5 a 3.6:
• Continue and further develop programmes dealing with various kinds of education. • Enrich the portfolio of the applied research. • (Re)consider the contribution of the faculty's particular units to the applied research offered by FSS.

COOPERATION WITH THE NON-ACADEMIC ENVIRONMENT AND TECHNOLOGY TRANSFER

3.7 The evaluated unit's most significant interactions with the non-academic application/corporate sphere	
Evaluate the most significant interactions with the non-academic application/corporate sphere, comment on the most typical users of the evaluated unit´s outcomes. Please take into consideration how the evaluated unit looks up for these users and how the evaluated unit cooperates with them. Use provided examples of interactions for your evaluation.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: MUNI FSS offers a wide range of services (mostly expert analyses and student internships) to various kinds of entities: media, governmental organisations, NGOs and corporations. The list includes Czech Ministries or national agencies and companies of international renown (ESET, Škoda). All the nine examples provided are labelled as long-term cooperation, which – on the one hand – testify to the established position of the Faculty as a valued partner, but on the other hand may indicate that the Faculty does not look up for further opportunities.	

3.8 System and support of technology transfer and intellectual property protection (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate the system of technology transfer of the evaluated unit. Consider the quality of the applied research and the effectiveness of technology transfer using the description and the data presented in the appendix of Self-evaluation report (table 3.5.1). Focus particularly on the number of filed and granted patents (Czech and international) and licences sold.	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: In this respect the Faculty entirely relies on MUNI TTO.	

3.9 Strategy for setting up and support of spin-off firms or other forms of commercialisation of R&D&I results (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate practical use of the intellectual property of the unit in the form of setting up spin-off companies or other forms of commercialising R&D&I results (both with and without the participation of the unit) established by the evaluated unit (university), or by another entity controlled by the evaluated unit (university), or an employee of the evaluated unit. Consider the model of functioning and coordination and control of intellectual property management of the evaluated unit (university).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: MUNI FSS has no links to any spinoff company, which is typical of this kind of unit.	

Recommendation 3.7, 3.8 a 3.9:
• Seek further cooperation partners. • Place more emphasis on international cooperation.

RECOGNITION BY THE SCIENTIFIC COMMUNITY

3.10 The most significant individual awards for R&D&I	
Evaluate the ten most significant R&D&I awards received (in the Czech Republic and in other countries) in the 2014–2018 reporting period.	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: Both the amount and renown of awards is rather moderate. Out of the two distinctions listed in the self-evaluation report there is one is a national award, bestowed by Czech Sociological Society, the other one is for the highly commended paper (European Commission, UNECE, Oxford Institute of Ageing). Further awards, mentioned during the on-site visit, were bestowed by the University's Rector. The Evaluation Panel Members noted that, despite some underrepresentation of women among the Faculty's FTEs, female scholars prove much more successful in obtaining awards.	

3.11 Recognition by the international R&D&I community (elected membership in international scientific societies, participation on the editorial boards of international scientific journals, invited lectures at the institutions abroad etc.)	
Evaluate the recognition of the evaluated unit by the international scientific R&D&I community, based on a commentary presented in the appendices of Self-evaluation report (table 3.11.1, table 3.11.2, table 3.11.3 and table 3.11.4).	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: The recognition of the Faculty by the international scientific R&D&I community is moderate. *Cyberpsychology, Journal of Psychosocial Research on Cyberspace* confirms that the cyber security is among the Faculty's unquestionable main focuses; the journal is edited by an international team, it has an international editorial board, and it is indexed in both the WoS and Scopus. Additionally, the employees of the Faculty are members of large editorial boards (more than 20, in some cases ca 60 people), rather than editors of various international journals. Some of these are published by renowned houses (mostly Taylor and Francis), but some are rather local periodicals (*Iranian Political Studies, Polish Political Science Review* or *European Countryside* – the latter with the editor from Mendel University in Brno). Among the Faculty's staff are members, coordinators and chairs of various international and national boards, associations and consortia. Finally, the examples of the most significant invited lectures delivered abroad and of the most significant lectures given by guests are decent but not outstanding.	

Recommendation 3.10 a 3.11:
• Encourage colleagues to take initiative in establishing international contacts with top scholars in the relevant fields. • Consider gender issues, not only in terms of numbers (male vs female staff), but also in terms of performance and achievements • Offer support to outstanding units and individuals that are more likely to obtain prestigious awards or to be elected to international boards, focus more on quality than quantity of memberships, boards of international journals etc.

POPULARISATION OF R&D&I

3.12 The most significant activities in the popularisation of R&D&I and communication with the public	
Evaluate the main activities of the evaluated unit in the area of popularisation of R&D&I and communication with the public, based on a maximum of ten significant examples from the evaluated unit perspective.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The Faculty offers a variety of forms of popularisation and communication with the public. Out of seven examples of activities listed in the self-evaluation report, some are strictly related to the applied research projects (Centre for the Development of Gifted Children in the South Moravian Region; various educational projects), other involve social work and media, with a special emphasis on the film festival Ekofilm co-organized by the Faculty.	

Recommendation 3.12:
• (Re)consider a faculty strategy and its place vis-a-vis other faculties and within the MUNI as a whole. • (Re)consider the share of the faculty's particular units in the popularisation of R&D&I. • Identify further fields and subjects that may be successfully disseminated among wide public.

MODULE 3 - OVERALL ASSESSMENT	
After evaluation of the individual criteria of the M3 module, please summarise your assessment in the context of the whole module (social benefits, applied research projects, results of applied research, cooperation with the non-academic environment and technology transfer, recognition by the research community and the popularisation of R&D&I) and describe and justify the strengths and weaknesses of the evaluated unit.	
Overall score [Calibrated]:	**123**
Overall grade [Excellent– Inadequate]:	**3 - Good**

General qualitative assessment (summary):

Overall, the Faculty performance is good and in some respects - very good, with a variety of interactions with social environment. Some of these are of substantial or outstanding relevance and have a potential for further development, also in collaboration with other MUNI units. However, at the same time the relationship between FSS and other Faculties that represent similar fields seems rather vague. Also it is also somewhat unclear to what extent the Faculty's main focuses are a strategical choice; if so, a split between departments or sections that are almost entirely concerned with teaching vs departments or sections that concentrate mostly on research, is worth reconsidering. Finally, the international recognisability of the Faculty and its members needs attention, as in its present shape it does not seem to do justice to its potential.

MODULE 3 SOCIAL RELEVANCE

EVALUATED UNIT: Faculty of Sport Studies, Masaryk University

FORD: 5. Social Sciences

SOCIAL RELEVANCE / SOCIAL BENEFIT OF THE EVALUATED UNIT

3.1 General self-assessment of the social benefit of R&D&I in the fields of research at the evaluated unit, and of the evaluated unit as a whole
This criterion has not indicative value. It represents a general introduction describing the social benefit of R&D&I in the fields developed by the evaluated unit, and the evaluated unit as a whole.
Qualitative assessment: The **strengths of this faculty** lie on the one hand in very **applied scientific** projects and their implementation up to the **patent** and on the other hand in the **mission to educate the public** and to support sports associations in a broad range of activities. A future goal could be to **increase its third-party funding**. Overall this MUNI-Sport **presents as an active and well performing faculty**.

APPLIED RESEARCH PROJECTS

3.2 Applied research projects	
Evaluate five most significant (from the perspective of the evaluated unit) applied research projects from the complete list in the appendix (tables 3.2.1 and 3.2.2 of Self-evaluation report), consider particularly results achieved or a project's potential for application.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: Evaluating the five most prominent applied research project of the faculty of sports it becomes obvious that the research projects are **well embedded into international grants**. This is demonstrated by partnering of Dr. Michael Vit as a research team in the **EU funded** composite **project** "Comparative Police Studies in the EU". This project as describe by the final report leading to changes for increasing the effectiveness in police organisations. Also the participation of the Department of Social Sciences and Sport Management in the **international Erasmus+ KA2 project** "New age of sports management education in Europe – NASME" demonstrate the international integration of the Faculty of Sport Studies. This important project will certainly improve and optimize the sports management education in future. From the side of the reviewers, we would like to mention the development of **maternity footwear another highlight** of the Faculty achievements with the final goal to reduce spasms in the area of lower limbs and painful spinal states in women in higher stages of pregnancy.	

Also other projects bear highly applicable and important potential such as the **innovation and production of 3-axis accelerometer and gyroscopes**.

Finally, the improvement of the standardisation of the Ottawa Mental Abilities in Sport Questionnaire (OMSAT-3) has a velar value an applicability.

Overall, in spite of having strong projects performed within the evaluation period, it would be desirable if the number of projects financed could be increased.

3.3 Contract research	
Evaluate revenues from contract research for the 2014–2018 reporting period from the complete list in the appendix of Self-evaluation report (tables 3.3.1 and 3.3.2).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: Several research projects have been conducted by a client from the Czech Republic. These projects include “Work environment analysis”, “Effects of dynamic-directional pad”, “Measurement and analysis of swimming data”, “Development of energy drink” and “Cooperation on the development of compression sleeves”. In addition, the minor contracted research work “Biomechanical analysis of pole jump” was performed for the Catholic University in Ruzomberok. This performance seems appropriate.	

3.4 Revenues from non-public sources (besides grants or contract research) from research work	
Evaluate revenues for the 2014–2018 reporting period for R&D&I from non-public sources, besides grants or contract research (e.g., licences sold, spin-off revenues, gifts, etc.) presented in a complete list in the appendix of Self-evaluation report (table 3.4.1).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: Although the faculty of sports have not listed any licences sold or spin-off revenues during the evaluation period we carefully evaluated other faculty of sport in many different international and even world leading universities and finally jugged the performance of MUNI Sport in this category as typical and average justifying a 2 - Average.	

Recommendation 3.2, 3.3 a 3.4:
In principle, it seems desirable if the faculty could increase its third-party funding in the next period.

APPLIED RESEARCH RESULTS

3.5 Applied research results with an existing or prospective economic impact on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results that have already been applied in practice, or that will realistically be applied, in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.5.1).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: During the reporting period the Russian patent No. **RU2014136083 (A)** and **WO2013123922 (A1)** "Shoe with instep elastic insertion and insole with depressions" could be filled by Martin Zvonar and the shoe company of Josef Hanak, BOTY J Hanak R. This is a major achievement **as through this patent the MUNI SPORT gains a share of the profits from the sale of the "biomechanical" footwear**. The innovation and production of 3-axis accelerometers and gyroscopes with the tegistered utility model (number 27059) could become in greater use. Until now it has already been used in two articles and on conferenced paper.	

3.6 Significant applied research results with an other than an economic impact one on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results with the other than the economic impact on society in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.6.1).	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: Members of the MUNI Sport participated in an expert implementation team to develop the document "Strategy for Brno 2050" including strategies aiming to improve the quality of life with Sports Concept, Housing Strategy, Cultural Strategy and Health Plan of the City of Brno.	

Recommendation 3.5 a 3.6:
The filling of the patent is an important acheafement. Possibly also other highly applyed projects might bear similar potential for the future.

COOPERATION WITH THE NON-ACADEMIC ENVIRONMENT AND TECHNOLOGY TRANSFER

3.7 The evaluated unit's most significant interactions with the non-academic application/corporate sphere	
Evaluate the most significant interactions with the non-academic application/corporate sphere, comment on the most typical users of the evaluated unit´s outcomes. Please take into consideration how the evaluated unit looks up for these users and how the evaluated unit cooperates with them. Use provided examples of interactions for your evaluation.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: MUNI-Sport interact with a broad spectrum of different non-academic entities including **sports associations** (Czech athletic federation, Czech Floorball, Czech Ice Hockey Association, Football Association of the Czech Republic, etc.), **Health Insurance Companiy** (VZP) or direct interaction with contracting researcher (ISOLINE, Aries). These interactions not only lead to intense cooperations but also help to **introduce new knowledge into training methodologies, coach training, and club management strongly** underpinning the social relevance of this faculty. Other occasions to present applied research projects are during the **Business Research Forum** (in 2015 and 2017) at which the faculties of the MUNI present their projects. It appears to be important to mention that also workshops, methodological materials and courses are provided to **educational sector at the level of elementary and secondary school**.	

3.8 System and support of technology transfer and intellectual property protection (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate the system of technology transfer of the evaluated unit. Consider the quality of the applied research and the effectiveness of technology transfer using the description and the data presented in the appendix of Self-evaluation report (table 3.5.1). Focus particularly on the number of filed and granted patents (Czech and international) and licences sold.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: MUNI-Sport **interacts strongly with the MUNI Technology Transfer Centre**. By evaluating this faculty it becomes clear that great attention is taken to protect promising technologies at an early stage of development by securing the development and verification of the functionality of these technologies. Measures have been taken by different events (by the university and the faculty) to **increase the awareness and education of** the members of this faculty (including PhD-students) to **aspects of the technology transfer**. The **good cooperation between the MUNI Technology Transfer Centre and the faculty is evidenced by the successful completion of a patent and one utility model** (a device for recording acceleration and angular acceleration changes).	

3.9 Strategy for setting up and support of spin-off firms or other forms of commercialisation of R&D&I results (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate practical use of the intellectual property of the unit in the form of setting up spin-off companies or other forms of commercialising R&D&I results (both with and without the participation of the unit) established by the evaluated unit (university), or by another entity controlled by the evaluated unit (university), or an employee of the evaluated unit. Consider the model of functioning and coordination and control of intellectual property management of the evaluated unit (university).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: The faculty is well aware on the strategies provided by the MUNI for implementing a spin-off company. By reviewing the self-evaluation, one has the impression that the faculty management would be ready for setting respective action to facilitate a spin-off firm if it becomes reasonable.	

Recommendation 3.7, 3.8 a 3.9:
Based on the individual thematic focus of different departments within the faculty a broad spectrum of different formats have been used to ensure the application of the research results, ranging for education or for commercialisation. The faculty as a howl certainly present very well but it was not clear if all different departments perfume equally good. Little focus was given to future flagship projects. There seems to be a very good interaction also to other faculties (SCI, MED, CEITEC, ECON, PED, FI, ARTS, ICS) that possibly could be used intensively with a special focus on developing novel ideas for applied projects.

RECOGNITION BY THE SCIENTIFIC COMMUNITY

3.10 The most significant individual awards for R&D&I	
Evaluate the ten most significant R&D&I awards received (in the Czech Republic and in other countries) in the 2014–2018 reporting period.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: Only two awards have been named: i) Prof. PhDr. Hana Válková, CSc. was awarded the prize **of Special Olympics Europe / Euroasia Committee in 2018** for the long-term development of sport, education and research in the area of support of people with intellectual disabilities - within the framework of the Czech Republic and in cooperation with universities in the Czech Republic. ii) Doc. PhDr. Zdenko Reguli was awarded the **Medal of Honour in 2017** for his contribution and cooperation/collaboration in the field of martial arts by the Idokan Poland Association. Unfortunately, only these two prices have been named e.g. no student presentation award or poster award.	

3.11 Recognition by the international R&D&I community (elected membership in international scientific societies, participation on the editorial boards of international scientific journals, invited lectures at the institutions abroad etc.)	
Evaluate the recognition of the evaluated unit by the international scientific R&D&I community, based on a commentary presented in the appendices of Self-evaluation report (table 3.11.1, table 3.11.2, table 3.11.3 and table 3.11.4).	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: Members of the MUNI Sport are well recognized in e.g. Martial Arts and Combat Sports as members of this faculty are e.g. vice–president of a related international society or are invited to international conferences. Also some editorial borad activities in international scientific journals are listed although with the exeption of Kinesiology non is listed in the ISI journals.	

Recommendation 3.10 a 3.11:
During the evaluation of this section, the impression predominates that individual personalities of the faculties are very well embedded and recognized internationally, but not the overwhelming majority of the academic staff. It could be a goal that every department can integrate better internationally.

POPULARISATION OF R&D&I

3.12 The most significant activities in the popularisation of R&D&I and communication with the public	
Evaluate the main activities of the evaluated unit in the area of popularisation of R&D&I and communication with the public, based on a maximum of ten significant examples from the evaluated unit perspective.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: Within this category members of the faculty are highly active. The activity ranges from a **website** (ZDRAWEB) with a focus on physiotherapy for general public, to **radio interviews, TV performance, Researchers Night, physical activity workshops** and many more.	

Recommendation 3.12:
In this category many different MUNI SPORT employees report outputs focusing primarily on health prevention, physical activity, self-defence, recreational and professional sports to the public and are very well present. It will be good if this density of public presence can be maintained.

MODULE 3 - OVERALL ASSESSMENT	
After evaluation of the individual criteria of the M3 module, please summarise your assessment in the context of the whole module (social benefits, applied research projects, results of applied research, cooperation with the non-academic environment and technology transfer, recognition by the research community and the popularisation of R&D&I) and describe and justify the strengths and weaknesses of the evaluated unit.	
Overall score [Calibrated]:	**144**
Overall grade [Excellent– Inadequate]:	**4 - Very good**

General qualitative assessment (summary):

Within the faculty of Sort Studies, the public social benefit seems to be very clearly in the foreground. This is made clear not only by the popular education character of events and media appearances, but also by the support of associations and schools.

As broad as the commitment to general further education is, the international research activity does not seem to be supported to the same extent by everyone. It is probably a little more difficult to establish oneself in the top international journals in the field of sports science than in the live science fields. In the same line, filling of a patent and a registered utility model is certainly not a matter of course for a faculty of sports studies and should therefore be rated highly.

Taken together the faculty of Sport Studies present themselves as a dynamic well performing unit.

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MODULE 3 SOCIAL RELEVANCE

EVALUATED UNIT: Central European Institute of Technology, Masaryk University

FORD: 3. Medical and Health Sciences

SOCIAL RELEVANCE / SOCIAL BENEFIT OF THE EVALUATED UNIT

3.1 General self-assessment of the social benefit of R&D&I in the fields of research at the evaluated unit, and of the evaluated unit as a whole
This criterion has not indicative value. It represents a general introduction describing the social benefit of R&D&I in the fields developed by the evaluated unit, and the evaluated unit as a whole.
Qualitative assessment: CEITEC MU impacts society mainly through its research generating knowledge and innovation. General social benefit of CEITEC R&D&I can be described through their scientific research following the Strategic Development Goals of the United Nations. First, the new biotechnological and agricultural approaches like a method to sterilize the seeds with ozone belong to the SDG Zero Hunger. Second, diagnostic kits for colorectal cancer, kits for COVID testing, markers for Parkinson's disease cover the SDG Good Health and Wellbeing. Third, public events, white papers, round tables etc. on coronavirus, genome editing or decreasing the gaps between EU-13 and EU-15 correspond to the SDGs Gender Equality and Quality Education. This clearly demonstrates the global social impact of the research in CEITEC.

APPLIED RESEARCH PROJECTS

3.2 Applied research projects	
Evaluate five most significant (from the perspective of the evaluated unit) applied research projects from the complete list in the appendix (tables 3.2.1 and 3.2.2 of Self-evaluation report), consider particularly results achieved or a project's potential for application.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: CEITEC has presented five most significant applied research projects of 2014-2018. They all have demonstrated considerable potential for application. Two projects – on the prognostic and predictive value of BCR signalling in human tumours and molecular diagnostics/personalised medicine have led to patents, utility samples and important publications. Another project allows immunochemical detection of European foulbrood in larva. Characterisation of B-cell receptors in a type of leukaemia has produced more than 30 impactful publications. In addition, table 3.2.1 provides a long list of other important applied research projects.	

3.3 Contract research	
Evaluate revenues from contract research for the 2014–2018 reporting period from the complete list in the appendix of Self-evaluation report (tables 3.3.1 and 3.3.2).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The number of research contracts both nationally and internationally is substantial, although their value is not generally very big. These contracts are mostly for services provided by the 11 core facility units and the biggest international contract in 2018 was 21,2 KEUR. It looks that the potential of CEITEC here has not been exploited fully, but is obviously in the building-up phase.	

3.4 Revenues from non-public sources (besides grants or contract research) from research work	
Evaluate revenues for the 2014–2018 reporting period for R&D&I from non-public sources, besides grants or contract research (e.g. licences sold, spin-off revenues, gifts, etc.) presented in a complete list in the appendix of Self-evaluation report (table 3.4.1).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: Revenues other than grants or contracts include gifts, sponsorship for predefined activities (conferences, workshops) and from provision of healthcare services paid by both private clients and General Healthcare Insurance (Genomics core facility). Overall income in 2018 was 188 KEUR. It is reasonable, taken into account that such a public fundraising is not the primary aim of CEITEC.	

Recommendation 3.2, 3.3 a 3.4:
Increase revenues from national and international research contracts using excellent technical facilities of CEITEC. One way of doing is to build more international networks for shared use of infrastructure.

APPLIED RESEARCH RESULTS

3.5 Applied research results with an existing or prospective economic impact on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results that have already been applied in practice, or that will realistically be applied, in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.5.1).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: The five most important achievements already in the phase of application include two sold licences based on a patent for diagnosis of aspergillosis and on a certified method for measurement of film thickness in epitaxial AlGaN/AlN/Si structure. There are also validation and	

development of a diagnostic kit for prediction of therapeutic response to cetuximab in metastatic colorectal cancer patients and discovery of prospective drug candidates targeting human protein 14-3-3 protein complexes in neurodegenerative diseases and tumours. All these results are important indeed and characterise the very good applied research potential of the CEITEC (which is supported by data in table 3.5.1).

3.6 Significant applied research results with another than an economic impact one on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results with the other than the economic impact on society in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.6.1).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: Here the CEITEC presents a paragraph in monography "Follicular Lymphoma", which is targeted to medical professionals as well as doctoral students and also paragraphs in other books written for different audiences. We agree that this type of work is of great importance to the community and value this type of activity by the researchers highly. The International Evaluation Panel wishes to underline important institutional leveraging effect of CEITEC activities in the University. People trained in CEITEC have moved to other units of the MUNI, both academic (faculties) and administrative (Technology Transfer Office, Research and Development Office, University leadership) and change the culture and operating philosophy of the whole University.	

Recommendation 3.5 a 3.6:
We wish to commend the CEITEC for successful patenting and licencing their IP and encourage them to be even more active in finding new ways of IP commercialisation.

COOPERATION WITH THE NON-ACADEMIC ENVIRONMENT AND TECHNOLOGY TRANSFER

3.7 The evaluated unit's most significant interactions with the non-academic application/corporate sphere	
Evaluate the most significant interactions with the non-academic application/corporate sphere, comment on the most typical users of the evaluated unit´s outcomes. Please take into consideration how the evaluated unit looks up for these users and how the evaluated unit cooperates with them. Use provided examples of interactions for your evaluation.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: The non-academic partners are biotech and pharma companies mostly (60%) coming from CZ, but also from other parts of Europe (25%) and the USA (15%). Collaboration is mostly based on	

cooperation agreements and/or contracts, but also through joint projects. The list of corporate partners is reasonable and will certainly be extended in the future.

3.8 System and support of technology transfer and intellectual property protection (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate the system of technology transfer of the evaluated unit. Consider the quality of the applied research and the effectiveness of technology transfer using the description and the data presented in the appendix of Self-evaluation report (table 3.5.1). Focus particularly on the number of filed and granted patents (Czech and international) and licences sold.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: Utilization of Intellectual property for internal and external purposes is clearly described in a linked document. The Technology Transfer Office of the University does valuable work for the protection and use of IP and also technology transfer, cooperation with the industry and establishing spin-off companies. Recently, the CEITEC also established a position for Business Development Manager fulfilling more specific tasks like technology scouting, searching new application partners, perform market analyses and develop CEITEC strategy. It is clear that this strategic and systematic approach to technology transfer at both CEITEC and University levels will create more long-lasting partnerships and IP commercialisation.	

3.9 Strategy for setting up and support of spin-off firms or other forms of commercialisation of R&D&I results (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate practical use of the intellectual property of the unit in the form of setting up spin-off companies or other forms of commercialising R&D&I results (both with and without the participation of the unit) established by the evaluated unit (university), or by another entity controlled by the evaluated unit (university), or an employee of the evaluated unit. Consider the model of functioning and coordination and control of intellectual property management of the evaluated unit (university).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: Mostly, commercialisation of CEITEC activities is achieved through collaborative contracts and service contracts. Commercialisation of IP is mostly done at the MUNI TTO, with the help of CEITEC Business Development Manager (see p. 3.8). Also, setup of spin-offs is organised by the University TTO and so far only one CEITEC spin-off, Sofigen, has been established (2013).	

Recommendation 3.7, 3.8 a 3.9:
Keep the same level of interactions with non-academic partners, build, together with the TTO, new avenues for IP commercialisation and technology transfer.

RECOGNITION BY THE SCIENTIFIC COMMUNITY

3.10 The most significant individual awards for R&D&I	
Evaluate the ten most significant R&D&I awards received (in the Czech Republic and in other countries) in the 2014–2018 reporting period.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: The CEITEC researchers have received numerous important awards for their achievements, both nationally (MEYS, Czech Science Foundation) and internationally (Commission on European Affairs (CEA) to European epileptologists, Alfred Bader Prize for Organic Chemistry).	

3.11 Recognition by the international R&D&I community (elected membership in international scientific societies, participation on the editorial boards of international scientific journals, invited lectures at the institutions abroad etc.)	
Evaluate the recognition of the evaluated unit by the international scientific R&D&I community, based on a commentary presented in the appendices of Self-evaluation report (table 3.11.1, table 3.11.2, table 3.11.3 and table 3.11.4).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: In the reported period, 32 CEITEC MU researchers worked as editors, associate editors, and members of editorial boards of many respected scientific journals. They gave more than 200 lectures at scientific events, including more than 50 abroad. Recognition by the international community involves memberships in more than 140 professional societies, including presidents and chairs of these organisations.	

Recommendation 3.10 a 3.11:
The researchers in CEITEC are internationally visible and clearly recognised by the community. Well done!

POPULARISATION OF R&D&I

3.12 The most significant activities in the popularisation of R&D&I and communication with the public	
Evaluate the main activities of the evaluated unit in the area of popularisation of R&D&I and communication with the public, based on a maximum of ten significant examples from the evaluated unit perspective.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: CEITEC researchers have been very active in popularisation of R&D and communication with the public. These activities include more or less everything one could think of – from press releases and online social networks to various events for different target groups. They are also active at regional, national and international levels – Open Days, Researchers' Night, ORION, Days of Electron Microscopy.	

Recommendation 3.12:
Keep active all your good performance in research popularisation and dissemination, your society needs it and has deserved it!

MODULE 3 - OVERALL ASSESSMENT	
After evaluation of the individual criteria of the M3 module, please summarise your assessment in the context of the whole module (social benefits, applied research projects, results of applied research, cooperation with the non-academic environment and technology transfer, recognition by the research community and the popularisation of R&D&I) and describe and justify the strengths and weaknesses of the evaluated unit.	
Overall score [Calibrated]:	**218**
Overall grade [Excellent– Inadequate]:	**5 - Excellent**

General qualitative assessment (summary):

CEITEC is certainly an excellent, very strong and successful unit of the MUNI and the International Evaluation Board wishes to congratulate the University for having started such an important unit, which creates leverage effects to many other faculties and also university-level management and leadership. With its internationally highly evaluated research it creates a healthy atmosphere of scientific competition in the university and helps to advance the academic standards of research. CEITEC is actively involved in teaching (mostly at PhD level, but not only), which is very important as the students get immediate access to the best researchers and research infrastructures. The PhD School operating in cooperation with faculties is a good example of mutually useful collaboration. We commend the CEITEC for building up and running important international networks like Alliance4Life, which serves the interests of EU-13 countries in advancing their high-quality health research collaboration and creating more visibility at pan-European level.

The Panel during their evaluation was worried about the sustainability of the expensive infrastructure in CEITEC and was pleased to hear that after the evaluation by the Ministry finishes in September 2021, the MEYS will cover the costs of core facilities for positively evaluated units in the period 2023-29.

CEITEC, through its PhD school and excellent technical infrastructure, supports PhD studies and attracts candidates internationally. The students get their degrees from the faculties (mostly SCI and MED), but different faculties may have different requirements for successful PhD studies. Due to its unique institutional position in PhD studies (it is involved in the PhD activities of different faculties), CEITEC could start discussions on harmonising the requirements for receiving PhD degree at MUNI.

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MODULE 3 SOCIAL RELEVANCE

EVALUATED UNIT: Institute of Computer Science, Masaryk University

FORD: 1. Natural Sciences

SOCIAL RELEVANCE / SOCIAL BENEFIT OF THE EVALUATED UNIT

3.1 General self-assessment of the social benefit of R&D&I in the fields of research at the evaluated unit, and of the evaluated unit as a whole
This criterion has not indicative value. It represents a general introduction describing the social benefit of R&D&I in the fields developed by the evaluated unit, and the evaluated unit as a whole.
Qualitative assessment: This is a rather unusual unit, sitting somewhere between service unit and research unit (a self-described hybrid). Hence, it is not clear whether the evaluation criteria put before us are completely adequate for this unit. Yet, we see ourselves forced to follow these guidelines. To appreciate the context, it is worth to point out that this unit has 4 professors, 25 staff with a PhD and over 300 other staff. The unit manages and develops the majority of the MUNI ICT ecosystem. The research is grounded in that infrastructure. The research output is adequate for the number of research staff. Yet, we believe there is great potential for industrial collaboration and other outreach that could be tapped. We are not convinced that this setup is optimal. We believe in the mission – improving service through innovation, especially at a university service unit. However, it is not clear that this couldn't be achieved by integrating the researchers within the appropriate academic unit.

APPLIED RESEARCH PROJECTS

3.2 Applied research projects	
Evaluate five most significant (from the perspective of the evaluated unit) applied research projects from the complete list in the appendix (tables 3.2.1 and 3.2.2 of Self-evaluation report), consider particularly results achieved or a project's potential for application.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: Considering the rather small size in terms of academic researchers, yet the very large size of staff, the number and size of applied research projects (averaging about 700k EUR per year) is commendable. With the majority of the funding coming from the Ministry of Interior, the funding source is not very diverse, creating the danger of all funding drying up at once.	

3.3 Contract research	
Evaluate revenues from contract research for the 2014–2018 reporting period from the complete list in the appendix of Self-evaluation report (tables 3.3.1 and 3.3.2).	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: Contract research is done regularly, often with smaller amounts, but a larger project in 2017. It averages about 125k EUR per year. A larger amount of contract research would have been expected considering that there are many staff members that could possibly be used in such efforts. Still the efforts are clear and numerous which is commendable. Further, there seems to be potential to work with international entities.	

3.4 Revenues from non-public sources (besides grants or contract research) from research work	
Evaluate revenues for the 2014–2018 reporting period for R&D&I from non-public sources, besides grants or contract research (e.g. licences sold, spin-off revenues, gifts, etc.) presented in a complete list in the appendix of Self-evaluation report (table 3.4.1).	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: There is substantial funding available from initiatives before the evaluation report. This is great. However, we are missing a strategy for new opportunities.	

Recommendation 3.2, 3.3 a 3.4:
We believe there is great potential for industrial collaborations. We believe in the overall claim being made: that a service unit lead by researchers leads to innovation to the benefit of the university. However, some of these services and innovations are also needed by industry. So, there should be a way to create revenue from such a setup.

APPLIED RESEARCH RESULTS

3.5 Applied research results with an existing or prospective economic impact on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results that have already been applied in practice, or that will realistically be applied, in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.5.1).	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: There is an ongoing commercialization effort through CaverDock: this is great. The impact, as of yet, is unclear, however.	

3.6 Significant applied research results with an other than an economic impact one on society	
Evaluate the five most significant (from the perspective of the evaluated unit) applied research results with the other than the economic impact on society in the 2014–2018 reporting period from the overview in the appendix of Self-evaluation report (table 3.6.1).	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: There seems to be potential, especially with the CopAS system which is implemented for the Czech police. This is great, yet the impact remains to be seen.	

Recommendation 3.5 a 3.6:
We believe that there is great potential to capitalize on the experiences of maintaining a critical infrastructure for the university with industrial collaborations.

COOPERATION WITH THE NON-ACADEMIC ENVIRONMENT AND TECHNOLOGY TRANSFER

3.7 The evaluated unit's most significant interactions with the non-academic application/corporate sphere	
Evaluate the most significant interactions with the non-academic application/corporate sphere, comment on the most typical users of the evaluated unit´s outcomes. Please take into consideration how the evaluated unit looks up for these users and how the evaluated unit cooperates with them. Use provided examples of interactions for your evaluation.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: The work with the police is commendable and the approach to engage the corporate side through the Business Research Forum are great.	

3.8 System and support of technology transfer and intellectual property protection (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate the system of technology transfer of the evaluated unit. Consider the quality of the applied research and the effectiveness of technology transfer using the description and the data presented in the appendix of Self-evaluation report (table 3.5.1). Focus particularly on the number of filed and granted patents (Czech and international) and licences sold.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: This is centralized through the university. There is substantial activity, some of it also reported by FI.	

3.9 Strategy for setting up and support of spin-off firms or other forms of commercialisation of R&D&I results (can be extended to the whole university, emphasising the specific features of the evaluated unit)	
Evaluate practical use of the intellectual property of the unit in the form of setting up spin-off companies or other forms of commercialising R&D&I results (both with and without the participation of the unit) established by the evaluated unit (university), or by another entity controlled by the evaluated unit (university), or an employee of the evaluated unit. Consider the model of functioning and coordination and control of intellectual property management of the evaluated unit (university).	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: The efforts are centralized within the university. However, the participation in two spin-offs (Flowmon and Netcope) is fantastic. However, there seems to be no revenue flow.	

Recommendation 3.7, 3.8 a 3.9:
It is surprising not to see more engagement with the corporate sphere. This aspect could be strengthened.

RECOGNITION BY THE SCIENTIFIC COMMUNITY

3.10 The most significant individual awards for R&D&I	
Evaluate the ten most significant R&D&I awards received (in the Czech Republic and in other countries) in the 2014–2018 reporting period.	
Score [0–5 points]:	**3 - Good**
Qualitative assessment: Considering the size of the unit there are a good amount of local awards (2 national and one European award on the cybersecurity efforts).	

3.11 Recognition by the international R&D&I community (elected membership in international scientific societies, participation on the editorial boards of international scientific journals, invited lectures at the institutions abroad etc.)	
Evaluate the recognition of the evaluated unit by the international scientific R&D&I community, based on a commentary presented in the appendices of Self-evaluation report (table 3.11.1, table 3.11.2, table 3.11.3 and table 3.11.4).	
Score [0–5 points]:	**2 - Average**
Qualitative assessment: While we appreciate your substantial involvement in H2020 projects (please keep up the great work) the visibility through the international scientific community should be documented through papers, editorships, and the like. The challenge of every grant funding (at an academic unit) is to turn that funding into novel and exciting research results. This is still not documented and, hence, we cannot change the score.	

Recommendation 3.10 a 3.11:
For any research unit, even if it is "applied" only (which is just totally fine), there is the need to measure excellence by academic standards on the international stage. The standard path is a proper (scientific) publication strategy. This would be our major recommendation.

POPULARISATION OF R&D&I

3.12 The most significant activities in the popularisation of R&D&I and communication with the public	
Evaluate the main activities of the evaluated unit in the area of popularisation of R&D&I and communication with the public, based on a maximum of ten significant examples from the evaluated unit perspective.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: Participation in the researcher's night is fantastic. After some additional information, we can now also see the effort being made to serve the campus community, which is appreciated.	

Recommendation 3.12:
More engagement, especially with the "public" on campus would be recommended.

MODULE 3 - OVERALL ASSESSMENT	
After evaluation of the individual criteria of the M3 module, please summarise your assessment in the context of the whole module (social benefits, applied research projects, results of applied research, cooperation with the non-academic environment and technology transfer, recognition by the research community and the popularisation of R&D&I) and describe and justify the strengths and weaknesses of the evaluated unit.	
Overall score [Calibrated]:	**167**
Overall grade [Excellent– Inadequate]:	**3 - Good**

General qualitative assessment (summary):

We see here great potential in the commercialization of the work, a broader engagement with the public, as well as a need to proof your work in an international scientific context. If the argument is (as made in the presentation) that a service unit at the university can be more innovative if led by researchers, this doesn't come out in this evaluation. Hence, evaluated as a research unit, which is the task set before us, there is lots of room to improve performance.

We value the argument of engagement of researchers in service units. However, we don't understand why this cannot be done with a close collaboration with the appropriate research unit (in this particular case the Faculty of Informatics). We see multiple benefits of the integration of the researchers within FI:

- Surrounded by a research culture that strives for international research standards
- Better access to students (in order to use the applied research in an educational setting)
- A competitive / attractive environment for hiring of researchers / renewal
- An intellectually nourishing culture
- A close connection to the Association of Industrial Partners

MODULE 3 SOCIAL RELEVANCE

SUMMARY

MODULE 3 - OVERALL ASSESSMENT
After evaluation of the individual evaluated units of the M3 module, please summarise your overall assessment in the context of the whole university (social benefits, applied research projects, results of applied research, cooperation with the non-academic environment and technology transfer, recognition by the research community and the popularisation of R&D&I) and evaluate the balance and describe and justify the strengths and weaknesses of the evaluated unit.
General qualitative assessment (summary): The Masaryk University is a major player in the Brno and South Moravian area. It is the largest local employer with an impact on education, science and society. The university consists of 10 faculties (9 evaluated), one special IT/service-oriented centre (ICS) and two institutes of excellence (CEITEC and RECETOX). The social benefits are a major part of the University performance since most of the program are devoted to the whole society in the region, nationwide but also internationally. There are many applied research projects which are supported by a professional tech transfer office and system of individual scouts. Results of some of these projects have been already applied and are creating additional revenue to the university, but mainly they are helping the society both in terms of employment (ENANTIS and other spin-offs) and economic growth. The university is being recognized by the research community on both the national and worldwide level. This is supported by the fact that the MUNI has the highest number of EU funded grants and projects among the Czech universities and is also very successful in receiving national grant support. There are multiple collaborations with both local and foreign research entities. There is a specialized program conducted by the rectorate on the popularisation of the science, its results, and the university both in the Czech Republic and the European area. In terms of the overall activities, there are two aspects of the view: research and education. The overall research is on a very good level even though it slightly differs between particular faculties or units. This aspect is well balanced with the teaching activities. Also, in the educational parts, there are some differences. For example, the Faculty of Medicine is understaffed while the Faculty of Science has a very good level of teaching capacity. A very important part is the existence of institutes and departments of excellence. These are running under very modern and progressional principles, and they are sharing their best practices with other units of the university. Masaryk University and results of research, educational efforts, tech transfer, popularization of science and several pro bono activities for society support very high social relevance. The overall assessment is very positive, with no fatal problems detected. The university is, in many aspects, a leader within the Czech Republic.

International Evaluation Panel has decided that some of the overall M3 grades (after the M3 calibration) do not represent Panel members' expert opinion. The panel recommended using particular criteria grades (prior to the M3 calibration) for internal feedback at the MUNI.

MODULE 4 VIABILITY

ORGANIZATION, MANAGEMENT AND SUPPORT OF R&D&I

4.1 Organisation and management of R&D&I	
Evaluate the management system and organizational structure for R&D&I and compare it with foreign universities at a similar level. Take into account also the data on the number and structure of the university's employees contributing to R&D&I with consideration of the structure and robustness of the university. See comments on data from the appendix of the Self-evaluation report (tables 4.1.1 and 4.1.2).	
Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

The university has 2000 FTE and over 31,000 students. The structure is formed by the rectorate (central management) and particular faculties which are formed by internal departments. The number of employees contributing to research development and innovation is appropriate to the size of the university.

The national legal situation is characterized by very high independence of particular faculties with limited power of the central role/power (rector) and complicated by the academic senates created by a large fraction by students. This creates in all universities a problem for the central management. In the case of MUNI, the overall structure is very well balanced, and new management is successful in playing the central role and fulfils the strategic goals.

There is a relatively large number of professors at a higher age. It is needed to take into account the historical view, which is influenced by the lack of professional researches and teachers in the middle age category, which was caused by the economic situation in 1990-2000.

Despite these problems, the management system and organizational structure are well balanced. This is nationwide phenomena, and the management is changing this by implementing step by step the HR AWARD system.

4.2 Support system of R&D&I and measures to stimulate high-quality science	
Evaluate described systemic stimulation measures/tools to promote quality of R&D&I.	
Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

Within the rector office there are several tools to support the quality of R&D&I. Namely: The Internal Grant Agency of Masaryk University (GAMU) which aims to: recruit research leaders (at the level of ERC – European Research Council, holders) with the generous funding of the MUNI Award in Science and Humanities (MASH), support promising ERC candidates through high-risk high-gain projects and specialized external consultancy, facilitate involvement in FP7/H2020 funded projects by funding travel, consultancy support, promote interdisciplinary research with inter-faculty grants, enable finalization of high-quality research results. Internal expert support

(Grant Office) for applications to FP7/H2020 with a strong track record, Rector's Awards for exceptional short- and long-term research results, including awards for excellent doctoral students and theses.
A very similar system is organized on the level of faculties. There is also (at some faculties) financial support for publishing in open access journals and financial incentives for publishing in high-level journals.

All this supports the high level of the R&D&I reflected in high number of publications in Q1 and Q2 WOS.

4.3 Institutional regulations for the use of institutional support for the LCDRO	
Evaluate the strategy for using institutional support for the LCDRO in managing institutionally supported research work and how institutional support was split among individual workplaces/research teams with regard to the quality of the research activity/research teams.	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

Until 2017 the institutional support was allocated within the nationwide principle-based only on the number of publications. After adopting the M17+ the management changed the allocation of support in the way, that 85% is divided among evaluated units based on size and performance in previous years, 5% remains in the hand of central management for support through internal grant agency (GAMU) and for support of specific strategic R&D plans. The last 10% is divided between evaluated units based on 11 indicators which have different weight for different units based on the SST and SSH fields. This allows the management to support specific areas of research based on the performance. On the level of faculties, the distribution of resources to a particular department is done based on performance in R&D.

4.4 Strategy for the establishing, financing and long-term development and sustainability of research centres and large research infrastructures	
Evaluate the described strategy for the sustainability and development of large research infrastructure if the university is the host organization for such a project. See also described strategy for the sustainability and development of research centre(s) developed in 2007–2015 under the European Structural Funds (Operational Programmes: Research and Development for Innovations, Prague – Competitiveness) and supported during the sustainability period under the National Sustainability Programme, if such a research centre is part of the university. *If this criterion is not relevant for the university to be evaluated, at the end of the evaluation, adjust the rating of this criterion to the average scoring of the other criteria of M4 module.*	
Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

There are the following LRIs: ISBE, INSTRUCT, ECRIN, EUBI, OPENSCREEN, EATRIS, ELIXIR, ACTRIS, DARIAH and CLARIN. These centres are supported by the national sustainability program, but future support from MEYS is necessary.

There are three infrastructures which were financed by the ESIF. These are:

CEITEC has the status of an independent unit (like a faculty). CEITEC fosters original, investigator-driven fundamental research with an organizational structure based on research groups with scientifically independent leaders, selected through open international recruitment. This model facilitates ambition in winning ERC grants and other excellence-based long-term funding, which will be the cornerstone of sustainability of the centre. Its high-end infrastructure with skilled staff is shared internally and externally thanks to its organization into core facilities (CF). Most CEITEC CFs are on the national roadmap for LRI, which is essential for their sustained upgrading and making their running costs affordable to their users.
RECETOX (Research Centre for Environmental Chemistry and Ecotoxicology) is a centre of excellence at MUNI SCI. It has an ambitious development strategy fuelled by large H2020 grants (a hat-trick with Teaming, Twinning and ERA Chair) and is set to achieve sustainability by reinforcing its global leadership role at the interface between the environment and human health.
CEPLANT (Centre for Low-Cost Plasma and Nanotechnology Surface Modifications) is a European KETs centre focused on applied research in plasma surface modification, with a sustainability strategy based on collaboration with industry.

As it is seen from the self-evaluation report and the communication during the evaluation week given the excellence and success in the various grant support the sustainability is well taken care of.

4.5 Training system in the area of intellectual property protection and technology transfer	
Evaluate the internal system for training undergraduate and postgraduate students and employees in the area of intellectual property protection and technology transfer.	
Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

There is a central Tech Transfer office within the rector office. It is led by professional management and serves to the whole university. The department covers all needed activities: project management, legal support, protection of intellectual property, search for industrial partners (licensees), help in the formation of spin-off companies and promotion of the university in public. The head of the TTO is president of the Czech association of TTOs – Transfera and is very active in lobbying at the state level. There is also a system of faculty scouts who are in direct contact with researches and is detecting any evolving intellectual property. Within their responsibilities also belongs the education in this field. Based on our experience, this system works very well.

Recommendation 4.1, 4.2, 4.3, 4.4 and 4.5:

We are convinced that the current management is on the right track. Nevertheless, we would recommend: a) to support evaluated units not by 85% but by 80%, so there are more chances to support excellent teams and formation of novel departments directly from the central office, b) to have better control over the formation of new departments and to prevent overlapping of fields of expertise which may lead to lowering the quality of both research and teaching. The first could be done stepwise, during, e.g. five years. The second is more difficult as the independence of particular faculties and other evaluated units rather high. An important factor is the start of new

faculty – Faculty of Pharmacy since July 2020. It is recommended to pay strong attention from the central management of the structure of departments and on the close collaboration with other relevant evaluated units in both teaching and research.

DOCTORAL STUDIES

4.6 Organisation of doctoral studies	
Evaluate the organization and management of doctoral studies: structure, key statistics, information on promotion and recruitment schemes, external communications concerning doctoral studies, (e.g. cooperation with the Czech Academy of Sciences, cooperation with the application sphere, recruitment abroad, etc.), eventually any other relevant information such as the existence of a doctoral school, basic courses in soft skills, etc.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: There are over 3,300 PhD students currently studying at MUNI. There are 80 PhD study programs in Czech and the same number in English. To improve the level of study, the management introduced so-called MUNI PhD Academia which helps students in their studies by many tools. Part of the students performs their studies at the institutes of the Czech Academy of Sciences. MUNI maintain cooperation with application sphere, and students are also exposed to this environment. Challenges: length of the studies is on average 5.5 years; approximately 50% of students do not finish their studies. This is actually in line with average numbers in the Czech Republic, but we can't be satisfied by being in line with the country averages. Therefore the management of the university on the level of rectorate as well on the level of deans offices is proactively working on changing these negative factors. E.g. there were introduced new rules on the number of PhD students per one supervisor; all students must spend some time (1-3 months) abroad to prevent inbreeding, several faculties adopted regular annual measurements of the performance of a student. There also ongoing effort to increase the number of foreign students.	

4.7 Internationalization of doctoral studies	
Evaluate the level of internationalization of doctoral studies based on mentioned particular examples of the international cooperation in doctoral studies, e.g. building open doctoral study programmes for foreign nationals and creating international networks for doctoral studies; care for foreign students coming within the framework of mobility; support and the existence of joint individual doctoral studies as part of international cooperation (e.g. joint degrees), individual contracts (e.g. cotutelle degrees), study visits and research internships abroad, etc.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: Currently, there are app 25% of foreign students (growth 20% from 2014) including Slovakia citizens and 9% (growth app 30%) excluding Slovak students. There exist obstacles given the	

national legal system which requires different programs between Czech and English courses and foreign students enrolled for English course have to pay a fee.

To help the increase of the number of foreign students there is The Centre for International Cooperation (CZS) and the foreign or study departments at individual faculties, as well as individual supervisors and group leaders, encourage and support the mobility of both incoming and outgoing doctoral students. Alone with ERASMUS+, the number of PhD students who took various foreign placements increased from 121 in 2013 to 239 in 2019.

From 2019 all PhD students are obliged to take the international internship for a minimum of 1 month.
The university (besides ERASMUS+) is very active in different international cooperations (MCSA, ETN, H2020 etc.).

The management supports the cotutelle agreements current number in double degree increase from 6 in 2014 to the current 15.

4.8 Subsequent careers for doctoral graduates (support conditions)

Evaluate the support conditions for doctoral graduates based on the listed specific measures (e.g. internal subsidy schemes for the further development of new scientists, postdoctoral fellows, active search for opportunities abroad, etc.) and provided representative data about subsequent careers for doctoral graduates. For evaluation, use the data from the appendix of Self-evaluation report (table 4.8.1).

Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

PhD students are encouraged to leave MUNI for postdoc after finishing their studies. The newly-organized PhD Academia is now a crucial tool to help new postdocs to build their career at other institution in the Czech Republic and abroad. Results of these efforts from the past are seen at table 4.8.1. which shows the successful placement of postdoc to a prestigious institution. The total statistical data which would track the careers of postdocs are not systematically recorded, but the new management is focused on this.

The other way for the “brain circulation” is to bring postdocs from other institutions. To support this, the university developed several supporting projects:

Postdoc@MUNI and the recently approved Postdoc@MUNI2 under the Operation Programme “Research, Development and Education” (OP RDE) of the MEYS.
MSCAfellow@MUNI1,2,3, providing support equivalent to MSCA-IF to well-evaluated, yet unfunded candidates (Seal of Excellence).
Training series for MSCA-IF candidates, both outgoing and incoming to MUNI.

4.9 Rules for funding doctoral students, including foreign students (stimulation and motivation tools)	
Evaluate the described model of university funding for doctoral students (PhD students), including international students, and according to the information provided about personal expenses (grants) and other costs. See also listed specific stimulation and motivation tools of the financial support for doctoral students in addition to their regular grants.	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

As in all country doctoral student receives a stipend from MEYS which is on the level of 440€/month. Given the fact that the average salary in the Czech Republic is around 1,200€ it is clear that the basic stipend is not sufficient to keep students motivated to stay at PhD studies. Especially in Brno, where the cost of living is rather high compared to the average in the Czech Republic.

To solve this problem, several evaluated units (ECON, FI, CEITEC) is subsidizing the basic stipend up to 700-900€. Many students are also becoming part-time employees supported by grant finances.

Evaluated units offer specific scholarships to support mobility, excellent publications etc.

The University receives dedicated funding – so-called Specific Research [4] – to support R&I activities involving PhD and Master students. The use of these funds is managed by the faculties. The total budget for Specific Research was €2,34M in 2018.

MUNI recently received an “Internal grant agency” grant project, which will pilot internal competition for PhD students and their research projects. There is a plan to support close to 200 projects over two years in a total budget of over €3.43M. The first call was launched in September 2020.

Recommendation 4.6, 4.7, 4.8 and 4.9:

The greatest danger in the Czech universities is so-called inbreeding. Students finish at one department their BSc, MS, PhD studies, and at the same department, they become associate Professors and Professors. We strongly recommend paying strong attention to this negative feature, and we support all the initiatives to prevent it which are introduced by the management.

Another recommendation is to prevent any supervisor from accepting any PhD student if it is not clear the supervisor will have enough finances to employ the student. Also, from the point of view of confidentiality, it is needed to have the student bound by a strong employment agreement.

Last recommendation is to really keep track of all absolvents of doctoral studies and to form strong interaction with alumni.

NATIONAL AND INTERNATIONAL COOPERATION AND MOBILITY IN R&D&I

4.10 Significant cooperation in R&D&I at the national level	
Evaluate specific examples of cooperation in terms of progressive R&D&I trends at the national level.	
Score [0–5 points]:	**5 – Excellent**

Qualitative assessment:

The university recognizes the importance of cooperation with other institutions and the private sector in the area of R&D&I.

- Member of Association of Research Universities in CR. MUNI is member of this association together with Charles University, Palacky University, University of Chemistry and Technology and Czech Technical University. The main activities are sharing of best practices, sharing of infrastructures, and helping to increase the success rate in EU funded programs.
- Cooperation with many local Universities and Institutes of CAS. More than 25% of all publications in WOS are in cooperation with other universities or Institutes of CAS.
- Sharing infrastructure. MUNI is participating in 17 LRI programs which support the sharing of large specialized instruments and infrastructures.
- Public sector – mainly through TACR Éta program for Humanities supporting the public sector needs. RECETOX is hosting the National Centre for Toxic Compounds.
- Industry – mainly through TACR programs. MUNI is part of 98 TACR programs and cooperate with many local companies and supports the formation of spin-off companies. This is also supported by ESIF funds.
- Local Research Ecosystem. MUNI is a major player in the so-called South Moravian Innovation Centre. MUNI runs CERIT Science Park to foster the ICT sector, business incubator and collaboration space.

4.11 Significant cooperation in R&D&I at the international level	
Evaluate specific examples of cooperation in terms of progressive R&D&I trends at the international level.	
Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

MUNI is involved through LRI ESFRI and ERIC projects. These are Alliance-4 life (EU-13 Life Sciences institutions), RECETOX, MSCA-RISE, Cybersecurity, Cyberpsychology, Structural biology, Computer Science, H2020-Twinning, Quantum Technologies, Synthetic Biology. There is strong scientific collaboration on the level of researchers and departments, which is reflected in the fact that 62% of WOS publication are international. Major partners are the University of London, University of California System, Max Planck Society, University of Cambridge, Karolinska Institute, Harvard University, KU Leuven. MUNI is this respect one of the best performing universities in the Czech Republic.

4.12 Mobility of academic staff and researchers (including segmental and intersegmental mobility)	
Evaluate the mobility of academic staff and researchers, including the mobilities of doctoral students and academic staff in connection with R&D&I (strategy, system, and policies), evaluate benefits of described specific examples. Evaluate also any barriers to the mobility of academic staff and researchers.	
Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

MUNI is taking care of excellent students and researchers' mobility. As was already mentioned above, with the strong use of MSCA and MSCA-RISE there are other programs to support mobility. Part of the students is also taking part in individual MSC-IF mobility projects. Other students (25) were funded by OP RIDE Seal of Excellence and MUNI also has six students benefiting from MSCA-IT networks.

Using MASH and ERA Chairs the university invested in bringing in 4 excellent scientists. The other direction – MUNI started to monitor how the graduates are successful in prestigious universities (3 examples).

As was stated above, a new rule requires all PhD students to spend a minimum of one month in a foreign institute.

4.13 Internationalization of the internal environment	
Evaluate the internationalization of the internal environment of the university in relation to R&D&I and to European standards. Evaluate the described tools to meet the objectives of internationalization and how they are implemented.	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

MUNI is well aware, that to achieve its goals in excellence in both teaching and research, one important element is internationalization. The bilingual environment is a crucial factor in achieving this goal. Scientists are usually well prepared in English, which is the first foreign language, but support is needed for students and the administrative part of MUNI.

To achieve the total bilingual environment:

- Translation of all internal documents and documents in the MUNI informational system
- English courses for staff
- Organizing work of International staff office (ISO)
- International advertisement for open positions which helps incoming foreign individuals to be able to start as fast as possible
- All these activities are financed by Vicerector for internationalization.

Current obstacles: still relatively low level of English knowledge of the administrative staff and by having a rigid system (combinational local and nationwide regulations) which can be only slowly changed in favour of the above-described efforts.

Recommendation 4.10, 4.11, 4.12 and 4.13:
We have detected many very progressive activities in the field of internationalization of both PhD students and excellent researchers both in the case of bringing them in and to help them find opportunities to leave MUNI after finishing their PhD studies. The Evaluation Panel strongly recommends speeding up the process of teaching English to administrative personnel and/or replacing those who are not able to learn English. But also, there should be a higher level of English teaching for managers at evaluated units as well for heads of departments . We recommend bringing in famous scientists from abroad for selected lectures but then letting them meet for a couple of hours not with leaders of the university but with students for informal discussions. Mingling of both Czech and foreign researchers and students during, e.g., weekend retreats also helps with language improvements but also builds strong relationships.

HUMAN RESOURCES AND CAREERS IN R&D&I

4.14 System for career growth for academic staff and researchers	
Evaluate the system for career growth for academic staff and researchers. See presented information on long-term placements for the academic staff abroad, and for foreign academics at the evaluated university (i.e. sabbaticals, whether there are particular regulations or a support system); consider also the information on international academics selection procedures; regulations for career growth; mentoring (if any); the transparent distribution of institutional Full Time Equivalents (FTE´s); position on successive contracts and senior academic posts; arrangements for staff return after placements at external workplaces, including abroad; and any other presented information. Consider the information from provided link to any career regulations or similar document (if any).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: The basic tool for building the system of career growth is an HR AWARD. At the moment, two evaluated units (CEITEC and SCI) have fully adopted this program, and other units will achieve this level within 1-2 years. By that, the HR AWARD will be constructed in a way which reflects natural differences between particular units while retaining the crucial parameters of this “system.” In place there are four key documents which apply to all employees and applicants: • MUNI Career booklet • MUNI internal wage regulations • MUNI internal employment code • Collective bargaining agreement with trade union • There also runs the Regular employee Evaluation using tools described in previous parts of this evaluation	

- To support International mobility, MUNI has adopted the system of Sabbatical leave where International Staff Office is helping to visit researchers and families.
- The Centre for the Development of Educational Competencies offers various courses aimed to strengthen the teaching skills
- The newly introduced mentoring mechanism helps PhD students also in their decision on a future career.

4.15 Evaluation system of academic staff and researchers and filling key positions in R&D&I	
Evaluate the evaluation system of academic staff and researchers (the basic rules and principles for internal evaluation) and the rules for filling senior positions in relation to R&D&I.	
Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

Each year all employees have a personal evaluation which controls their development and enhancement of qualification. Each person is evaluated on multiple factors (scientific results, number of papers, lectured hours, number of PhD students, diploma work etc.

To support the entire process, MUNI has developed the electronic tool for the Evaluation of Academics (EVAK) and prepared a thorough methodology for both the evaluated person and the evaluator.

Both systems are currently being implemented. Some units are already running fully on EVAK while others are progressing towards it. It is expected that within a relatively brief period (one or two years) the whole of MUNI will have fully implemented the staff evaluation system and be actively working with the evaluation results.

4.16 Recruitment system for academic staff and researchers from the external environment	
Evaluate the described recruitment system for academic staff from the external environment, especially from other countries.	
Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

MUNI is encouraging evaluated units to advertise a new position in specific English journals starting with postdoc positions as well as for professors and associate professors. There is a specific Procedure Regulation on this.

The selection from applicants is made via selection committees where at least one must be a foreign expert (not Slovak). All opened position must be advertised in the MUNI web site an in parallel in Science Journal, Find a Postdoc and EURAXESS websites.

These efforts are supported by newly introduced MASH and by two new OP Ride programs: POSTDOC@MUNI1/2 and MMSCAfellow@MUNI1/2/3

4.17 Human resources structure	
Evaluate the current situation, age structure and development trend for the staff contributing to R&D&I, and their structure by job classification and gender in the 2014–2018 reporting period (see also tables 4.17.1 and 4.17.2 of Self-evaluation report), including workers who are foreign nationals (apart from Slovak nationals) contributing to the university's R&D&I (see also table 4.17.3 of Self-evaluation report). Within the evaluation, consider holding an HR Award, or whether the university aims to receive such Award.	
Score [0–5 points]:	**4 - Very good**

Qualitative assessment:

In principle, the trend of structure and development of R&D&I staff is positive, and the numbers on professors, associate professors and assistant professors are growing on average 100% between 2014 and 2018.

The important part is the implementation of HR AWARD in two evaluated units, and continuous work on receiving this AWARD in the rest of the units. This will improve the possibility to better influence all the aspects.

The distribution of professors, associated professors and assistant professors as given in table 4.1.17 for 2014 shows that out of 268 professors 50 (close to 19%) are at the age of 70 and over. On average, 18% of all professors are women, in all these categories. Both factors need improvement.

The same table for 2018 shows that from 274 professors 52 (again 19%) and woman represent 17%. This observation will be commented in the recommendations.

4.18 Gender equality measures	
Evaluate any arrangements of the university concerning the implementation of gender equality. Within evaluation consider benefits of these arrangements in the career path, the recruitment process, the filling of senior positions (including gender equality in senior positions; see tables 4.18.1 and 4.18.2 of Self-evaluation report), in nominations to professional bodies, the evaluation system and remuneration. Consider also measures to harmonize family life and work for researchers (flexible working hours, flexible forms of work, management of maternity / parental leave, facilitating child care and care for family members, age management in relation to gender) and measures to eliminate negative behaviour in the workplace such as mobbing or sexual harassment.	
Score [0–5 points]:	**3 - Good**

Qualitative assessment:

To name the most important tools for how to help parents in their return after parental leave are:
GAMU special support for the return of women
Career Restart program, again support after the return
There is a dedicated nursery school ran by the Faculty of Education
Introduction of flexible working hours
H2020 Libra project helped to develop the Gender Equity plan.

All the official documents and codes are addressing equal opportunity principles.

A result of this effort is that in 2018 there were 14 females in the top management compared to 7 in 2014.

Recommendation 4.14, 4.15, 4.16, 4.17 and 4.18:

As it is known, the system of the obligatory state care of children starts only from 3 years of age. This means that young female researchers stay with children three years unless their family (parents) can take care or the family has resources to support baby-sitters or private nursery schools. The cost of these is about 12 thousand CZK/month. It would be desirable to offer the most talented females who do not have the possibility to receive personal or financial support from their parents some financial incentive based on their involvement during return to work. Eg. 6,000 CZK if 50% or 12,000 CZK if 100%. It was adopted at IOCB Prague 4 years ago, and currently, we have 26 such cases. The cost of such a measure including obligatory payments is close to 200,000 CZK a year, but the great benefit is that such a person does not lose contact with science and is able to continue in her/his career.

As for the senior staff – promotion of woman to a higher position should be supported, and there should be help from the side of management to prepare them for habilitation procedures.

As for the age structure – we can recommend the system used by some research institutions - researchers should stop at the age of 65. If he or she wants to continue in full employment and all responsibilities she or he has to present in front the ISB and convince them, that finishing the employment would be a major loss of science and the MUNI. This is then happening every five years. Another option is to offer the position of emeritus, who does not have a group anymore but can stay (with lower salary) and work on the finishing their work – publications, books, reviews etc.

FUNDING FOR R&D&I

4.19 Structure of funding for R&D&I

Evaluate the portfolio of financial sources of the university in comparison with any other research organizations. Comment whether you consider the funds from public and non-public sources in individual financial categories sufficient. Evaluate the listed projects considered the most important from the perspective of the evaluated unit, and decide whether they represent high-quality and top-notch research and development. Within the evaluation use also data in tables 4.19.2, 4.19.3 and 4.19.4 in the appendix of Self-evaluation report.

Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

Again, it must be stated that MUNI is the most successful recipient of H2020 grants in the CR and serves as a positive example in this country and shares best practices with other universities. Table 4.19.2 provides 26 projects between 2014 to 2018 where MUNI was the organizer of over one mil € in 2018. In projects where MUNI was a participant of other projects there were 50 projects with the support of 1,4 mil €. MUNI is also very successful in receiving local grants from all

local grant agencies (GCR, TACR, AZV, MPO and others). The total income from these agencies in 2018 was more them 42 mil € (compared to 18 mil € in 2014). There were six ERC grants, 15 MSCA projects etc.

Compared to similar universities, this productivity is outstanding.

4.20 Support for obtaining foreign research projects (including the strategy for obtaining prestigious foreign funding for R&D&I)	
Evaluate the strategy, tools and established support system of the evaluated university for obtaining foreign research projects, e.g. arrangements for administrative support, project counselling, management of information on R&D&I, organizing project management, the existence of auxiliary funding (internal subsidies) to help produce quality applications, etc.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: The excellence described in the previous question relies on strong administrative support which is very well organized on both the rectorate level and in particular units. CEITEC played a significant role: from the very beginning in 2012, it built a professional grant department which helped in both preparation of applications and during the project itself. Once they reached excellence, they were able to transfer the know-how to the central administration, and from there it was disseminated to particular evaluated units. In addition to that, the management organizes training days, especially for young researchers as well as Grants week for all interested. The grant office provides consultancy any time it is needed on a highly professional level.	

Recommendation 4.19 and 4.20:
The system of support on the central level is on a very good level, and it would be very good to increase the support in some particular evaluated units.

FORMATIVE EVALUATION OF R&D&I AND THE START-UP STRATEGY (WITH POTENTIAL FOR APPLICATION)

4.21 Internal and external system for evaluating research units (groups, teams, departments, institutes)	
Evaluate the described system for the internal and external evaluation of research units / research teams / groups / departments / university institutes.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: There are several levels of self-evaluation at MUNI. Currently, there is an annual evaluation of units by MUNI leadership. On the level of departments there also is an annual evaluation by the management of evaluated units. In 2020 there was a pilot Independent International evaluation of departments at the Faculty of Arts, and this system will spread over the university in 2021 and will be held every five years.	

Independent evaluation runs every 2-4 years at CEITEC. The CEITEC ISAB evaluates the performance of each sub-unit in terms of research quality and gives their recommendations.

4.22 Conditions for setting up new teams and introducing new research topics (start-up strategy)	
Evaluate the university strategy for setting up new research teams (including international teams), support for their work at the university (sharing instruments, laboratories and information equipment for R&D&I) and the policy for ensuring conditions for the creation of new high-quality research focuses/topics, especially with the potential for application.	
Score [0–5 points]:	**4 - Very good**
Qualitative assessment: CEITEC served as a pilot in establishing new research teams. The hiring is based on open international recruitment, and the new research topics receive a starting budget. The new team is a separate economic unit, and the head defines the research program. Based on this valuable experience, the system is now introduced to other evaluated units with three new teams already in place. The support comes from GAMU MASH. There is an elevated level of sharing instruments and other infrastructures. The results of basic research are applied (if possible) through professional TTO. There are differences between particular units which needs to be unified.	

4.23 External advisory bodies for R&D&I, independent feedback for R&D&I	
Evaluate the external advisory body of the evaluated university for R&D&I, e.g. an international scientific council.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: The International Scientific Advisory Board consists of four worldwide recognized scientists who advise on the following topics: • Research directions • Internationalization efforts • An increasing level of PhD programmes • Best use of MUNI Grant agency • Best practices of HR • Are supporting the Evaluation system • Help with identification of possible business partners Separate ISAB is being used by CEITEC as it was already mentioned before.	

Recommendation 4.21, 4.22 and 4.23:
The system of creation of new groups is a very positive trend and should be applied across the university. It is recommended that each evaluated unit should have a specific ISAB to evaluate the

performance better and to help during the selection of new group leaders. Also, maybe the central ISAB should have more members, to cover a broader area of science.

RESEARCH INFRASTRUCTURE

4.24 System for acquiring and renewing instruments and equipment for R&D&I	
Evaluate the described system for acquiring / optimizing the acquisition of expensive instruments and equipment and the renewal of older expensive instruments. See also the data from the appendix of Self-evaluation report (table 4.24.1).	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: This item is of extreme importance for MUNI since there have been massive investments during the period 2007 and 2013. To be able to manage to purchase of new equipment the MUNI have created a Specific board (Expert committee for the assessment of the Equipment Purchase plan) and is considering every purchase with cost over 36.8 k€. There is in place a new board – Committee for strategic research projects which is considering the purchase of strategic importance to be in line with central university strategy. Based on information received during "on-site" evaluation, the financial resources are safe for the next 5-10 years.	

4.25 System for sharing instruments and equipment for R&D&I	
Evaluate the internal organization of research infrastructure (technologies, expensive instruments and instrument sets). Consider also the described system for sharing (including sharing with external research organizations) expensive instruments and instrument sets, i.e. core facilities and the sharing of instruments and instrument sets.	
Score [0–5 points]:	**5 – Excellent**
Qualitative assessment: The sharing of instruments and infrastructures started as a pilot project with CEITEC, CERIT-CS, RECETOX, and other evaluated units are joining this system. All the instruments are easily accessible through a web site, and the level of sharing is very high. The sharing is both internal (MUNI) but allows access to external research organizations for a minimum cost. It is also accessible to commercial partners for the full cost.	

Recommendation 4.24 a 4.25:
We can only support the system of purchasing new equipment and system of sharing existing infrastructures.

GOOD PRACTICE IN R&D&I

4.26 Internal regulations and measures for maintaining good practice in R&D&I (e.g. Code of Conduct for Research Integrity, ethical issues)	
Evaluate how the compliance with the ethical aspects of R&D&I is overseen by the evaluated unit and consider presented description of the system, eventually also authentic documentation if provided by the university. Evaluate in connection with the European Code of Conduct for Research Integrity.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: There are several directives considering these aspects, e.g. Directive on Research Ethic or MUNI Academic and Professional Employee code of Ethics. There is the MUNI Ethics board which oversees these areas. As for publishing, there are three policies in place • Best practice in Sci publishing • Position on Predatory Publishing and OA Scholarly Journals • Bibliometric indicators For the research on human subjects, there is the MUNI Research Ethics committee and Ethics Board of the Faculty of Medicine.	

4.27 Open Access strategy for information from R&D&I	
Evaluate the described institutional strategy of the university for Open Science 2.0/Open Access, including, e.g. the operation of an institutional repository or other mentioned tools.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: MUNI has signed the Berlin Declaration on OA to knowledge in the Sciences and Humanities in 2010. MUNI also has voluntary Open Access/Open Science policy which supports • Existing international cooperation in OA/OS • Green OA through Existing Repository • Gold OA for journals published by MU • Support for research to publish in Gold OA journals To strengthen these activities, a new strategy was put in place from Jan 2020, which aims to: • establish a new robust overall policy for Open Science (not only Open Access). • finalize development of a support system for researchers (specialized consultation, a new webpage, and new Open Science contact persons at each HS). • establish an advisory body for Open Science made up of top MUNI researchers to create a feedback loop for the implementation team.	

4.28 Data Management strategy for research data	
Evaluate the policy for managing research data, consider how data is collected, made accessible and shared; intellectual property protection; personal data ethics and protection; archiving; backup; risk management; responsibility for datasets; quality assurance, etc.	
Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

There are several directives in place which consider the data management in the fields like handling personal data, ethical aspects of research. The system is supported by the following stakeholders

- Role of TTO
- Role of HR dept
- Role of Rector office
- Role of the Department of Security and Data Management

In 2020 a new three years project started to support Data Management, data stewardship, data curation services, personal capacities to support data processing. The aim is to create one Open Science Policy by 2022

Recommendation 4.26, 4.27 and 4.28:
We can recommend continuing in the right direction, which was set by current management. The field of “information”, data management etc. is very quickly developing, hence, continuous attention should be given to this area.

MODULE 5 STRATEGY AND POLICIES

R&D&I MISSION AND VISION

5.1 The evaluated institution's R&D&I mission and vision	
Evaluate the vision and general mission for R&D&I (in the context of its education function and the strategy for university education under state policy or the relevant ministry, and comparing the mission as defined with the actual situation). Consider also supplemented links to the strategic plan for teaching, scientific, research, development and innovation, artistic or other creative activity, and any update of this plan.	
Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

In the self-evaluation report it is written:
Mission:
Masaryk University (MUNI) strives to create and to disseminate knowledge, thus enhancing the quality of life and fostering cultural growth in the community. This mission stems from the University's founding values [1]. As a responsible University, we engage in public space, with public bodies to shape a healthy and secure society.

Vision:
In 2025, MUNI will be:
An internationally visible European university with a strong reputation in the academic community.
An attractive employer recruiting excellent established scientists with their teams as well as young talented scientists as postdocs and junior researchers.
A university successful in global competition according to the qualitative and performance criteria used in international rankings.

In the long-term, MUNI aims to become:
An internationally-recognized research university, dominant in the Czech higher education and research areas.
A role model in the quality, attractiveness, internal culture and integrity of its working and study environment. A leader in its proactive and responsible approach towards society.

Based on the discussions during "the on-site evaluation" it is clear that the new management which started in 2019 is on the right track to achieve these goals in the next years. There is a strong accent on internationalization, on the increasing quality of both teaching and research activities. The strategy is in line with local policies.

Recommendation 5.1:
The recommendation would be to include in these strategic activities all the evaluated units, so they are well aligned with the vision and mission.

R&D&I OBJECTIVES AND STRATEGIES

5.2 Research objectives and strategies before the next evaluation	
Evaluate the research strategy and objectives (e.g. specificity, feasibility, the international context of the strategic plan for teaching, scientific, research, development and innovation, artistic or other creative activity, and any update of this plan). See also, how the society and the market's needs have been identified.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: The management has a strong strategic plan for the next decade to develop in all aspects. Namely • Pressure on high-quality research (quality over quantity) • Pressure on interdisciplinarity (a collaboration between departments and faculties) • A novel system to hire and retain excellent scientists • To improve the gender situation at the university • Doctoral programmes and quality of PhD students admitted • Support the society, e.g., Law School is organizing help to people in need but also helps companies in specific courses. • The transfer of results on research (application) is realized through TACR projects both in natural sciences, medicine, and humanities.	

Recommendation 5.2:
We support the strategic plan. To achieve all these activities, it is recommended to increase the economic strength of the central management as it was recommended in module 4.

R&D&I NATIONAL AND INTERNATIONAL CONTEXT

5.3 Relation to higher national and supranational strategic goals and measures for R&D&I	
Evaluate how the R&D&I policies relate to the higher national and supranational strategic targets and measures for R&D&I, e.g. the European Commission's Europe 2020 strategy for smart, sustainable and inclusive growth, the National Research, Development and Innovations Policy for 2016–2020, the National Priorities for Research, Experimental Development and Innovations, the National Research and Innovation Strategy for Smart Specialisation of the Czech Republic (National RIS3 Strategy), etc.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: The university is very well aligned with both national and EU policies. On the National level we can mention: • National RIS3 strategy • Program Country for future Europe: • European Green Deal	

- Digital Age

Programs like Cybersecurity, programs in the environmental studies, accent on the quality of tech transfer, support of spin-offs formation are just some examples of these activities.

5.4 Strategy and strategic management tools to improve the international or sectoral competitiveness of the university's research work and its quality	
Evaluate the strategy and strategic management tools to increase the international or sectoral competitiveness of the university's research activity and its quality. Consider also the list of the most significant international evaluations for R&D&I in which the evaluated university has taken part. Evaluate the described vision and strategy for the next five-year period.	
Score [0–5 points]:	**5 - Excellent**

Qualitative assessment:

The strategy for improving competitiveness relies on:

- The increasing role of ISAB. The international advisory board helps the management to set strategy and tools to improve competitiveness.
- Research evaluation from the top-down – as we have learned at all levels, there is an annual evaluation going on. The evaluation of faculties is conducted by the management of the university, the evaluation of departments is done by the management of faculties, and department heads are evaluating particular researchers. The result of this evaluation of research quality is then reflected in financing.
- There is strong support for applying for EU grants both at the central office and at particular faculties.
- The major effort is in the implementation of HR Award, which will then result in better access to diverse types of EU grants.
- There is dedicated support for ERC grant holders

Recommendation 5.3 and 5.4:
The only recommendation would be to continue with all the strategies developed by the new management. The pioneer in these efforts is CEITEC which then also serves as a positive example for other evaluated units.

TOOLS FOR IMPLEMENTING THE RESEARCH STRATEGY

5.5 Institutional tools for implementing the research strategy, emphasizing support of quality R&D&I and the innovation environment	
Evaluate the described institutional and strategic tools of the university (e.g. strategic management tools, tools created to support the achievement of research objectives, legal and organizational regulations related to support of R&D&I, etc.) aimed at implementing its research strategy, with the emphasis on supporting quality of R&D&I and the innovation environment.	
Score [0–5 points]:	**5 - Excellent**
Qualitative assessment: There is a strong effort from the new management to address all the issues regarding the research strategy and support. The research is curiosity-driven, and given the legal situation in the Czech Republic, the scientists and departments have a high level of freedom to choose their topic. Despite this, strategic tools can be divided into several areas: • System of internal financing which is based on excellent research results • Open HR policy which promotes internalization and hiring excellent researchers • Novel organization of PhD studies – there is pressure on the better selection process, internal grant financing, mentoring and periodical assessment of the progress • The centres of excellence like CEITEC or RECETOX also serve as pilot places for new activities and are helping to the management to convince other evaluated units that the new “ways” are paying off.	

Recommendation 5.5:
As it was mentioned above, we would support the stronger position of the central (rector) office in the distribution of financial resources to be able to support those departments which are aligned with the central strategy.

MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY

SUMMARY ASSESSMENT OF MODULE M4 AND M5

OVERALL ASSESSMENT OF MODULE M4

MODULE 4 - OVERALL ASSESSMENT		
After evaluation of the individual criteria of the M4 module, please fill in overall score and overall grade in M4 module.		
CRITERIA		**SCORE [0-5 points]**
4.1	Organization and management of R&D&I	**5 - Excellent**
4.2	Support system for R&D&I and measures to stimulate high-quality science	**5 - Excellent**
4.3	Institutional regulations for the use of institutional support for the LCDRO	**4 - Very good**
4.4	Strategy for the establishing, financing and long-term development and sustainability of research centres and large research infrastructures	**5 - Excellent**
4.5	Training system for intellectual property protection and technology transfer	**5 - Excellent**
4.6	Organization of doctoral studies	**4 - Very good**
4.7	Internationalization of doctoral studies	**5 - Excellent**
4.8	Subsequent careers for doctoral graduates (support conditions)	**4 - Very good**
4.9	Rules for funding doctoral students, including foreign students (stimulation and motivation tools)	**4 - Very good**
4.10	Significant cooperation in R&D&I at national level	**5 - Excellent**
4.11	Significant cooperation in R&D&I at international level	**5 - Excellent**
4.12	Mobility of academic staff and researchers (including segmental and intersegmental mobility)	**5 - Excellent**
4.13	Internationalization of the internal environment	**4 - Very good**
4.14	System for career growth for academic staff and researchers	**5 - Excellent**
4.15	Evaluation system for academic staff and researchers and filling key positions in R&D&I	**5 - Excellent**
4.16	Recruitment system for academic staff and researchers from the external environment	**5 - Excellent**
4.17	Human resources structure	**4 - Very good**
4.18	Gender equality measures	**3 - Good**
4.19	Structure of funding for R&D&I	**5 - Excellent**
4.20	Support for obtaining foreign research projects (including the strategy for obtaining prestigious foreign funding for R&D&I)	**5 - Excellent**
4.21	Internal and external system for evaluating research units (groups, teams, departments, institutes)	**5 - Excellent**
4.22	Conditions for setting up new teams and introducing new research topics (start-up strategy)	**4 - Very good**
4.23	External advisory bodies for R&D&I, independent feedback for R&D&I	**5 - Excellent**
4.24	System for acquiring and renewing instruments and equipment for R&D&I	**5 - Excellent**
4.25	System for sharing instruments and equipment for R&D&I	**5 - Excellent**
4.26	Internal regulations and measures for maintaining good practice in R&D&I (e.g. Code of Conduct for Research Integrity, ethical issues)	**5 - Excellent**
4.27	Open Access strategy for information from R&D&I	**5 - Excellent**
4.28	Data Management strategy for research data	**5 - Excellent**
Overall score:		**131**
Overall grade [Excellent– Inadequate]:		**5 - Excellent**

OVERALL ASSESSMENT OF MODULE M5

MODULE 5 - OVERALL ASSESSMENT		
After evaluation of the individual criteria of the M5 module, please fill in overall score and overall grade in M5 module.		
CRITERIA		**SCORE [0-5 points]**
5.1	The evaluated institution's R&D&I mission and vision	**5 - Excellent**
5.2	Research objectives and strategies before the next evaluation	**5 - Excellent**
5.3	Relation to higher national and supranational strategic goals and measures in R&D&I	**5 - Excellent**
5.4	Strategy and strategic management tools to improve the international or sectoral competitiveness of the university's research work and its quality	**5 - Excellent**
5.5	Institutional tools for implementing the research strategy, emphasizing support for quality R&D&I and the innovation environment	**5 - Excellent**
Overall score:		**25**
Overall grade [Excellent– Inadequate]:		**5 - Excellent**

SUMMARY ASSESSMENT OF MODULE M4 AND M5

MODULE 4 AND MODULE 5 - OVERALL ASSESSMENT
After evaluation of the individual criteria of the M4 and M5 modules, please summarise your assessment in the context of both modules. Consider the conditions of the evaluated unit for R&D&I on the one hand (organization, management and support of R&D&I; doctoral studies, national and international cooperation and mobility in R&D&I; HR and career in R&D&I; financial resources for R&D&I; formative evaluation of R&D&I and start-up strategy, research infrastructure and good practice in R&D&I), and on the other hand mission and vision in R&D&I, objectives and strategies in R&D&I, the national and international context of R&D&I and the chosen tools for the implementation of the research strategy. Justify your assessment by highlighting major strengths and/or weaknesses.
General qualitative assessment (summary): In our view, in modules 4 and 5, the university is performing excellently compared to both local and central Europe universities. The current management is paying a lot of attention to improve the gender policy, the situation of PhD students, the internalization of studies and overall staff. The support of EU and local grants is unprecedent in the Czech Republic. The management makes the best efforts to also influence the situation of faculties which are in a way independent, based on local laws.

Note: All supporting materials provided to the members of the MUNI Evaluation Panel are available here.