

HR Excellence in Research: Gap Analysis



Version	2018-07-02
Case number	2018CZ315708
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Submission date	3 rd July 2018
Date Endorsement Charter and Code	Endorsement Letter by CEITEC Consortium (30. 7. 2012) – see Annex 5 Endorsement & Notification Letter by CEITEC MU (25. 1. 2018) – see Annex 6
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INTRODUCTION

CEITEC (Central European Institute of Technology; also "CEITEC consortium") is a scientific centre in the fields of life sciences, advanced materials and technologies whose aim is to establish itself as a recognised centre for basic as well as applied research. CEITEC was approved by the European Commission on 6th June 2011, as a project financed through the Operational Programme Research and Development for Innovation, to be implemented in the period of 2011-2015. It is a consortium whose six partners include the four most prominent universities and two research institutes in Brno, and it benefits from the support of the Region of South-Moravia and the City of Brno. In 2016, the CEITEC project was finished, and CEITEC as an established research centre shifted from the "CEITEC-asproject" phase to "CEITEC-as-institution" phase.



CEITEC Consortium is built on a foundation of six core institutions

Central European Institute of Technology of Masaryk University (also "CEITEC MU" and "the Institute") is a leading partner in the CEITEC consortium.

CEITEC MU is a higher education institute at Masaryk University (also "MU"), established pursuant to Section 22 (1) b) of the Higher Education Act of the Czech Republic and specified in section 2 b) of Annex No. 2 of the MU's Statute. **The institute is organized in 5 research centres and 37 research groups.** As an integral part of the university, CEITEC MU is working in close connection with the Faculty of Medicine and the Faculty of Science at Masaryk University.



CEITEC MU is the proud employer of more than 430 employees¹ that come from 34 different countries all around the world, having 32 percent international staff. Researchers not only from CEITEC can benefit from the presence of high-end infrastructure being organized in eleven core facilities. CEITEC MU offers a vibrant research environment hosting excellent speakers from life sciences as part of almost 200 events organized per year (from international conferences and summer schools to seminars and hands-on workshops). See tab 1 for selected CEITEC MU highlights.

Table 1 CEITEC MU Highlights (2017)

- 37 research groups in five defined research areas
- 11 core facilities
- 382 employees (203 women / 53 %) (FTE)
 - 281 researchers (118 women / 42 %)
 - 103 international employees
 - (29 % including administration / 37 % only research employees)
- budget 23,4 mil EUR
- 320 publications per year
 - 11 % of publications in Tier 5
- 2 ERC grant holders
- 1 ERA Chair grant holder
- ~ 200 scientific events organized

¹ 430 HC / 381 FTE (31. 12. 2017)



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Table 2 Research centres at CEITEC MU

Centre for Structural Biology	The structural biology programme harbours research groups that study the intricate and exquisite choreography of life at cellular, molecular and atomic levels. We visualise structural details ranging from cells, their compartments, down to individual proteins, nucleic acids, and their complexes. Through the integration of structural and computational data, we reveal the atomic details of the mechanisms by which healthy cells function and diseases progress. This basic understanding helps to develop novel therapeutic strategies to meet the challenges of an ageing society, public health and global pandemics.
Mendel Centre for Plant Genomics and Proteomics	The Genomics and Proteomics of Plant Systems research programme is focused on understanding the evolutionary-based strategies of plants. The knowledge acquired by omic approaches, combined with our research experience in the areas of developmental and stress biology of plants, is subsequently used to develop new agricultural, biotechnology and biomedical applications in collaboration with potential users and top research workplaces in the field.
Centre for Molecular Medicine	The main goal of the Molecular Medicine programme is to gain a better understanding of basic molecular mechanisms in many diseases, especially cancer. Researchers from the programme focus on various types of leukemia and several solid tumours, they investigate immune cell microenvironment, transcription regulation, B and T cell receptor repertoires, and the effect of RNA modifications on innate immunity. For various malignancies, much effort has also been made to identify diagnostic and prognostic markers (miRNA profiling, lincRNA, mutations in <i>TP53</i> and other cancer-related genes) and introduce them in clinical practice.
Centre for Neuroscience	The Neuroscience programme aims to develop a unique workplace in the European context, reaching from basic to transitional central nervous system research; from animal studies to clinical, social and behavioural research of a healthy and diseased brain, in particular dementia, epilepsy, movement disorders, schizophrenia, depression and pain, studied with a core facility enabling the most advanced structural, functional and metabolic brain mapping.
Centre for Nanotechnologies and Microtechnologies	The research is focused on the area of nanotechnologies covering materials and structures to be exploited in nanoelectronic and nanophotonic applications. The research involves the preparation, characterization and analysis of the properties of nanostructures enabling active application of the principles which determine the unique and specific properties of nanostructures.

CEITEC MU is presided over by the Director, and the primary management tools include the Strategic Plan (currently for the period 2017-2020), internal regulations (typically Director's Measures), budget and human resources management. The Director appoints members for the institute's two main advisory bodies: the <u>Director's Board</u> and <u>Scientific Board</u> (composed of selected internal group leaders and external experts both from abroad, from national research institutes and university faculties).

In January 2017, a **Strategic Plan of CEITEC MU up to 2020** (also "Strategy 2020" and "Strategic Plan") was approved by the Rector of Masaryk University, in accordance with legal provisions related to strategic planning at universities. This Strategic Plan (see Annex 1) represents the first written



institutional strategy for CEITEC MU from its establishment. It was developed with the help of the Strategy Committee (all members are recognised senior group leaders at CEITEC MU: R. Štefl, P. Plevka, M. O'Connell, I. Rektorová) and discussed with the Director's Board and CEITEC MU Scientific Board.

The Strategy 2020 takes the dual role of **CEITEC MU as a university research institute within MU and a biggest "organisational unit" within the CEITEC consortium into account.**

The Strategic plan determines, in line with MU's long-term strategy, the mission, the vision, CEITEC MU's five strategic priorities (see tab 3 below) and main goals, the measures and tools to achieve them and the indicators that the strategic plan is being fulfilled.

One of the strategy's key performance indicators is also "to be awarded the HR Excellence in Research Award" (also "HR Award"). The HR Award has an important position in the CEITEC MU Strategy, there are five priorities formulated in the strategy, and 4 of them are relevant to the principles and areas coved by the Charter and Code, and 22 out of a total of 54 activities defined by the strategy are directly or indirectly linked to HRS4R.

Table 3 The CEITEC MU Strategic Plan up to 2020: Mission, Vision and Priorities

MISSION

CEITEC MU, as a member of the CEITEC consortium and a research institute within MU, aims to improve quality of life and human health through scientific research.

VISION (2020)

CEITEC MU wants to be:

- Internationally recognised research institute in life sciences with links to material science
- One scientific community bridging disciplinary boundaries
- A role model for a university research institute in Czech and Central European context
- Source of inspiration and innovation to the university, a driver of internationalisation of the university
- An institute with the open, international, fair and friendly environment

STRATEGIC PRIORITIES

- 1. Strong institutional profile
- 2. Leadership in science
- 3. Excellent working environment
- 4. Sustainable and efficient institute with good governance
- 5. Strong community open to its environment



PROCESS

CEITEC Consortium endorsed the Charter and Code in 2012², after adopting the Common rules for HR Management by the CEITEC Coordination Board in December 2011, which aimed to unify standards in HR practices within the consortium on a level above the national average (e.g. obligation to open calls for group leader positions as open and international). CEITEC MU sent the Endorsement & Notification Letter on 25th January 2018³.

In 2014, CEITEC MU was successful in the ERA Chair scheme and was able to attract Mary O'Connell, a successful senior group leader from Ireland. As an integral part of the ERA Chair project that inter alia aims to enhance a cultural shift towards modern research management principles at Masaryk University, CEITEC MU also defined its strategic goal to apply for the HR Excellence in Research Award. During 2014-2016, mostly preparatory works and consultations regarding the formal process were implemented. As already mentioned, in January 2017, the rector of Masaryk University approved the CEITEC MU Strategic Plan up to 2020 that includes the formal goal to be awarded by the HR Award.

CEITEC MU Management⁴ approved the first concept of works related to the HR Award application in February 2017. Based on that, a **working group on the HR Excellence in Research Award** was established at CEITEC MU in order to start designing and formulating the Gap Analysis and the Action Plan (see table 4). The working group, chaired by E. Handlířová, Head of the Director's Office, consists of representatives from all administrative departments and the Director's Office. Its members have been appointed with individual areas and principles of the Charter and Code, resp. the Gap Analysis. A time-schedule and concept of how to approach preparing the gap analysis and action plan were prepared and presented to the CEITEC MU management on 21st March 2017. **The Director's Board (consisting of heads of research centres and selected group leaders) was selected to serve as a Steering Committee (see table 4)**.

⁴ Director, Deputy Director for Science, Deputy Director for Administrative Matters, Head of Director's Office, Scientific Secretary, Spokesperson (PR Manager).



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² See Annex 5.

³ See Annex 6. The Endorsement & Notification Letter was saved in "My Euraxess" e-tool on 15th June 2018.

Table 4 Working Group and Steering Committee members

Working Group E. Handlířová, Head of Director's Office; N. Kostlánová, Scientific Secretary; K. Ornerová, Head of Strategy and Science Department; A. Dvořáková, Head of HR Department; M. Marcolla, Secretary; L. Čoček, Head of Grant Office; A. Valterová, Head of Grant Administration Dept.; R. Gnida, Head of Operations Dept. (2018); J. Šilarová, PR Manager. Steering J. Fajkus, Head of Mendel Centre for Plant Genomics and Proteomics, Group Leader Committee J. Humlíček, Head of Centre for Advanced Nanotechnology and Microtechnology, Group (in alphabetical Leader order) K. Kubíček, Senior Researcher, CEITEC MU Senator Š. Pospíšilová, Head of Molecular Medicine Centre, Group Leader I. Rektor, Head of Neuroscience Centre, Group Leader K. Říha, Deputy Director for Science, Group Leader V. Sklenář, Managing Officer for the Research Infrastructure, Professor O. Slabý, Group Leader R. Štefl, Head of Centre for Structural Biology, Group Leader

During the Gap Analysis preparation, CEITEC MU could benefit from partnering with several HR Award holders, such as VIB (Belgium), University of Ljubljana (Slovenia) and others, and their experience with implementing the Charter and Code.

On 22nd and 23rd November 2017, CEITEC MU Management (with Head of HR and Head of International Relations and PR and Marketing Manager as invited guests) organized a strategic retreat in order to discuss the major challenges and activities of 2017 (reporting) and 2018 (planning). On 23rd November, a brainstorming session was moderated by E. Handlířová, Head of Director's Office and coordinator of all activities related to the HR Award at CEITEC MU. **Members of the management went through all 40 Charter and Core principles, assessed the level of compliance and discussed the current status and relevant gaps between the current status and targeted status as described by the principles of the Charter and Code.** The outcomes of the brainstorming discussion were used as one of two major sources (the second is described below as a PhD and Postdoc Survey).

In November, activities leading to formulating the PhD and Postdoc survey were launched. A team of three people (Head of Director's Office/HR Award coordinator, Scientific Secretary and psychologist specialized in psychology applied to human resources management) designed a survey using an online questionnaire with 77 open/closed questions that aimed to identify PhD students' and postdocs' experience, opinions and satisfaction at CEITEC MU. The survey touched topics such as training, relationship with supervisor, career track, working conditions and more, in order to touch on the Charter and Code's principles. The survey was launched on 27th November 2017 and closed on 20th December 2017, and during this period we received 87 responses.



An analysis of **the PhD and Postdoc Survey 2018** data creates the second important Gap Analysis input. You can find more details, including the used methodology, in Annex 2.

From December 2017 to February 2018, the HR Award working group was writing the gap analysis – based on the two above described inputs. The working group's role was to deepen the received information both from the management and researchers and to:

- List all relevant norms (EU legislation, national legislation, university directives and internal CEITEC MU rules)
- Describe the current status from the perspective of given principle of the Charter and Code
- Do self-assessment of our compliance with the given principle of the Charter and Code
- Describe identified gap(s) and possible strategy (steps) that should be implemented in the Action
 Plan

In May 2018, the Director discussed the Gap Analysis with group leaders (28th May 2018), stressing out the importance of their active role in the HR Strategy (Action Plan) implementation, as well as with the Director's Board (the Steering Committee, 22nd May 2018). Comments and inputs were collected and implemented into the final version of the Gap Analysis and the HR Strategy (Action Plan).

Table 5 Overview of involvement of stakeholder groups

*Stakeholder group	*Consultation format	Outcomes
Management	Design and main inputs, brainstorming	The approved concept of the project of the preparation of the HR Award application Inputs for the Gap Analysis Inputs for the HR Strategy and Action Plan
Steering Committee	Consultation	The approved concept of the project of the preparation the HR Award application and the role of the Steering Committee Review of the Gap Analysis Review of the HR Strategy and Action Plan
Employees	Internal seminars Internal newsletter (update)	Increased internal awareness on the HR Excellence in Research Award Recommendations by the employees, particularly regarding the procedure and implementation of the Action Plan and on how to promote the HR Award internally to researchers
Group Leaders	Consultation	Increased internal awareness on the HR Excellence in Research Award Selected inputs to the Gap Analysis and the HR Strategy
Core Facility Heads	Consultation	Increased internal awareness on the HR Excellence in Research Award Selected inputs to the Gap Analysis and the HR Strategy



Postdocs	Active involvement: the online survey	One of main inputs to the Gap Analysis
PhD students	Active involvement: the online survey	One of main inputs to the Gap Analysis
University stakeholders (Rector, university management, deans)	Information on the procedure and milestones	Increased internal awareness on the HR Excellence in Research Award and its importance for further development of the institute and its internationalisation

Table 6 Overview of meetings and seminars (2016-2018)

Participants / Target group	Date(s)	Description
Management	16 th August 2016 21 st March 2017 3 rd October 2017 22 nd -23 rd November 2017 28 th November 2017 17 th April 2018, 23 rd May 2018	Preliminary discussion Design of work Updated design of work Gap Analysis (brainstorming) Gap Analysis HR Strategy and Action Plan
The steering committee (Director's Board)	28 th March 2017 28 th November 2017 23 rd May 2018	Design of work Gap Analysis HR Strategy and Action Plan
Employees	15 th September 2017 11 th April 2018	Internal seminar on HR Award Internal seminar on results of the Gap Analysis
Working group ⁵	16 th February 2017 6 th June 2017 30 th October 2017, 14 th November 2017 8 th January 2018 9 th January 2018, 22 nd January 2018 5 th February 2018 26 th April 2018	Kick-off meeting Gap Analysis PhD and Postdoc Survey design Gap Analysis PhD and Postdoc Survey results Gap Analysis HR Strategy and Action Plan

⁵ Beside face-to-face meetings, the working group was writing and reviewing the Gap Analysis, HR Strategy and the Action Plan using the on-line tool that supports document editing by the whole team at the same time.



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Technical notes:

With respect to the current state of compliance with the selected principles and their close interconnection, some principles were, for the purpose of the gap analysis, merged into one group of principles (e.g. principles 12 and 13, principles 16-18, principles 36 and 37, etc.).

The gap analysis is focused on the university institute level (a part of the Masaryk University). Indeed, in the text all three levels are evaluated: 1) university level, 2) CEITEC consortium, 3) university institute.

The gap analysis was prepared in the period of March 2017 until March 2018. It does not reflect any developments in concerned areas (principles) after 1st April 2018. The following Action Plan therefore begins in II.Q./2018.



AREA 1: ETHICAL AND PROFESSIONAL ASPECTS

1. Research freedom (+)

No.	40 principles of C&C	Definition	Keywords
1	Research freedom	Researchers should focus their research for the good of mankind and for expanding the frontiers of scientific knowledge, while enjoying the freedom of thought and expression, and the freedom to identify methods by which problems are solved, according to recognised ethical principles and practices. Researchers should, however, recognise the limitations to this freedom that could arise as a result of particular research circumstances (including supervision/guidance/management) or operational constraints, e.g. for budgetary or infrastructural reasons or, especially in the industrial sector, for reasons of intellectual property protection. Such limitations should not, however, contravene recognised ethical principles and practices, to which researchers have to adhere.	 Research freedom Freedom to select research topic and methods (but with some limitations) Research for the good of mankind Research for expanding the frontiers of scientific knowledge

Current status:

CEITEC MU fully implements principles of research freedom. Researchers are free to select their research topic and methods (with a limitation of the research scope and strategy of the institute, available core facilities and allocated budget). CEITEC MU uses open international calls for new group leaders; the only limitation is the research scope⁶ of the institute and the strategic research areas as defined in the CEITEC MU Strategic Plan up to 2020. Group leaders have an important role in the management of their group, i.e. they manage the budget of their groups and have the power to recruit new employees.

CEITEC consortium approved the Code of Ethics (2011) that includes an article on research freedom that closely refers to The European Charter & Code for Researchers (also: "Charter and Code"): "Researchers should focus their research on making advances for the good of mankind and on

⁶ CEITEC (<u>https://www.ceitec.eu/</u>) is a scientific centre that integrates research and development in the fields of life sciences, advanced materials and technologies. Research groups are integrated in seven research programmes. CEITEC MU participates in five of them: Structural biology, Genomics and proteomics of plant systems, Molecular medicine, Brain and mind research and Advanced nanotechnologies and microtechnologies.



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expanding the frontiers of scientific knowledge, while enjoying the freedom of thought and expression, and the freedom to identify methods by which problems are solved according to recognized ethical principles and practices."

Researchers' assessment:

In the CEITEC MU researchers' group, we have identified the researchers' view on complying with the "Research freedom" principle through a variety of questions focused on the appropriate amount of autonomy in research (5), proper implementation of the ethical standards and practices as defined by the EU, Czech Republic and CEITEC (7), and general awareness on such norms and standards (24).

For all questions, the histogram and median test were conducted, showing **no major gaps to be identified**.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

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- Act No. 111/1998 Coll., on Higher Education Institutions and on Amendments and Supplements to some other Acts, as amended (hereinafter the Higher Education Act)
- MU Statutes (Art. 2, 3), available at: https://www.muni.cz/en/about-us/official-notice-board/mu-statutes
- MU Directive No. 6/2015, MU Academic and Professional Employee Code of Ethics (Art. 1, 9, 13, 14, 16), available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- MU Instruction No. 8/2015. Ethics Committee Rules of Procedure
- MU Measure No. 2/2017, Statute of the Research Ethics Committee
- CEITEC consortium Code of Ethics, 2011, available at:
 https://is.muni.cz/do/1471/uredni_deska/spolecna_pravidla_konsorcia_CEITEC/2011-12-14_Code_of_Ethics_approved.pdf?lang=en



2. Ethical principles (+)

No.	40 principles of C&C	Definition	Keywords
2	Ethical principles	Researchers should adhere to the recognised ethical practices and fundamental ethical principles appropriate to their discipline(s) as well as to the ethical standards as documented in the different national, sectoral or institutional Codes of Ethics.	Ethical principlesEthical principles of given disciplineCode of Ethics

Current status:

Monitoring research projects' compliance with generally accepted ethical standards is regularly carried out (via the Ethical Committee of the Masaryk University) as one of university's legal obligations. CEITEC MU follows the university and consortia Code of Ethics, both specifying ethical principles to be applied in research. There are no cases of breaking ethical principles recorded at CEITEC MU.

Research on a human subject that addresses sensitive ethical issues (e.g. research on human embryonic cells, work with personal data, research involving human subjects – volunteers, children, vulnerable individuals or groups, patients, healthy volunteers in clinical trials, etc.) must be screened and approved by the Ethical Committee of MU. Assessing the project proposal by the Ethical Committee is also a prerequisite for obtaining grants and for publishing in prestigious journals. A gap that can be identified, but rather to be categorized in the "Working conditions" area (and therefore not included here), is that all materials related to the work of the Ethical Committee of MU are available only in Czech.

Researchers' assessment:

In the CEITEC MU researchers' group, we have identified the researchers' view on complying with "Research principles" as defined in the Charter and Code, mainly through a question on (dis)agreement with the statement that "The ethical standards and practices (as defined by the EU, the Czech Republic and CEITEC) are followed accordingly in our group" (7).

For this question, the histogram and median test were conducted, showing **no major gaps to be identified**.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

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Relevant norms, legislation, guidelines:

Act No. 111/1998 Coll., the Higher Education Act



- MU Statutes (Art. 2, 3, 46), available at: https://www.muni.cz/en/about-us/official-notice-board/mustatutes
- MU Directive No. 1/2018, Protection and Processing of Personal Data
- MU Directive No. 6/2015, MU Academic and Professional Employee Code of Ethics (Art. 2, 3, 8, 17), available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- MU Directive No. 5/2015, Research Ethics at MU
- MU Directive No. 6/2013, on Research Data
- MU Instruction No. 8/2015, Ethics Committee Rules of Procedure
- MU Measure No. 2/2017, Statute of the Research Ethics Committee

3. Professional responsibility (+/-)

No.	40 principles of C&C	Definition	Keywords
3	Professional responsibility	Researchers should make every effort to ensure that their research is relevant to society and does not duplicate research previously carried out elsewhere. They must avoid plagiarism of any kind and abide by the principle of intellectual property and joint data ownership in the case of research carried out in collaboration with a supervisor(s) and/or other researchers. The need to validate new observations by showing that experiments are reproducible should not be interpreted as plagiarism, provided that the data to be confirmed are explicitly quoted. Researchers should ensure, if any aspect of their work is delegated, that the person to whom it is delegated has the competence to carry it out.	 Plagiarism Proper quoting Research relevant to society Duplication of research Validation of findings

Current status:

There is a variety of measures already in place regarding such a wide principle as professional responsibility (plagiarism, proper quoting, research relevant to society, avoiding duplication of research already carried out elsewhere). Below, we introduce some of them:

- CEITEC MU follows the CEITEC consortium Code of Ethics (no violation of the code has been recorded since 2011, when it was approved) – see article 2.3 "Professional responsibility".
- CEITEC MU Strategy 2020 includes the strategic goal "1.1 Address societal challenges in new generation biomedicine and sustainable agriculture through interdisciplinary research potential"

 aiming to do research that is relevant to society.



- In 2017, CEITEC MU received funding from Teaming call (H2020) together with VIB (Belgium) as a
 part of addressing societal challenges in sustainable agriculture and supporting research relevant
 to society.
- CEITEC PhD School offers a course on "Law, ethics and philosophy of science". The main objective of the course is to acquaint students with the practical aspects of gaining scientific knowledge. At the end of the course, students should be able:
 - to better understand of the importance of methodology, ethics and law in science;
 - to know the basics and background of epistemological approaches in science;
 - to find one's way in ethical corners of contemporary scientific conduct;
 - to be aware of ethically exposed legal issues in science (intellectual property, copyright, data protection).
- Potential plagiarism at Masaryk University is being detected with the aid of a specialized application implemented directly in the MU Information System. This tool may be used by teachers, administrative staff and students alike. (https://www.muni.cz/en/about-us/official-notice-board/plagiarism).
- MU offers a Citation Style Handbook (Czech only) that includes the most commonly used citation styles including the ISO bibliographic referencing standard (ISO 690).

Researchers' assessment:

In the of CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Professional responsibility" principle through a variety of questions focused on conducting research that is relevant to society and does not duplicate research previously carried out elsewhere (8), but also on being aware of the copyrights and publication policies applied to research in the EU, the Czech Republic and at CEITEC (25).

For all questions, the histogram and median test were conducted, showing **no major gaps to be identified**.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

There are some areas where CEITEC MU should develop new measures to address issues such as data anonymization, data management, data manipulation (also relevant to principle no. 7 Good practice in research). The accountability of the institution in research will require developing and adopting internal policies on auditing data and processes leading to output release.

"Although failures in data manipulation, fabrication or any other kind of misconduct have never been identified, the research environment at CEITEC MU is not fully monitored and such a system may be more prone to induce false researcher behaviour." K. Říha, Deputy Director for Research



Relevant norms, legislation, guidelines:

- MU Statutes (Art. 2, 3, 46), available at: https://www.muni.cz/en/about-us/official-notice-board/mustatutes
- MU Directive No. 1/2018, Protection and Processing of Personal Data
- MU Directive No. 6/2015, MU Academic and Professional Employee Code of Ethics (Art. 6, 15), available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- MU Directive No. 5/2015, Research Ethics at MU
- MU Directive No. 10/2013, Intellectual Property at MU
- MU Directive No. 6/2013, On Research Data
- CEITEC MU Strategic Plan up to 2020 (see Annex 1)

4. Professional attitude (+/-)

No.	40 principles of C&C	Definition	Keywords
4	Professional attitude	Researchers should be familiar with the strategic goals governing their research environment and funding mechanisms and should seek all necessary approvals before starting their research or accessing the resources provided. They should inform their employers, funders or supervisor when their research project is delayed, redefined or completed, or give notice if it is to be terminated earlier or suspended for whatever reason.	 Funding mechanisms Goals governing research environment Reporting obligation of researchers

Current status:

In 2017, the CEITEC MU Strategic Plan up to 2020 (also: the strategy) was been approved by the rector of Masaryk university. Inter alia, the strategy aims to **strengthen the group leaders' professional attitude and increase awareness on the managerial aspects of a group leader's position**.

The strategy has been broadly promoted and is publicly available to all employees. Implementing the strategic plan is monitored and reported to the management and other bodies of the institute, incl. group leaders quarterly.

At CEITEC MU, line management with using methodology management and participatory management is in place. Regular Group Leaders' Meetings are part of the participatory management (with Director and other members of the management). The group leaders' meetings are organized on a quarterly basis with the aim of increasing awareness on management priorities, strategic goals and other important topics relevant for researchers. Such meetings are also good occasions to gather feedback and different views on discussed topics. See principle 35 Participation in decision-making bodies for more information.



CEITEC MU has well-established grant office support for researchers in all stages of their career ("pre-award phase"). The process, researchers and administrative staff's roles and responsibilities, grant reporting system, information services, etc. are described and functional. Approximately once per month via e-mail and once per month via internal newsletter, all CEITEC MU researchers receive an update on upcoming funding opportunities. The Grant Office also organizes information sessions before every major call for proposals (key national funders) and workshops on important calls (such as MSCA-IF). A general e-mail for queries on grants and funding is available and advertised. All CEITEC MU may request individual consultation on funding strategy at any time.

For the post-award phase, CEITEC MU has established **robust support for all principal investigators within the Department for Project Administration**. The department is responsible for properly implementing, monitoring and checking all grants in accordance with all aspects of the grant agreements, such as time-schedule, budget issues, indicators, project changes. The department closely cooperates with principal investigators as the main responsible persons for the grant as a whole.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Professional attitude" principle through a variety of questions focused mainly on their awareness of funding mechanisms and the ability to identify the appropriate grant scheme, apply for the grant and implement the grant properly, including following the time-schedule, delivering project outputs and milestones (26, 27).

For all questions, the histogram and median test were conducted, showing no major gap for postdocs, but finding a low level of awareness and know-how related to grants in the PhD student group. However, this is also connected with the particular stage of a research career when PhD students are not expected to write grant proposals and implement grants from the position of the principal investigator. This lower median in the case of PhD students also reflects the established grant support system (both pre-award phase and implementation phase) that provides group leaders with the highest standard of individual support service and a lower level of service for PhD students.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

A gap can, however, be identified in missing formalization / institutionalization of current good practice and quality services of the Grant Office and the Department for Project Administration. **CEITEC MU lacks an internal norm on proper preparation and implementation of grants/projects and subsequent sustainability of projects, including standardizing the project support team's personnel structure (such as availability of administrator, finance manager, project manager, etc.). This issue is to be addressed in the Action Plan.**

Relevant norms, legislation, guidelines:

MU Directive No. 1/2018, Protection and Processing of Personal Data



- MU Directive No. 6/2016, Management of Projects
- MU Directive No. 6/2015, MU Academic and Professional Employee Code of Ethics (Art. 6, 15), available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- MU Directive No. 10/2014, Strategic Planning at MU
- MU Directive No. 5/2014, Inspection Code
- MU Directive No. 10/2013, Intellectual Property at MU
- MU Directive No. 6/2013, on Research Data
- MU Directive No. 3/2013, Financial Control at MU
- CEITEC MU Strategic Plan up to 2020 (see Annex 1)
- Director's Measure of CEITEC MU No. 3/2016, Organizational Structure CEITEC MU, available at:
 https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Directors_Measure_CEITEC
 MU_03_2016_Organizational_Structure_As_Amended_2018-01-01.pdf?lang=en

5. Contractual and legal obligations (+/-)

No.	40 principles of C&C	Definition	Keywords
5	Contractual and legal obligations	Researchers at all levels must be familiar with the national, sectoral or institutional regulations governing training and/or working conditions. This includes Intellectual Property Rights regulations, and the requirements and conditions of any sponsor or funders, independent of the nature of their contract. Researchers should adhere to such regulations by delivering the required results (e.g. thesis, publications, patents, reports, new products development, etc.) as set out in the terms and conditions of the contract or equivalent document.	 Working conditions Training conditions IP regulations Grant conditions Fulfilment of given regulations (grant contract) Delivering of required research results

Current status:

Professional and robust personnel administration focused on properly implementing all national, sectoral and institutional regulations in the area of contract and working conditions is strong part of HR at CEITEC MU.

At the beginning of the working contract, each employee receives complex information regarding contract and working conditions (description of job position and contractual conditions, health and safety training, brochure for new employees). Such information is provided both by the direct superior (head of workplace) and the HR manager.

All employees have access to the MU intranet with updated information on the contract, sources of the contract's financing, evidence of all changes to the contract, workloads for individual projects, etc. The system is available both in Czech and English.



For international staff, there is a Welcome Office established. A dedicated HR Manager helps with all formal and legal requirements (stay permits, registration to all authorities in Czech Republic, accommodation, etc.). All important documents related to the contractual and working conditions are translated into English for international employees.

Regarding other conditions and regulations, we can also mention these activities, principles and measures:

- All internal rules (Director's Measures) are available to all CEITEC MU employees on the document server for Masaryk university, in both a Czech and English version. This is part of the institute's larger strategic priority – to offer an international working environment and increase the institute's internationalization by improving inclusiveness in the working environment (see Annex 1, Strategy 2020, strategic priority 3 "Excellent working environment").
- For PhD students, there are clear expectations specified to successfully finish the CEITEC PhD School and receive a PhD degree (see *Principles in the Area 4 for detailed information on organization of CEITEC MU PhD School*).
- In the case of IP regulations, CEITEC MU cooperates with the Centre for technology transfer at Masaryk university (CTT MU) which offers training and other related activities, information brochures and events.
- Regarding grant conditions and delivering required/promised project outcomes, we aim to ensure
 full information on researchers and project team members through kick-off meetings (see principle
 4 "Professional attitude" for detailed information on grants).

Researchers' assessment:

In the CEITEC MU researchers' group, we have tried to identify researchers' view on complying with the "Contractual and legal obligations" principle through a variety of questions focused on:

- proper employee orientation (38),
- proper explanation and clarification of the content of the given job/position (39),
- proper information process on employee's rights and responsibilities (43),
- awareness on funding mechanisms and ability to identify the appropriate grant scheme, apply
 for the grant and implement the grant properly, including following the time-schedule, delivering
 project outputs and milestones (26, 27) also related to "Professional attitude" principle.

For all questions, the histogram and median test were conducted, showing **no major gaps to be identified** (with the exception of the second point, focused on the awareness of funding mechanisms – the gap is however already included in the *"Professional attitude"* principle).

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

 A gap was identified in missing a formal orientation process that needs to be defined and implemented. So far, the quality and extent of the orientation process was related to the quality



and responsibility of the superior (head of workplace). The orientation process should involve all steps needed for proper orientation of an employee and should involve not only a representative of the HR Department but mainly the new employee's direct superior. The goal is to create a standardized orientation plan to reflect the needs of the position and the department.

2. Another gap was identified in the lack of awareness about the existing IP protection system (as operated by the Centre for Technology Transfer at MU), but also on an implementation level, where CEITEC MU does not have a formal procedure on scouting, pre-screening publications and research outputs in place. Researchers can consult with CTT MU, but there is no "active system" in place (searching actively for relevant research outcomes to be protected as IP).

- Act No. 262/2006 Coll., Labour Code
- MU Employment Code, available at: https://www.muni.cz/en/about-us/official-notice-board/masaryk-university-employment-code
- MU Statutes, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-statutes
- MU Directive No. 6/2016, Management of Projects
- MU Directive No. 10/2014, Strategic Planning at MU
- MU Directive No. 3/2013, Financial Control at MU
- MU Directive No. 10/2013, Intellectual Property at MU
- Rules of Organization of CEITEC MU, available at:

 https://is.muni.cz/do/1471/uredni_deska/organizacni_rad/Rules_of_Organisation_CEITEC_MU_20

 16-02-11_FINAL_EN.pdf?lang=en
- Brochure for new employees (v2017)



6. Accountability (+)

No.	40 principles of C&C	Definition	Keywords
6	Accountability	Researchers need to be aware that they are accountable to their employers, funders or other related public or private bodies as well as, on more ethical grounds, to society as a whole. In particular, researchers funded by public funds are also accountable for the efficient use of taxpayers' money. Consequently, they should adhere to the principles of sound, transparent and efficient financial management and cooperate with any authorised audits on their research, whether undertaken by their employers/funders or by ethics committees. Methods of collection and analysis, the outputs and, where applicable, details of the data should be open to internal and external scrutiny, whenever necessary and as requested by the appropriate authorities.	 Responsible research Accountability of researchers towards employer/funders/society Efficient use of public money Sound, transparent, efficient financial management Audits Methods of collection and analysis, outputs, data details – data management

Current status:

CEITEC MU, as well as the university as a whole, has to follow Law no. 320/2001 on Finance Control and all related laws. **CEITEC MU is experienced in finance management and related checking activities, including risk management.** At the level of the MU Rectorate, there is a Department for Internal Audits that is a methodological guarantor for the area of controls, audits and compliance with national and EU legislation in this area. The Department for Internal Audits at the Rectorate also performs all internal audits at the university, including CEITEC MU.

At CEITEC MU, there are three main departments responsible for finance control and cooperating with auditors on audits and controls (in accordance with the Director's Measure no. 3/2016 Organizational Structure):

- Finance Department;
- Department for Project Administration;
- HR Department

All these departments are also authors and guarantors of budget guidelines prepared for all employees and for various grant schemes, in order to ensure sound, transparent and efficient use of public money.

During the period 2016-2017, there have been six external audits and two internal audits done at CEITEC MU (other audits, that were done on the level of the university or CEITEC consortium, are not counted). All the audits were focused on grants and projects implemented by CEITEC MU, mainly checking cost eligibility (both personnel and operation costs), investment costs, activities, indicators, etc. External audits were made by institutions such as the Ministry of Finance of the Czech Republic, the Ministry of Education, Youth and Sports of the Czech Republic, Czech Republic Supreme Audit



Office and other grant providers. All audits from this period were finished with a "no findings" conclusion (only in one project audit was there a minor finding of rather formal character, caused by using the wrong type of bank account for an approximate amount of 140 EUR from a total project budget of 223 mil EUR). From this perspective, CEITEC MU is considered an institution that uses public money in an efficient way with good finance management.

Such an efficient use of money is connected with the purchase of research equipment:

- At the level of MU, there is a Committee on purchase of research equipment assessing all major university faculty and institute investments in order to stop purchase duplication.
- At the level of CEITEC MU, the Director issued an investment policy (May 2017), which serves to
 declare principles, and outline a procedure, applicable to investment proposals so that a coherent
 and transparent decision-making process is in place for investments that will incur costs for the
 whole Institute.

The policy ensures that decisions on new investments are made after having full information, after public presentation and defence of the proposal and considering all available arguments for and against the proposal, including available budget from the institute's funds and projects.

Accountability is not only about finance control and funds use, but also about an **internal culture that supports discussion and public presentation** of new proposals. At CEITEC MU, such a culture is cultivated by internal policies. E.g. already mentioned "policy on investments" (May 2017) stating that all investment proposals to be paid from the institute's central funds are presented to CEITEC MU employees by a proposer, including a complex analysis of all relevant aspects of such an investment purchase. Based on this public presentation (defence), the Director makes a final decision.

At CEITEC MU, there is also **well-established system on public procurements** with an active role for a public procurement manager, who guards the effective use of public money.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify researchers' view on complying with the "Accountability" principle as defined in the Charter and Code, mainly through a question on data management (the other parts that are included in the principle, are covered mostly by internal norms, therefore we consider "Managerial assessment" as essential for this analysis).

We asked our researchers on their (dis)agreement with a statement "I am familiar with the current national legal requirements regarding data and confidentiality protection, and undertake the necessary steps to fulfil them" (23).

For this question, the histogram and median test were conducted, showing **no major gaps to be identified**.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

1. CEITEC MU should develop new measures to address issues such as **data anonymization**, **data management**, **data manipulation** (also relevant to the principle no. 3 "Professional"



- responsibility"). The research environment at CEITEC MU is not fully monitored and such a system may be more prone to induce false researcher behaviour. The institution's accountability in research will require developing and adopting internal policies on auditing data and processes leading to outputs release.
- 2. CEITEC MU is missing a functional repository for archiving outputs produced by researchers.
- 3. Responsible research and principles of responsible research and innovations (RRI) are a new topic at CEITEC MU that needs to be addressed. For that reason, it is currently perceived as a gap. However, since CEITEC has recently become an ORION project partner Open Responsible research and Innovation to further outstanding knowledge (www.orion-openscience.eu/) and has started implementing new policies, we expect that this gap will be diminished.

- Act No. 134/2016 Coll., on Public Procurement, as amended
- Act No. 255/2012 Coll., on Inspection, as amended (hereinafter Inspection Code)
- Act no. 280/2009 Coll., the Tax Code, as amended
- Act No. 262/2006 Coll., Labour Code, as amended
- Act No. 235/2004, Coll., on Value Added Tax, as amended
- Act No. 320/2001 Coll., on Financial Control in Public Administration and on the Amendment to Some Acts, as amended (hereinafter Act on Financial Control)
- Act No. 218/2000 Coll., on Budgetary Rules and on the Amendment of Some Related Acts, as amended (hereinafter Budgetary Rules)
- Act No. 586/1992 Coll., on Income Taxes, as amended
- Act No. 563/1991 Coll., on Accounting, as amended
- MU Educational, Creative and Associated Activities Quality Assurance and Internal Evaluation
 System Guidelines, available at: https://www.muni.cz/en/about-us/official-notice-board/pravidla-systemu-zajistovani-a-vnitrniho-hodnoceni-kvality-vzdelavaci-tvurci-a-s-nimi-souvisejicich-cinnosti-na-mu
- MU Employment Code, available at: https://www.muni.cz/en/about-us/official-notice-board/masaryk-university-employment-code
- MU Directive No. 10/2017, Use of Information Technology
- MU Directive No. 6/2016, Management of Projects
- MU Directive No. 10/2015, Public Procurement Rules
- MU Directive No. 6/2015, MU Academic and Professional Employee Code of Ethics, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- MU Directive No. 5/2014, Inspection Code
- MU Directive No. 6/2013, on Research Data
- Policy on Investment Decisions at CEITEC MU (2017)



7. Good practice in research (+/-)

No	40 principles of C&C	Definition	Keywords
7	Good practice in research	Researchers should adopt safe working practices at all times, in line with national legislation, including taking the necessary precautions for health and safety and for recovery from information technology disasters, e.g. by preparing proper back-up strategies. They should also be familiar with the current national legal requirements regarding data protection and confidentiality protection requirements and undertake the necessary steps to fulfil them at all times.	 Work health and safety rules Back-up strategies (IT) Data protection Confidentiality protection rules

Current status:

CEITEC MU is strong in health and safety policy and practices. All legal requirements are strictly followed, the care for occupational safety and health protection is managerial employees' responsibility. The Health and Safety Manager coordinates the field with responsible persons. CEITEC MU research activities are carried out in accordance with national law, university rules on health and safety, fire protection and selected Director's Measures (see full list of related legislation and norms below).

The **information security** agenda is covered by the university policy. Data are protected by the Centre of Information Technologies at University Campus Bohunice at Masaryk University (CIT UKB MU), which formulates and ensures back-up plans.

At CEITEC MU, in 2017, a work on formulating **IT Conception** was started, which is expected to be finalized in the first half of 2018. The conception will cover standard IT support, higher IT support standards and related issues, including a format of cooperation with the university parts responsible for IT (CIT UKB MU and Institute of Computer Science).

MU and CEITEC MU also started preparing to implement **new GDPR rules** (effective from May 2018). Currently, there are two main MU Directives: Rector's Directive No. 3/2010 Protection of personnel data at Masaryk University and MU Directive No. 6/2013 on Research Data. See Principle no. 2 "Ethical Principles" for more information on the Ethical Committee of MU.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Good practice in research" principle, as defined in the Charter and Code, mainly through questions on lab management rules (44, 45), occupational safety and health standards (48, 49) and data protection.

For these questions, the histograms and median tests were conducted, showing **no major gaps to be identified**. Even vice versa, **lab management rules and occupational health and safety standards were assessed very positively** – both from the perspective that such rules are well-defined, but also that employees act in accordance with those rules (having means over 5).



For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

- At CEITEC MU, it is necessary to determine a responsible person for each laboratory, as stated by the Director's Measure no. 2/2017 Determination of Responsibility for the Operation, Maintenance and Repairs of Instrumentation and Equipment of CEITEC MU (but still not implemented properly).
- 2. IT Policy, as described above, is to be finished, approved and implemented.
- 3. A gap was identified in the lack of mechanism at lab (group) level. There is no formal system on lab books evidence and archiving. An internal norm should be approved in order to have a clear system specifying the required results.

- Act No. 309/2006 Coll., Act on Securing Other Conditions of OSH, as amended
- Act No. 262/2006 Coll., Labour Code, as amended
- Act No. 258/2000 Coll., on Public Health Protection, as amended
- Act No. 133/1985 Coll., on Fire Protection, as amended
- Government Regulation No. 495/2001 Coll.
- MU Directive No. 1/2018, Protection and Processing of Personal Data
- MU Directive No. 10/2017, Use of Information Technology
- MU Directive No. 6/2016, Management of Projects
- MU Directive No. 5/2015, Research Ethics at MU
- MU Directive of No. 6/2013, on Research Data
- Rector's Directive No. 10/2009, Determination of the Organisational Measures of Occupational Safety and Health Protection
- Rector's Directive No. 4/2005, Organisation of Fire Prevention Measures at MU
- Director's Measure of CEITEC MU No. 7/2017, Education of Employees in the Field of Occupational Safety, Health Protection and Fire Prevention, available at:
 - https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Directors_Measure_CEITEC MU 07-
 - 2017_Education_of_Employees_in_the_Field_of_Occupational_Safety_Health_Protection_and_ Fire_Prevention.pdf?lang=en
- Director's Measure of CEITEC MU No. 6/2017, Operation, Handling and Storage of Gas Pressure Vessels, available at:
 - https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Directors_Measure_CEITEC_MU_06-2017_Gas_Pressure_Vessels_Operation_Handling.pdf
- Director's Measure of CEITEC MU No. 2/2017, Determination of Responsibility for the Operation,
 Maintenance and Repairs of Instrumentation and Equipment of CEITEC MU, available at:
 https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Directors_Measure_CEITEC_MU_02-2017_Equipment_responsibility.pdf



- Director's Measure of CEITEC MU no. 10/2016, Personal Protective Equipment at the Workplace,
 Cleaning Agents, Detergents and Disinfection Preparations, available at:
 <a href="https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Director_s_Measure_10-2016_Personal_Protective_Equipment_at_the_Workplace_Cleaning_Agents_Detergents_and_Disinfection_Preparations_final.pdf?lang=en
- Director's Measure of CEITEC MU No. 8/2016, Works Forbidden to Pregnant and Breastfeeding
 Female Employees and to Female Employees Who Have Recently Given Birth until the 9th Month
 after Delivery, available at:
 <a href="https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Director_s_Measure_8-2016_Works_forbidden_to_pregnant_and_breastfeeding_female_employees_and_to_female_em

ployees_who_have_recently_given_birth_until_9th_month_after_delivery_final.pdf

Director's Measure of CEITEC MU No. 7/2016, Handling with Dangerous Chemical Substances and Mixtures and Operation of Laboratories, available at:
 https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Director_s_Measure_7-2016_Handling_with_Dangerous_Chemical_Substances_and_Mixtures_and_Operation_of_Laboratories_final.pdf

8. Dissemination, exploitation of results (+/-)

No.	40 principles of C&C	Definition	Keywords
8	Dissemination, exploitation of results	All researchers should ensure, in compliance with their contractual arrangements, that the results of their research are disseminated and exploited, e.g. communicated, transferred into other research settings or, if appropriate, commercialised. Senior researchers, in particular, are expected to take a lead in ensuring that research is fruitful and results are either exploited commercially or made accessible to the public (or both) whenever the opportunity arises.	 Dissemination Exploitation Communication of science Transfer of knowledge Commercialization

Current status:

CEITEC MU fully supports the dissemination of research results and their further exploitation. The communication of science, especially, is very well established and operated at the institute. Data shows that on a national level, CEITEC scientists' research is almost continuously presented in the media.



CEITEC MU has defined a "bonus system", a methodology that motivates researchers to publish their research results. The environment is built in a way that pushes researchers at all levels (from PhD to group leaders) to publish in high quality journals. E.g. PhD students need to publish to finish their PhD study.

From the perspective of "communication of science", there is a PR team established as a part of the Director's Office, being active in communicating research (with the direct or indirect involvement of researchers) not only to other researchers, but also to the general public, to policy makers and other stakeholders. For more information on science communication, please refer to principle "Public engagement".

Researchers' assessment:

The principle "Dissemination, exploitation of results" was not directly covered by the PhD and Postdoc Survey 2018".

Gap(s) identified:

- 1. A gap could be found in the area of exploiting research results a CEITEC MU **TT Strategy** should be prepared and discussed.
- 2. A gap can be identified in a lack of awareness about the activities of the Centre for technology transfer at MU, but also at a practical (implementation) level, where CEITEC MU does not have a formal policy/procedure on scouting, and pre-screening publications and research outputs. Researchers can consult with CTT MU, but there is no "active system" in place. (This gap is already identified in the principle Contractual and legal obligations.)

- MU Directive No. 6/2015, MU Academic and Professional Employee Code of Ethics (Art. 10, 11), available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- MU Directive No. 10/2013, Intellectual Property at MU
- MU Directive No. 4/2013, Repository of Employees' Work Outcomes
- MU Instruction No. 6/2017, Valuation and Evidence of Intellectual Property
- Rector's Measure No. 9/2013, to Ensure the Sustainability of Outputs in the Field of Intellectual Property
- Director's Measure of CEITEC MU No. 04/2015, Methodology Bonus Contribution to the Research Groups of CEITEC MU for Their Scientific Excellence, available at: https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Directors_Measure_04-2015_Bonus_system_EN.pdf?lang=en
- Director's Measure of CEITEC MU No. 01/2012, to Calculation of the Price of Commercial Orders, available at:
 - https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Measure_No._1_2012.pdf?lang=en
- Director's Measure of TTO MU No. 2/2014, to Support the Commercialization of Results Proof of Concept Phase



9. Public engagement (+)

No.	40 principles of C&C	Definition	Keywords
9	Public engagement	Researchers should ensure that their research activities are made known to society at large, in such a way that they can be understood by non-specialists, thereby improving the public's understanding of science. Direct engagement with the public will help researchers to better understand public interest in priorities for science and technology, and also the public's concerns.	 Public engagement Societal impact of research

Current status:

The public engagement of researchers and their willingness to communicate science has improved substantially since the beginning of CEITEC MU operation in 2011. Currently, the Strategic Plan up to 2020 defines a strategic priority of being a "strong community open to its environment" that are further specified into two main goals:

- increase and intensify academic and community collaborations and interaction within the university and within the CEITEC consortium;
- engage with local (regional, national) community and society-at-large

As already mentioned above, there is PR team established as a part of Director's Office, active in communicating science (with researchers' involvement) not only to other researchers, but also to the general public, to policy makers and other stakeholders.

Science researchers' communication skills have been developed step-by-step at CEITEC (CEITEC MU) since its beginning (2011).

The CEITEC MU Communication Strategy was discussed by the Board of Director's and approved by the Director in January 2018. A significant part of the Communication Strategy is dedicated to science communication. The target audience is defined, and tools to communicate towards a specific target group are settled. Researchers are well supported by the CEITEC MU communication team to communicate the results of their research to the public, but also to the scientific community. New communication tools, such as social media communication, are being implemented in 2017, and the number of researchers using it is constantly growing together with number of people reached by such media.

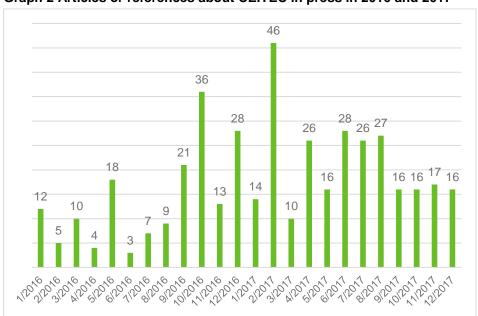
CEITEC is active on social media, where it presents up to date scientific topics, scientists are also encouraged to promote their scientific results via social media. If applicable, a press release is issued and news about the published scientific results are published on the CEITEC webpage on a regular basis.



530 853 312 010 2017 445 469 263 963 2016 305 604 2015 161 379 2014 0 100 000 200 000 300 000 400 000 500 000 600 000 ■ visits cz
■ visits eng
■ unique visitors cz
■ unique users eng

Graph 1 Web pages visits in 2017-2017

Source: www.ceitec.cz, www.ceitec.eu



Graph 2 Articles or references about CEITEC in press in 2016 and 2017

Source: PR Report 2017

CEITEC follows Open Science principles, which includes public engagement activities:

- Open Lab Days are organized regularly where concrete scientific projects are presented and discussion with the public is open;
- CEITEC regularly joins **European Researchers Night** and welcomes over two thousand visitors in the laboratories;
- Open Days for high school and university students are organised regularly too;
- Primary school students are invited, and popular science topics are presented in an understandable way.



Researchers' assessment:

The principle "Public engagement" was not directly covered by the PhD and Postdoc Survey 2018".

Gap(s) identified:

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Relevant norms, legislation, guidelines:

- MU Directive No. 6/2015, MU Academic and Professional Employee Code of Ethics, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- CEITEC MU Strategic Plan up to 2020 (see Annex 1)

10. Non-discrimination (+)

No.	40 principles of C&C	Definition	Keywords
10	Non discrimination	Employers and/or funders of researchers will not discriminate against researchers in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition.	Non-discriminationEqual opportunities

Current status:

The principle of non-discrimination is incorporated in national and institutional legislation as one of the main principles to be followed by the employer.

"No CEITEC employee should be discriminated against in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition." (CEITEC Code of Ethics, 2011)

At the university level, an **Equal Opportunity Panel** was established in 2016 by the rector, in line with Art. 16 of the Ethical Code of MU. The panel discusses initiatives made by the rector and/or other employees or students of the university.

In order to address the issues of equal opportunities and non-discrimination, CEITEC MU started implementing the <u>LIBRA Project</u> (H2020-GERI). => **See Principle 27 "Gender Balance" for more information on activities related to LIBRA and equal opportunities.**

CEITEC MU has not received any complaints regarding breaking non-discrimination principles during its existence.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify researchers' view on complying with the "Non-discrimination" principle, as defined in the Charter and Code, mainly through questions on equal



opportunities during the recruitment process (36, 37). We asked for our researchers (dis)agreement on the statements "The admission procedure of CEITEC follows all ethical standards and gives the same opportunity of success to all without respect to gender, race, nationality, etc." (36) and "Each gender has the same chance to succeed when applying for a job at CEITEC and while going through the selection process" (37).

For these questions, the histograms and median tests were conducted, showing no major gaps to be identified. **In fact, equal opportunities during recruitment process were assessed very positively** (having means between 5.6 to 6.19 in the scale from 1 to 7, having 7 as most positive assessment).

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

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- Act. No 198/2009 Coll., on Equal Treatment and on the Legal Means of Protection against Discrimination and on Amendment to some Laws, as amended
- Act. No. 262/2006 Coll., Labour Code (par. 16, 17), as amended
- Act No. 111/1998 Coll., the Higher Education Act
- Act No. 1/1993 Coll., the Constitution of the Czech Republic, as amended
- Charter of Fundamental Rights and Freedoms
- MU Employment Code (Art. 2h), available at: https://www.muni.cz/en/about-us/official-notice-board/masaryk-university-employment-code
- MU statutes (Art. 20), available at: https://www.muni.cz/en/about-us/official-notice-board/mu-statutes
- MU Internal Wage Regulations, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-internal-wage-regulations
- Regulations on Competitive Selection Procedures at MU (Art. 12, par. 2), available at: https://www.muni.cz/en/about-us/official-notice-board/rad-vyberoveho-rizeni-mu
- MU Directive No. 1/2018, Protection and Processing of Personal Data
- MU Directive No. 5/2017, Employee Evaluation
- MU Directive No. 6/2015, MU Academic and Professional Employee Code of Ethics (Art. 2, par. 2d, Art. 4), available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- MU Directive No. 5/2015, Research Ethics at MU
- MU Instruction No. 1/2016, Rules of Procedure of the Equal Opportunity Panel of the MU
- CEITEC consortium Code of Ethics (Art. 2.1), 2011, available at:
 https://is.muni.cz/do/1471/uredni_deska/spolecna_pravidla_konsorcia_CEITEC/2011-12-14_Code_of_Ethics_approved.pdf?lang=en



11. Evaluation/appraisal systems (+/-)

No.	40 principles of C&C	Definition	Keywords
11	Evaluation/ appraisal systems	Employers and/or funders should introduce, for all researchers, including senior researchers, evaluation/appraisal systems to assess their professional performance on a regular basis and in a transparent manner by an independent (and, in the case of senior researchers, preferably international) committee.	EvaluationAppraisalPerformance

Current status:

The system of management and internal setting of CEITEC has been inspired and set according to the most significant scientific institutions. It is based on regularly evaluating the quality of scientific results carried out by an independent team of top world experts in the given fields. An independent evaluation of research groups led by senior group leaders, according to strict international standards, is ensured by the International Scientific Advisory Board (also "ISAB"), whose members are significant people in foreign and Czech science.

ISAB meets twice a year and sets the criteria, comments on the planned research activities and gives recommendations regarding CEITEC's strategic positioning, which is important for the Common Evaluation of Scientific Excellence – an external evaluation of research groups organised every 4 years to assess the outcomes of this period. Each research group provides the background information in a given format and structure, i.e., publications (quality and quantity), funding and applied results, such as patents and licenses. The group leader also provides supplemental information about the group's accomplishments, strategy, vision and plan. The last part of the assessment is the on-site interview chaired by the evaluation board. The result of the evaluation is summarized in an overall report containing the grade (A-D), comments and recommendations from the evaluation board, which serve as a background for identifying the actions and measures to be taken to improve the research groups' prosperity. If the group's performance is not sufficient (grade D), the management pays specific attention to the result of the evaluation and considers the termination of the group.

Junior group leaders are evaluated separately from senior group leaders. Junior research group leaders are researchers that established their first independent group within the past 5-6 years. After this time, they are evaluated and the decision is made whether they will continue their research at CEITEC MU. The evaluation is mainly based on the overall performance of the research group; additional factors, such as group viability in terms of financing, its personal structure, engagement in inter-disciplinary and inter-sectoral activities as well as contributing to CEITEC's development are also considered.

Two or three reviews are prepared, based on the evaluation reports provided by external reviewers from the same or a similar research field. These researchers should have neither personal nor extensive working relations with the candidate or members of his/her group. Further, the recommendation by ISAB



members during their annual visit on site are added to the final report from the evaluation. Based on the recommendation by ISAB, the CEITEC MU director makes one of the following decisions:

- 1. The group passes the evaluation. The group leader will be promoted to a senior research group leader with an unlimited contract.
- 2. The research group does not pass the evaluation. The group will be discontinued and will finish its activities at CEITEC MU within one year. It cannot submit grants or hire new students.
- 3. The group does not pass the evaluation but shows very promising development within one year. The group will then be re-evaluated with only two possible evaluation outcomes (see 1 and 2). Some of the group's activities may be limited until the final evaluation.

PhD students' progress is annually evaluated during the PhD Day. The evaluation committee, the student and the supervisor have a short (ca 15 minutes) interview based on the Progress Report, final assessment and recommendation. The major objectives of the PhD Day are:

- to summarise the scientific milestones and achievements of the past year;
- to specify the goals for the coming year;
- to receive supervisor(s) and the doctoral committee feedback;
- to meet the requirements of MU Study and Examination Regulations and the Concept of CEITEC PhD School.

Beside the standard evaluation of research groups, there is also an appraisal system included in the internal budget rules. These rules cover a set of indicators for the research groups that are annually evaluated and included within the budget for each research group as a bonus/malus.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Evaluation/appraisal systems" principle, as defined in the Charter and Code, mainly through questions related to their relationship with their supervisor. Please refer to Area 4 – principles 36-40 for detailed information.

Gap(s) identified:

What was identified as a gap in evaluating researchers is the non-existence of an evaluation system tailored to the position of the group leader as a manager. CEITEC MU has a very well-developed evaluation of the overall group's research performance that enables evaluating a "unit", however, the institute is missing an evaluation of the group leader as a managerial position, using more "soft indicators", e.g. Is the group leader a good leader? Is he/she an active member of the academic community at CEITEC MU? Is he/she involved in any extra roles/positions, such as committee member, member of an evaluation panel, mentor role.

- MU Statutes, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-statutes
- MU Internal Wage Regulations, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-internal-wage-regulations



- MU Directive No. 5/2017, Employee Evaluation
- MU Directive No. 6/2015, MU Academic and Professional Employee Code of Ethics, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- MU Directive of MU No. 5/2015, Research Ethics at MU
- MU Directive No. 10/2013, Intellectual Property at MU
- Rector's Directive No. 4/2008, Classification of Employees into a Wage Levels
- Director's Measure of CEITEC MU No. 06/2016, Internal Budget Rules of CEITEC MU, available at:
 https://is.muni.cz/do/1471/uredni deska/opatreni reditele/70921299/Directors Measure CEITEC
 _MU_06-2016_Internal_Budget_Rules_As_Amended_2017-11-15.pdf?lang=en
- Director's Measure of CEITEC MU No. 04/2015, Methodology Bonus Contribution to the Research Groups of CEITEC MU for Their Scientific Excellence, available at https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Directors_Measure_04-2015_Bonus_system_EN.pdf?lang=en



AREA 2: RECRUITMENT

12. Recruitment (+/-)

13. Recruitment (Code) (+/-)

No.	40 principles of C&C	Definition	Keywords
12	Recruitment	Employers and/or funders should ensure that the entry and admission standards for researchers, particularly at the beginning of their careers, are clearly specified and should also facilitate access for disadvantaged groups or for researchers returning to a research career, including teachers (of any level). Employers and/or funders of researchers should adhere to the principles set out in the Code of Conduct for the Recruitment of Researchers when appointing or recruiting researchers.	Recruitment rulesAdmission standards
13	Recruitment (Code)	Employers and/or funders should establish recruitment procedures which are open, efficient, transparent, supportive and internationally comparable, as well as tailored to the type of positions advertised. Advertisements should give a broad description of knowledge and competencies required and should not be so specialised as to discourage suitable applicants. Employers should include a description of the working conditions and entitlements, including career development prospects. Moreover, the time allowed between advertising the vacancy or the call for applications and the deadline for reply should be realistic.	 Recruitment process – open, transparent Tailored approach to the type of position advertised

Current status:

At the beginning, it was important to establish a functional monitoring system. In 2016, Director's Measure no. 5/2016, Rules of Tenders for Employee Recruitment, imposed a new rule that the HR Department is involved in all recruitment procedures and is responsible for their organization. This Director's Measure is in line with the university rules. HR Department launched monitoring data from all recruitment procedures, including segregation based on gender and nationality. For the HR Department, the new rules also brought an important requirement to be able to show group leaders the benefits of such an arrangement, including why it is important to have open calls and to reduce the number of internal promotion(s) without a real selection procedure. Therefore, recruitment plays an important role in the CEITEC MU Strategic Plan up to 2020. In its strategic priority "Leadership in science", CEITEC MU develops activities in order to attract scientific leaders and help them grow.



At CEITEC MU, only group leaders are members of academic staff. For both academic and non-academic staff, the selection process for a certain position is announced on the MU website in Czech and English, and also on adequate scientific portals (in English). EURAXESS portal is used for all research (and selected technician) positions – this obligation is formulated in the CEITEC HR Common Rules for HR Management.

In the text of the announced selection procedure, the conditions that need to be fulfilled by an applicant are specified so his/her application can be taken into consideration. The specification of international relevance in an applicant's research profile (academic staff) is an essential condition. The deadline for submitting the applications is at least 30 days from the date the academic position was announced. When it comes to non-academic staff, the deadline for submitting the applications is shorter – 14 calendar days. The announcer can prolong, interrupt or cancel the selection procedure only in justified cases.

If needed – interviews are organized via Skype calls (or similar means enabling remote communication). In the case of on-site interviews with applicants from abroad, travel and accommodation costs are covered by CEITEC MU.

From October 2015, CEITEC MU has been implementing the "LIBRA Project" (Leading innovative measures to reach gender balance in research activities, H2020-GERI). A long-term goal for the LIBRA project is to increase the representation of women in science, and their participation in management positions. This goal is to be achieved by means of direct support for women in science and research, eliminating barriers and biases based on gender and also by means of improving awareness of the gender dimension in research activities. One of the LIBRA Project work-packages is dedicated specifically to "Recruitment". The project is based on formulating and implementing quite a complex and robust Gender Equality Plan (GEP). In 2017, LIBRA WP Recruitment Leader, Austrian institute Ce-M-M- prepared "Recruitment Guidelines" that contain a description of all recruitment procedure phases and recommendations on best practices (not only) from the perspective of equal opportunities and in support of team diversity. Based on the LIBRA Recruitment Guidelines, CEITEC MU has already updated the template on advertising a Postdoc position⁷. In 2018, CEITEC MU – as a part of the Gender Equality Plan - will prepare a proposal of new recruitment rules that will implement recommendations stated in the LIBRA Recruitment Guidelines. Those recommendations include areas such as proper monitoring, training of selection committee members, proper interview design and structure, appropriate means of communication with applicants, etc.

A specific and very important target group for the recruitment procedure (or also "admission procedure") are PhD Students. The admission procedure into CEITEC PhD school in the Life sciences programme is open, transparent, selective and supports mobility. There is a two round admission process:

⁷ The new template reflects the openness of a selection procedure for both genders, presents CEITEC MU as an employer that supports diversity, and which will help us to continue in a well-established trend. In at least one year, data should be revised to assess the impact of this change on the proportion of male and female applicants for postdoc positions.



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- Based on applications and background information, applicants are informed about the result by email in a given term, as stated for the respective academic year.
- An interview in English. For candidates living abroad, personal attendance is not necessary,
 a Skype conference can be organized.

The admission committee is composed of at least 3 members – group leaders, senior researchers and members of the doctoral committee – and allocates points to the interviewed candidates according to these assessment criteria:

- knowledge in the field of Life Sciences
- communication in English
- supplied materials
- general impression

The exam is successfully passed by candidates who get at least 85 points out of 100. However, passing this threshold does not guarantee admittance - as the number of positions is limited, only candidates with the highest number of points will get the position. The maximum number of accepted students is 30. The results of Round 2 of the admission process are announced to applicants by e-mail in the given deadline as stated for the respective academic year. Written notification of the final decision is sent within 15 days from the session of the faculty's main admission committee.

All the information related to the admission process is available at the CEITEC PhD website - http://ls-phd.ceitec.cz/basic-info-about-ceitec-phd-school/.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Recruitment" principles (12, 13) through a variety of questions focused on personal experience with the recruitment process (34), assessment of the recruitment procedure of CEITEC (35, 36) and equal opportunities during the recruitment of researchers (36, 37).

For all questions, the histograms and median tests were conducted, showing **no major gaps to be identified**.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

- 1. Recruitment rules of CEITEC MU need to be revised and updated to be open, efficient, transparent, supportive and internationally comparable, as well as tailored to the type of positions advertised (OTM-R).
- 2. Some group leaders (and/or facility heads) do not always inform the HR Department on new positions and do not organize a selection procedure with the HR department (as mentioned earlier, even though there is an internal rule that specifies such a requirement). This causes not only problems in recruitment monitoring, but also in following on-boarding of new employees (esp. when coming from another country) and quality control of the recruitment procedure and its standards. The goal is to show that there are some sources from which we can get high-



- quality staff, and the HR department and a scientific secretary (methodically) can help in this process.
- 3. PhD students with supervisors at CEITEC MU might be enrolled in the other programmes (outside CEITEC PhD School) with different rules and conditions, including the admission procedure. Unifying rules and conditions for PhD programmes for PhD students at CEITEC is a challenge for the following years.
- 4. CEITEC MU should consider using electronic / on-line forms to gather applications. The benefit of on-line forms could be found in better evidence, including available metadata.

Relevant norms, legislation, guidelines:

- Act No. 262/2006 Coll., Labour Code (par. 30), as amended
- Act No. 111/1998 Coll., the Higher Education Act
- Regulations on Competitive Selection Procedures at MU (whole document, especially Art. 3, 8, 11), available at: https://www.muni.cz/en/about-us/official-notice-board/rad-vyberoveho-rizeni-mu
- MU Statutes (Art. 26, 44), available at: https://www.muni.cz/en/about-us/official-notice-board/mu-statutes
- MU Employment Code, available at: https://www.muni.cz/en/about-us/official-notice-board/masaryk-university-employment-code
- MU Directive No. 6/2015, MU Academic and Professional Employee Code of Ethics (Art. 1, 9, 13, 14), available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- MU Directive No. 5/2015, Research Ethics at MU
- MU Instruction No. 13/2014, Rules for Recruitment of New Employees at RMU
- Rector's Directive No. 2/2010 (Art. 4), MU Career Code
- CEITEC Common Rules on HR Management (2011), available at:
 https://is.muni.cz/do/1471/uredni_deska/spolecna_pravidla_konsorcia_CEITEC/2011-12-14_Common_Rules_for_HR_Management_approved.pdf?lang=en
- Director's Measure of CEITEC MU No. 5/2016, Rules of Tenders for Employee Recruitment (Art. 4, 5, 7), available at:
 - https://is.muni.cz/do/1471/uredni deska/opatreni reditele/70921299/Measure 05 2016 Rules of Tenders for Employee Recruitment.pdf?lang=en



14. Selection (Code) (-/+)

No.	40 principles of C&C	Definition	Keywords
14	Selection (Code)	Selection committees should bring together diverse expertise and competences and should have an adequate gender balance and, where appropriate and feasible, include members from different sectors (public and private) and disciplines, including from other countries and have relevant experience to assess the candidate. Whenever possible, a wide range of selection practices should be used, such as external expert assessment and face-to-face interviews. Members of selection panels should be adequately trained should be realistic.	 Diversity of selection committees Gender balance Wide range of selection practices Training of selection committee members

Current status:

The composition of selection committees is regulated by Masaryk University Regulations on Competitive Selection Procedures and by CEITEC MU Measure of the Director No. 5/2016, Rules of Tenders for Employee Recruitment. The selection committee varies depending on whether it is an academic or non-academic selection procedure.

When it comes to **academic selection procedure**, the selection committee needs to have at least 5 members, including a chair, and the number of members always needs to be odd. One of the selection committee members is always one representative the workplace for the selection procedure being made, it is usually a head of this workplace. Also, a foreign member of a selection committee needs to be present in the academic selection procedure process (at CEITEC MU, the academic selection procedures are organized only in case of group leader positions).

There is no obligation to have a foreign member for a **non-academic position**. It is only necessary to have an odd number of members of a selection committee and one of the members must be a direct superior for the position which the selection procedure is taking place for.

Researchers' assessment:

The PhD and Postdoc Survey 2018 did not cover the principles from Area 2, Recruitment, in such detail as specified by the principle "Selection". Please refer to general assessment as specified in the principles "Recruitment" (12, 13).

Gap(s) identified:

As already stated in Principles 12 a 13, at CEITEC MU there is definitely a gap in having recruitment rules specifying the requirements on the diversity of selection committees (incl. the gender balance aspect), and actively working with various selection practices. Selection committee members are not trained in recruitment. (This gap is to be addressed as a part of Recruitment rules revision and update, as stated above.)



Relevant norms, legislation, guidelines:

- Act No. 262/2006 Coll., Labour Code (par. 30), as amended
- Regulations on Competitive Selection Procedures at MU (whole document, especially Art. 2, 4, 5, 7, 9), available at: https://www.muni.cz/en/about-us/official-notice-board/rad-vyberoveho-rizeni-mu
- Director's Measure of CEITEC MU No. 5/2016, Rules of Tenders for Employee Recruitment (Art. 4, 5, 6), available at:

https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Measure_05_2016_Rules_of_ Tenders for Employee Recruitment.pdf?lang=en

15. Transparency (Code) (+/-)

No.	40 principles of C&C	Definition	Keywords
15	Transparency (Code)	Candidates should be informed, prior to the selection, about the recruitment process and the selection criteria, the number of available positions and career development prospects. They should also be informed about the strengths and weaknesses of their applications after the selection process.	 Transparency of recruitment Recruitment rules Informing candidates after recruitment process

Current status:

An academic selection procedure follows the conditions set out in the Regulations on Competitive Selection Procedures. The selection committee may invite the applicant to take a public lecture. The selection committee can decide that none of the applicants are suitable for a position. The result of a selection procedure is announced to the applicants immediately via email or phone call.

The position name and the name of a selected applicant needs to be announced in the website's public section.

The selection criteria listed in the advertised position description are selected mainly by the head of workplace (future superior of selected candidate) in coherence to the general requirements of an institution for that type of position. In case of positions of higher priority (typically group leaders, heads of core facilities), there is cooperation with the HR department, Deputy Director for Science and Scientific Secretary. Calls for group leader positions are always reported to the management, Director's Board and CEITEC MU Scientific Advisory Board.

Applicants for an advertised position are informed about all important issues during a personal interview and they have an opportunity to ask questions related to a future contract. They are informed about career development possibilities and other benefits during a personal interview and also after entering into an employment relationship.

In case an applicant is interested, he/she is provided with feedback on the strengths and weaknesses of his/her application orally, by selected member of the selection committee. This aspect is, however, provided on an informal basis and there is no obligation to do so.



Researchers' assessment:

Please refer to the principles "Recruitment" (12, 13).

Gap(s) identified:

Internal procedure on providing feedback on an application's strengths and weaknesses is currently absent. This gap is to be addressed as a part of general revision in the recruitment rules. *Please refer to principles "Recruitment"* (12, 13).

Relevant norms, legislation, guidelines:

- Act No. 262/2006 Coll., Labour Code (par. 30), as amended
- Regulations on Competitive Selection Procedures at MU (Art. 3, par. 4, Art. 5, especially par. 5, 7, 17, 18), available at: https://www.muni.cz/en/about-us/official-notice-board/rad-vyberoveho-rizeni-mu
- Rules of Organisation of CEITEC MU (Art. 9, par. 2c), available at:
 https://is.muni.cz/auth/do/1471/uredni deska/organizacni rad/Rules of Organisation CEITEC M
 U 2016-02-11 FINAL EN.pdf?lang=en
- Director's Measure of CEITEC MU No. 5/2016, Rules of Tenders for Employee Recruitment (Art. 5, par. 1), available at:
 - https://is.muni.cz/auth/do/1471/uredni_deska/opatreni_reditele/70921299/Measure_05_2016_Rule s_of_Tenders_for_Employee_Recruitment.pdf?lang=en



16. Judging merit (Code) (-/+)

17. Variations in the chronological order of CVs (-/+)

18. Recognition of mobility experience (Code) (-/+)

No.	40 principles of C&C	Definition	Keywords
16	Judging merit (Code)	The selection process should take into consideration the whole range of the candidate's experience. While focusing on their overall potential as researchers, their creativity and level of independence should also be considered. This means that merit should be judged qualitatively as well as quantitatively, focusing on outstanding results within a diversified career path and not only on the number of publications. Consequently, the importance of bibliometric indices should be properly balanced within a wider range of evaluation criteria, such as teaching, supervision, teamwork, knowledge transfer, management of research and innovation and public awareness activities. For candidates from an industrial background, particular attention should be paid to any contributions to patents, development or inventions.	 Selection process Recruitment Creativity Results Career path Wider range of criteria Importance of supervision, teamwork, management, public awareness activities
17	Variations in the chronological order of CVs (Code)	Career breaks or variations in the chronological order of CVs should not be penalised but regarded as an evolution in career, and consequently, as a potentially valuable contribution to the professional development of researchers towards a multidimensional career track. Candidates should therefore be allowed to submit evidence-based CVs, reflecting a representative array of achievements and qualifications appropriate to the post for which application is being made.	Career breaksEvaluation of CVsRecruitment process
18	Recognition of mobility experience (Code)	Any mobility experience, e.g. a stay in another country/region, in another research setting (public or private) or a change from one discipline or sector to another, whether as part of the initial research training or at a later stage in the research career, or virtual mobility experience, should be considered as a valuable contribution to the professional development of a researcher.	 Mobility Evaluation system – mobility

Current status:

The "Judging merit" and "Variations in the chronological order of CVs (Code)" principles are related to the principle "Selection (Code)" and its requirement on training selection committee members. CEITEC MU does not organize training of selection committee members, however this should change in the



period 2018-2020. A part of training should also be learning how to evaluate candidates based on both qualitative and quantitative aspects, etc. (as defined by principles 16-18 and 20). What should be taken into account is also "mind-set" and the personality of the applicants (e.g. are they team players, are they willing to participate in the institute's development, etc.).

Career breaks or variations in the chronological order of CVs are not considered to be a barrier to a career at CEITEC MU. If there are no objective reasons, like strictly given project funding, applicants with an alternative career track are also welcome.

The mobility experience, no matter if intersectoral, interdisciplinary or international, is always considered as an advantage to the applicant, particularly if it is supported by a positive recommendation letter given by a former supervisor.

Researchers' assessment:

The PhD and Postdoc Survey 2018 did not cover the principles from Area 2, Recruitment, in such detail as specified by the principles "Judging merit", "Variations in the chronological order of CVs"," Recognition of mobility experience" and "Recognition of qualifications". Please refer to general assessment as specified in the principles "Recruitment" (12, 13).

Gap(s) identified:

Selection committee members are not trained in recruitment. CEITEC MU needs to address the existing gap in missing guidelines on how to assess CVs and how to evaluate candidates. (This gap is to be addressed as a part of Recruitment rules revision and update, as stated above.)

Relevant norms, legislation, guidelines:

- Act No. 262/2006 Coll., Labour Code (par. 30), as amended
- Regulations on Competitive Selection Procedures at MU (Art. 2, par. 2c, Art. 3, par. 4), available at: https://www.muni.cz/en/about-us/official-notice-board/rad-vyberoveho-rizeni-mu
- MU Directive No. 5/2017, Employee Evaluation
- Rector's Directive No. 2/2010, MU Career Code



19. Recognition of qualifications (Code) (+)

No.	40 principles of C&C	Definition	Keywords
19	Recognition of qualifications (Code)	Employers and/or funders should provide for appropriate assessment and evaluation of academic and professional qualifications, including non-formal qualifications, of all researchers, in particular within the context of international and professional mobility. They should inform themselves and gain a full understanding of rules, procedures and standards governing the recognition of such qualifications and, consequently, explore existing national law, conventions and specific rules on the recognition of these qualifications through all available channels.	Recognition of qualifications

Current status:

The area of qualification recognition is regulated by European and national legislation, as well as by bilateral and multilateral agreements among the Czech Republic and other countries. **One of the university's role is therefore to provide good service to researchers regarding practical realization of the recognition of qualifications.**

In the Czech Republic, recognition of foreign higher education and qualifications is based on comparing the extent and contents of the foreign higher education with degree programmes of a similar focus accredited in the Czech Republic.

The system of recognizing foreign higher education and qualifications is well managed at MU. The agenda is under the Office for Studies, Masaryk University Rector's Office. Complex information is available at university website (https://www.muni.cz/en/admissions/recognition). Moreover, at CEITEC MU, the Strategy and Science Department supports employees as well as students with information and help with recognizing education and qualifications (e.g. regularly with the recognition of foreign higher education after successful students are admitted to doctoral studies).

Area of non-formal qualifications is assessed as a part of principles 12-18.

Researchers' assessment:

The PhD and Postdoc Survey 2018 did not cover the principles from Area 2, Recruitment, in such detail as specified by the principles "Judging merit", "Variations in the chronological order of CVs"," Recognition of mobility experience" and "Recognition of qualifications". Please refer to general assessment as specified in the principles "Recruitment" (12, 13).

Gap(s) identified:

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Relevant norms, legislation, guidelines:

- Act No. 111/1998 Coll., the Higher Education Act
- Act No. 500/2004, Coll., on Administrative Procedure, as amended
- Directive 2005/36/EC, on The Recognition of Professional Qualifications, available at: http://eurlex.europa.eu/LEXUriServ/LexUriServ.do?uri=OJ:L:2005:255:0022:0142:EN:PDF
- International agreements (bilateral and multilateral) concerning mutual recognition of higher education qualifications, binding to the Czech Republic
- International agreements concerning the authentication of public documents, binding to the Czech Republic

20. Seniority (Code) (+/-)

No.	40 principles of C&C	Definition	Keywords
20	Seniority (Code)	The levels of qualifications required should be in line with the needs of the position and not be set as a barrier to entry. Recognition and evaluation of qualifications should focus on judging the achievements of the person rather than his/her circumstances or the reputation of the institution where the qualifications were gained. As professional qualifications may be gained at an early stage in a long career, the pattern of lifelong professional development should also be recognised.	 Recruitment – requirements Evaluation of achievements with respect to career stage and career breaks

Current status:

The levels of qualifications required are defined in line with the needs of the given position. In general, the HR Department recommends setting minimal requirements as "Obligatory" and other requirements as "Desirable but not required". This leads to a larger pool of applicants who are not discouraged from applying for the position.

Researchers' assessment:

The PhD and Postdoc Survey 2018 did not cover the principles from Area 2, Recruitment, in such detail as specified by the principle "Seniority". Please refer to general assessment as specified in the principles "Recruitment" (12, 13).

Gap(s) identified:

Selection committee members are not trained in recruitment. CEITEC MU needs to address the existing gap in missing guidelines on how to assess CVs and how to evaluate candidates. (This gap is to be addressed as a part of Recruitment rules revision and update, as stated above.)



Relevant norms, legislation, guidelines:

- Act No. 262/2006 Coll., Labour Code (par. 30), as amended
- Regulations on Competitive Selection Procedures at MU (Art. 2, par. 2c, Art. 3, par. 4, Art. 12, par. 3), available at: https://www.muni.cz/en/about-us/official-notice-board/rad-vyberoveho-rizeni-mu

21. Postdoctoral appointments (Code) (-/+)

No.	40 principles of C&C	Definition	Keywords
21	Postdoctoral appointments (Code)	Clear rules and explicit guidelines for the recruitment and appointment of postdoctoral researchers, including the maximum duration and objectives of such appointments, should be established by the institutions appointing postdoctoral researchers. Such guidelines should take into account time spent in prior postdoctoral appointments at other institutions and take into consideration that the postdoctoral status should be transitional, with the primary purpose of providing additional professional development opportunities for a research career in the context of long-term career prospects.	 Recruitment guidelines Rules for appointments Transitional status of postdoc position Professional development Career opportunities for postdocs

Current status:

Postdocs are typically non-academic employees at CEITEC MU and their recruitment is currently based on the general rules of Masaryk University and CEITEC MU (see Principles 12 and 13).

In 2016, CEITEC MU started several activities with the aim of unifying research position clarification according to international standards. Firstly, as part of the systemization of job positions, the measure dedicated to characterizing a postdoc has been implemented. Such a definition was absent before the implementation, and a group of employees categorized as "postdocs" was quite heterogeneous. In 2017, the CEITEC MU Director's Board discussed a new career system proposal expected to be approved and implemented in 2018. The career system specifies all positions at CEITEC, career track for all positions, requirements on individual types of positions and research group life cycle. Regarding postdocs, this position will be considered as a transitional position.

Please refer to principle 28 Career Development for more information about the systemization of job positions and the new career system.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' (particularly postdocs') view on complying with the "Postdoctoral appointments" principle through a variety of questions focused on personal experience with the recruitment process (34), assessment of CEITEC's the recruitment procedure of CEITEC (35, 36) and equal opportunities during the researcher recruitment (36, 37).



For all questions, the histograms and median tests were conducted, showing **no major gaps to be identified within the specific group of respondents (postdocs)**. Compared to PhD students, postdocs as a group are more satisfied with all aspects as stated in the survey's questions/statements (34-37).

Gaps have been identified in closely related topics of career development. Please refer to principle 28 for more information.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

- A formal Career System that specifies all positions at CEITEC, career track for all positions, requirements on individual types of positions and also research group life cycle is missing at CEITEC MU.
- 2. A gap is definitely present in the absent **specific recruitment rules for recruitment and appointment of postdocs**, including defining the postdoc as someone, who "comes in and goes out" after given period of time.

Relevant norms, legislation, guidelines:

Director's Measure of CEITEC MU No. 4/2016, Rules for Jobs Systemization, available at:
 https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Measure_04_2016_Rules_for
 _Jobs_Systemisation.pdf



AREA 3: WORKING CONDITIONS AND SOCIAL SECURITY

22. Recognition of the profession (+)

No.	40 principles of C&C	Definition	Keywords
22	Recognition of the profession	All researchers engaged in a research career should be recognized as professionals and be treated accordingly. This should commence at the beginning of their careers, namely at postgraduate level, and should include all levels, regardless of their classification at national level (e.g. employee, postgraduate student, doctoral candidate, postdoctoral fellow, civil servants).	Recognition of the profession

Current status:

All researchers at CEITEC MU, including PhD students, are considered as professionals. In 2016, CEITEC MU started several activities with the aim of unifying the classification of research positions according to international standards. Firstly, the systemization of job positions has been implemented by the Director's Measure No. 4/2016 Rules for Jobs Systemization. A part of the measure is dedicated to characterizing PhD student, postdoc and staff scientist positions. In 2017, CEITEC MU Director's Board discussed a new career system proposal expected to be approved and implemented in 2018.

Please refer to principle 28 Career Development for more information about the systemization of job positions and the new career system.

CEITEC MU is also very active in the communication of science – including **presenting researchers to the public as experts** in their fields that, through their intensive research projects, improve quality of life and human health.

CEITEC MU uses the **Principles for Innovative Doctoral Training** in order to increase the recognition of the profession.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Recognition of the profession" principle, mainly through a question on the general perception of CEITEC MU's environment: "I consider CETEIC to be an institute with open, international, fair and friendly environment." (47)

For this question, the histogram and median test were conducted, showing **no major gaps to be identified**.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".



Gap(s) identified:

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Relevant norms, legislation, guidelines:

- MU Internal Wage Regulations, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-internal-wage-regulations
- MU Directive No. 5/2017, Employee Evaluation
- Rector's Directive No. 2/2010, MU Career Code
- Rector's Directive No. 4/2008, Classification of Employees into a Wage Levels
- CEITEC MU Strategic Plan up to 2020 (see Annex 1)
- Communication Strategy of CEITEC MU (2018)
- Director's Measure of CEITEC MU No. 4/2016, Rules for Jobs Systemization, available at:
 https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Measure_04_2016_Rules_for_Jobs_Systemisation.pdf

23. Research environment (+)

No	40 principles of C&C	Definition	Keywords
23	Research environment	Employers and/or funders of researchers should ensure that the most stimulating research or research training environment is created, which offers appropriate equipment, facilities and opportunities, including remote collaboration over research networks, and that the national or sectoral regulations concerning health and safety in research are observed. Funders should ensure that adequate resources are provided in support of the agreed work programme.	 Stimulating environment Remote collaboration Networking Health and safety rules Adequate resources

Current status:

CEITEC MU considers "having a stimulating environment" and "enabling and supporting collaboration and networking" as highly important aspects of building an excellent research institute and goes beyond an approach that reduces the research environment to only building research infrastructure. Therefore, we can say that this principle is very well established at CEITEC. The CEITEC MU Strategic Plan up to 2020 solves support of this principle in the strategic priority "Excellent working environment".

Regarding specific activities and compounds of CEITEC MU operation, we can mention some, such as:

• Research infrastructure is state-of-the-art and one of reasons why outstanding scientists/students select CEITEC for their further carrier development.



- CEITEC Core Facilities are the parts of the national/European RIs (ESFRI, ERIC). CEITEC also collaborates with VBCF for sharing know-how as well as instruments/protocols/trainings for students/researchers.
- CEITEC MU is a partner in three Twinning projects that enable research stays in partnering institutions and establishing/strengthening research collaboration.
- CEITEC MU organizes a whole range of research events (from highly prestigious international conference(s), summer schools, hands-on workshops, to smaller lectures). For example, in 2017, there were 210 events organized by CEITEC MU.
- Trainings for all the employees in order to increase their career development are organised.
- Involved in international alliances (e.g. EU-LIFE, Allinace4Life, Instruct) encourage networking.
- Active group leader participation in the institute's governance (see principle 35 "Participation in decision-making bodies" for more information).

From the perspective of health and safety rules, please address to the principle 7 for more information.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify researchers' view on complying with the "Research environment" principle, as defined in the Charter and Code, through a wide range of questions listed below:

- I am satisfied with the research environment in my LAB (e.g. weekly lab meetings, lab retreats, opportunity to discuss topics within the group, etc.) (1)
- I find the work environment at CEITEC stimulating and motivating (2)
- I am satisfied with the research environment of CEITEC (e.g. scientific events, core facilities, networking opportunities, scientific evaluation, access to information sources, etc.) (3)
- My group leader provides productive work environment (the leader is supportive; provides guidance when necessary, etc.) (4)
- I have enough networking opportunities and/or scientific interactions (6)
- I was sufficiently informed on my rights and responsibilities as an employee of CEITEC (e.g. lab management and safety rules, GMO, timesheets, etc.) (43)
- The management system of labs at CEITEC is well-defined and well-set (44)
- In general, CEITEC employees act in accordance with the management system of labs (45)
- I consider CEITEC to be an institute with open, international, fair and friendly environment (47)
- Occupational Safety and Health Standard of CEITEC is well-defined and well-set (48)
- In general, CEITEC employees act in accordance with the Occupational Safety and Health Standard (49)

For all these questions, the histograms and median tests were conducted, showing **no major gaps to be identified**.

For detailed information and background data, including design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".



Gap(s) identified:

-

Relevant norms, legislation, guidelines:

- MU Employment Code, available at: https://www.muni.cz/en/about-us/official-notice-board/masaryk-university-employment-code
- MU Directive No. 8/2017, Grant Agency MU
- CEITEC MU Strategic Plan up to 2020 (see Annex 1)

24. Working conditions (+/-)

No.	40 principles of C&C	Definition	Keywords
24	Working conditions	Employers and/or funders should ensure that the working conditions for researchers, including disabled researchers, provide where appropriate, the flexibility deemed essential for successful research performance in accordance with existing national legislation and with national or sectoral collective-bargaining agreements. They should aim to provide working conditions which allow both women and men researchers to combine family and work, children and career. Particular attention should be paid, inter alia, to flexible working hours, part-time work, tele-working and sabbatical leave, as well as to the necessary financial and administrative provisions governing such arrangements.	 Working conditions Flexible working conditions Work-life balance Flexible working hours Part-time working Sabbatical leave

Current status:

CEITEC MU aims to be an institute with an open, international, fair and friendly environment. To achieve this, CEITEC MU focuses on building an excellent working environment through developing coherent, transparent and supportive conditions of employment at any stage in a career. An emphasis is put into the inclusiveness of the institute and facilitating family and work obligations.

CEITEC MU Work-life balance policy can be found here.

An employee can be given **sabbatical leave** of 6 to 12 months, once every 7 years, unless there are some serious circumstances related to fulfilling educational and research tasks at MU. This right is ensured by MU Directive No. 4/2017, Sabbatical Leave.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Working conditions" principle, as defined in the Charter and Code, through a wide range of questions listed below:



- The personal and work life in my current position are well-balanced (28)
- The social benefits (holiday, pension allowances, food vouchers, etc.) available at CEITEC fit my needs (29)
- I am satisfied with the HR-support in transferring to CEITEC/the Czech Republic (Welcome service) (30 only for international staff)
- It was easy for me to find child support (31 only for international staff)
- It was easy for me to find housing (32 only for international staff)
- It was easy for me to build up a social network (33 only for international staff)
- My orientation process went well during the first three months of work (38)
- It has been comprehensibly explained to me what things should be done at CEITEC and why (39)
- I consider CEITEC to be an institute with open, international, fair and friendly environment (47)

For all these questions, the histograms and median tests were conducted. **Data analysis indicates** gaps to be addressed by the Action Plan in these areas:

- Work-life balance in the PhD student group
- Social benefits in the PhD student group
- Child support in both groups (child support was solved only in case of employees from abroad, not Czech PhD students nor Czech postdocs)

In case of the remaining questions, no gaps were identified.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

Gaps were identified through the PhD and Postdoc Survey in three areas: 1. work-life balance (PhD students), 2. social benefits (PhD students) and 3. child support (both PhD students and postdocs). These gaps need to be further explored since the survey does not provide reasons for the dissatisfaction that could lead from not having a system in place, low awareness of existing support, etc.

Relevant norms, legislation, guidelines:

- Act No. 262/2006 Coll., Labour Code (par. 78-99, 224-247, 317), as amended
- MU Internal Wage Regulations, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-internal-wage-regulations
- MU Employment Code, available at: https://www.muni.cz/en/about-us/official-notice-board/masaryk-university-employment-code
- MU Statutes, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-statutes
- Collective Agreement between MU and University trade union MU Coordinating union committee (Art. 1, par. 2)
- MU Directive No. 4/2017, Sabbatical Leave available only in Czech
- MU Directive No. 11/2013, Organizing a working time at MU
- Rector's Directive No. 9/2014, on the Studies of Persons with Special Needs at MU
- Rector's Directive No. 8/2014, on Ensuring Accessibility of MU for Persons with Disabilities



- Rector's Directive No. 2/2010, MU Career Code
- Director's Measure of CEITEC MU No. 11/2016, Rules of Home-Office Work, available at:
 https://is.muni.cz/do/1471/uredni deska/opatreni reditele/70921299/Director s Measure 11-2016_Rules_of_Home-Office_Work_final.pdf?lang=en
- Director's Measure of CEITEC MU No. 2/2016, System of Taking a Holiday, available at:
 https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Directors_Measure_CEITEC
 MU_2-2016_Taking_a_holiday.pdf?lang=en



25. Stability and permanence of employment (-/+)

No.	40 principles of C&C	Definition	Keywords
25	Stability and permanence of employment	Employers and/or funders should ensure that the performance of researchers is not undermined by instability of employment contracts and should therefore commit themselves, as far as possible, to improving the stability of employment conditions for researchers, thus implementing and abiding by the principles and terms laid down in the EU Directive on Fixed-Term Work.	 Stability of employment Instability Contracts (defined, fixed-term contracts)

Current status:

Czech legislation allows agreement on a fixed-term and indefinite employment contract. The duration of a fixed-term employment between the same contracting parties (employee and employer) may not exceed 3 years, and from the date of the beginning of a first fixed-term employment contract, cannot be repeated more than twice. Extending a fixed-term employment contract is also considered repeating an employment contract. If a period of 3 years has expired from the termination date of a previous fixed-term employment contract, the previous fixed-term employment contract between the same contracting parties is not taken into consideration. That means that it is possible to give a certain employee a fixed-term employment contract again.

The Labour Code allows employers to apply some exceptions when it is possible to use repeatedly fixed-term contracts. These exceptions need to be agreed on in a Collective agreement with a labour union. As a part of a Collective agreement, it is agreed that the exception in starting and extending fixed-time employment contracts will be those employees who carry out projects commitments. These employees can have an employment contract without repetition limit of fixed-term employment.

The policy of extending scientist's employment contracts is influenced by projects and grants, which are opened for a fixed period (from one year to five years). The grant determines the aim of research and the agenda of workers in a certain, scientific group. Therefore, it is not possible to ensure the agenda of all these workers after project closure and to finance them from MU resources, which are public and are a subject of strict rules and control.

Currently, most researchers have a fixed-term employment contract for one (or more) year(s) and the extension of an employment contract is decided by a particular employee's superior (group leader) based on the duration of the project and his/her research group's budget possibilities.

An employee gets the information about extending/non-renewing an employment contract from his/her superior as soon as possible, typically 2 months before the contract ends. In order to minimize instability of employment for employees that have typically fixed-term contracts, CEITEC MU switched from a system of "one-year contracts" that are repeatedly renewed, to contracts agreed on for multiple years



(depending on project duration). That means that in an example three-year project, contracts are closed for three years and not one year with two contract renewals.

The proposal of a new Career System at CEITEC MU (currently being prepared with expected approval in 2018) specifies permanent contracts for the following positions: Senior Group Leader(s), Technical Positions (typically positions located in core facilities). For other positions (PhD Students, Postdocs), fixed-term contracts are typically signed. *Please refer to description of principles 12, 13 and 28 for more information on career system.*

In 2017, CEITEC MU had **92** % scientists with a fixed-term contract and only **8** % with permanent contracts.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Working conditions" principle, as defined in the Charter and Code, through a wide range of questions listed below:

- The personal and work life in my current position are well-balanced (28)
- The social benefits (holiday, pension allowances, food vouchers, etc.) available at CEITEC fit my needs (29)
- I am satisfied with the HR-support in transferring to CEITEC/the Czech Republic (Welcome service)
 (30 only for international staff)
- It was easy for me to find child support (31 only for international staff)
- I do not feel any instability regarding my employment contract and conditions (46)

For all these questions, the histograms and median tests were conducted. **Data analysis indicates** these gaps to be addressed in the Action Plan in these areas:

- Perception of instability regarding employment contract and conditions by both groups
- Work-life balance (only PhD students)

In case of the remaining questions, no gaps were identified.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

There is the gap of perceived employment contract instability in the group of researchers which needs to be addressed by the Action Plan. Even though there are external factors influencing this area (such as project funding), CEITEC MU should consider all available measures to minimize such instability. The percentage of employees with a permanent contract should be increased (esp. in case of staff scientists and technical staff).

Relevant norms, legislation, guidelines:

Act No. 262/2006 Coll., Labour Code (par. 39), as amended



- MU Employment Code (Art. 4, par. 2l, Art. 5, par. 1), available at: https://www.muni.cz/en/about-us/official-notice-board/masaryk-university-employment-code
- MU Statutes, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-statutes
- Collective Agreement between MU and University trade union MU Coordinating union committee (Art. 6)
- MU Measure No. 9/2017, Personnel Policy Support Programme for the period 2017-2019

26. Funding and salaries (+/-)

No.	40 principles of C&C	Definition	Keywords
26	Funding and salaries	Employers and/or funders of researchers should ensure that researchers enjoy fair and attractive conditions of funding and/or salaries with adequate and equitable social security provisions (including sickness and parental benefits, pension rights and unemployment benefits) in accordance with existing national legislation and national or sectoral collective bargaining agreements. This must include researchers at all career stages including early-stage researchers, commensurate with their legal status, performance and level of qualifications and/or responsibilities.	 Adequate salaries Equitable social security provisions Sick-days Parental benefits Pension rights

Current status:

The MU wage policy is determined by an Internal Wage Regulations and MU Collective Agreement. There is a new CEITEC MU Director's Measure No. 10/2017 On Evaluation and Rewarding Rules, which regulates conditions for rewarding all CEITEC MU employees.

CEITEC MU has a **benefit system** which contributes to a work-life balance and good work environment. One of the benefits currently established is 30 days of holiday (days off) for non-academic employees and 40 days of holiday (days off) for academic employees (compared to 20 days of holiday as the minimum standard in the Czech Republic, defined in the Labor Code). Since CEITEC MU offers a relatively high number of vacation days, there is no formulized employees demand / need to establish a sick-day benefit. If an employee is sick for a longer period of time, his/her doctor issues him/her a **sick note** covered by Labor Code No. 262/2006. This means that the employee gets a certain amount of his/her wage while he/she is sick (paid from the health insurance paid by employer and employee).

As a part of the institute's work-life balance policy, there is a right to a **family caretaking benefit**, which is based on Labor Code No. 262/2006. A family caretaking benefit takes place in a situation where a child or other family member gets sick (the condition is that he/she lives in the same household as a particular employee). An employee may take care of a family member and get a certain amount of their wage at the same time. Although the length of this benefit is 9 calendar days, there can be a replacement for the eligible person (parents). For an employee living alone (single parent), the support period can be up to 16 days.



Labor Code No. 262/2006 also sets a right for a **parental benefit**. There is a difference between maternity and parental leave. Maternity leave lasts 28 weeks. It starts 6 to 8 weeks before the delivery date and cannot be shorter than 14 weeks. The length of parental leave and its utilization depends on the parents' decision. We try to satisfy every mother/father when it comes to going back to work. It is possible for fathers to take parental leave in the Czech Republic from the date of a child's birth as well.

A new item in Czech legislation is a **Fathers Post-Natal Care**, which allows fathers to have paid leave for one week, which can be taken during the first six weeks from the date of a child's birth.

There are some financial amounts set for **social and health insurance wage deductions** in Czech legislation. A certain part from these deductions is sent for a pension that an employee receives from a state (the Czech Republic). Social and health insurance deduction is mandatory. There is also **pension insurance**, which an employee may pay himself/herself and in the amount that he/she wants. This insurance is voluntary. CEITEC MU contributes to this pension insurance as an employer. This contribution is 2 % from the wage tariff and is included in a Collective Agreement.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Funding and salaries" principle, as defined in the Charter and Code, through questions focused on available social benefits (29), but also focused on the perceived stability of the working conditions (46).

<u>Note</u>: The survey was not focused on adequate salaries, this issue is to be covered by a salary level analysis, including analysis on the gender pay gap.

For all these questions, the histograms and median tests were conducted. **Data analysis indicates** gaps in these areas:

- Social benefits in the PhD student group
- Perception of instability regarding employment contract and conditions by both groups

(These gaps are already included within the principles 24 and 25.)

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

- A gap has been identified in the wage policy, which is not completely anchored and defined.
 The aim is to have a salary range for all positions so the wages the same positions are in a certain scatter and a wage policy is transparent.
- 2. It is also necessary to take a gender aspect into consideration, so we don't have any differences in the same positions within an institution between men and women. This aspect will ensure the mentioned salary range will be set according to the job position. CEITEC MU has never done an analysis of (non)existence of a Gender Pay Gap at the institute. This should be the first step, in order to find the starting point and extent of (if any) the gap.
- 3. We found a gap in **foreigners' insurance**, which is created based on an employment contract. This insurance is valid just for these foreign employees and not for their family members. This has already caused several cases of families (researcher and his/her wife/husband/



child/children) facing health troubles not covered by health insurance and causing huge debts for medical care. Unfortunately, this problem could only be solved by lawmakers, not by employees nor employers.

Relevant norms, legislation, guidelines:

- Act No. 262/2006 Coll., Labour Code (par. 109-144a, 145-150, 191-206, 393a), as amended
- MU Internal Wage Regulations, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-internal-wage-regulations
- MU Employment Code (Art. 4, par. 2i), available at: https://www.muni.cz/en/about-us/official-notice-board/masaryk-university-employment-code
- Collective Agreement between MU and University trade union MU Coordinating union committee (Art. 10)
- MU Directive No. 5/2017, Employee Evaluation
- MU Directive No. 7/2016, MU Rector's Award
- MU Directive No. 7/2013, Rules of Pensions Insurance and Saving
- Rector's Directive No. 4/2008, Classification of Employees into a Wage Levels
- Director's Measure of CEITEC MU No. 10/2017, On Evaluation and Rewarding Rules for CEITEC MU Employees, available at:
 - https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Directors_Measure_CEITEC _MU_10-2017_On_Evaluation_and_Rewarding_Rules.pdf?lang=en
- Director's Measure of CEITEC MU No. 4/2017, CEITEC MU Awards, available at:
 https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Directors_Measure_CEITEC
 MU_04-2017_Awards.pdf?lang=en
- Director's Measure of CEITEC MU No. 4/2015, Methodology Bonus Contribution to the Research Groups of CEITEC MU for Their Scientific Excellence, available at: https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Directors_Measure_04-2015_Bonus_system_EN.pdf?lang=en



27. Gender balance (+/-)

No.	40 principles of C&C	Definition	Keywords
27	Gender balance	Employers and/or funders should aim for a representative gender balance at all levels of staff, including supervisory and managerial levels. This should be achieved on the basis of an equal opportunity policy during recruitment and at the subsequent career stages without, however, taking precedence over quality and competence criteria. To ensure equal treatment, selection and evaluation committees should have an adequate gender balance.	 Gender equality Gender balance Leaky pipeline Equal opportunity policy Recruitment rules Career system Training of evaluation committees Gender equality plan

Current status:

From its establishment, CEITEC MU has actively promoted equal opportunities, gender balance, diversity and supported women in science. Both the CEITEC Code of Ethics (2011) and Common Rules for HR Management (2011) reflect the importance of equal opportunities. Achieving gender equality in science and research is a complex issue that requires a multidisciplinary and integrated approach. It is necessary to focus on (sub)conscious prejudices based on gender, the work environment, management and decision-making positions, stereotypes relating to male and female scientists and science in general, as well as scientific content, research priorities, etc.

With the aim of moving from a philosophical level to real CEITEC improvements on gender balance and equal opportunities, based on an equal opportunities audit in 2012, CEITEC implemented the "Work-life balance" project during the years 2012-2015 (1st April 2012 – 31st March 2015). The main focuses of the project were gender mainstreaming, information services, support for flexible working conditions, and training oriented on gender issues.

CEITEC MU further continued in its activities and applied for the LIBRA Project (H2020-GERI) in 2014 (project implementation started in October 2015) to increase the representation of women in science and their participation in management positions. This goal is to be achieved by directly supporting women in science and research, eliminating barriers and biases based on gender and also by means of improving awareness of the gender dimension in research activities. Thus, the LIBRA project contributes to the implementation of the objectives in the European Research Area (ERA) such as supporting career development for women and supporting their involvement in management processes and decision-making in science and research.

As a part of the LIBRA project, CEITEC MU formulated a **Gender Equality Plan** (GEP) that was signed by the Director in November 2016 and includes 41 actions covering all implementation areas:

- 16 actions in the Recruitment area
- 5 actions in the Career Development area



- 11 actions in the Work-Life Balance area, with direct responsibility in one action, dealing with the preparation of a web-based induction module for new hires
- 6 actions in the Sex/Gender in Research area
- 3 actions in the Management area

Among others, we can identify the following activities that were already implemented:

- Modifying data analysis tools to have gender-disaggregated data on all the indicators currently in use for reporting
- Monitoring gender balance at each stage of the recruitment process and for each advertised vacancy
- Providing training on work-life balance awareness for leaders of HR departments and senior scientific staff
- · Conceptualising the web-based induction module on work-life balance for all new staff
- Hosting lectures of seminar series "My Life in Science" highlighting challenges and benefits of maintaining a good WLB
- Providing rooms for breastfeeding/milk pumping/nappy changing
- Improving pregnancy safeguard measures
- Promoting personal return plans to be arranged before leaves
- Participating in the pilot career development program for postdoctoral researchers
- Organise seminars for PhD students and Postdocs about available opportunities in non-academic scientific sectors
- Participation of HR representatives in a workshop on best practice for gender inclusive job announcements and recruitment measures
- Applying job announcement guidelines to prepare gender-inclusive requirement profile templates which will be used for all subsequent job announcements
- Institutional website revision (in collaboration with PR department) to demonstrate diversity-inclusive work environment (e.g. including pictures of both male and female role models in non-traditional roles)
- Developing and presenting at least one "family case" on the institutional website, introducing a family
 of which one parent is working at the institute
- Developing gender inclusive PR materials (e.g. posters, brochures) to present a more diversityinclusive environment

Even though a lot of work has been done and partial improvements made, when looking at current data (see graph 3 below), there is a clear existence of a so called "leaky pipeline" at CEITEC MU, having a higher share of women in rather junior research positions (PhD students, postdocs) and a remarkably lower share of women in group leader positions. Through the existence of the leaky pipeline, it is clear CEITEC MU still needs to improve the implementation of gender equality principles (through implementation of the Gender Equality Plan) and building an excellent working environment supporting diversity at the institute.



■ % MEN ■ % WOMEN 100% 84,36 % 78,05 % 73,25 % 80% 62.55 % 56,49 9 60% 40% 43,51 % 37,45 % 20% 26.75 % 21, % 15,64 % 0% PhD students Junior researchers Lab technicians Senior researchers Group leaders

Graph 3 CEITEC MU Leaky Pipeline (2016)

Gender balance in research is not only about a balance on research positions, but also in formal bodies at the institute (see tab 5). As a first step, CEITEC MU started regularly monitoring/reporting the representation of women in decision-making and advisory bodies at the institute. Such monitoring and reporting allows CEITEC MU to take active and precise steps leading to an increase in women in decision-making and advisory bodies.

Table 7 Women in decision-making and advisory bodies (2017)

Decision-making and advisory	Committee	Women	
bodies of CEITEC MU	members (no.)	no.	%
Management	4	2	50
Director's Board	8	3	37.5
Scientific Board	16	1	6.2

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Gender balance" principle, as defined in the Charter and Code, through a wide range of questions that focused on perceived work-personal life balance (28), gender equality related to the recruitment process (36, 37) and general culture of the institute (being an open, fair and friendly environment) (47).

For all these questions, the histograms and median tests were conducted. Data analysis indicates a gap in the area of work-life balance in the PhD student group⁸. In case of the remaining questions, no gaps were identified.

<u>Note</u>: It is important to say that the question of gender balance should be properly analysed using a quantitative data analysis on the existence of a leaky pipeline and other indicators related to it.

⁸ This gap is already included in principles 24 and 25.



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For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

- 1. There is a clear existence of a so called "leaky pipeline" at CEITEC MU, having a higher share of women in rather junior research positions (PhD students, postdocs) and a remarkably lower share of women in group leader positions.
- 2. There is a **low representation of women in decision-making and advisory bodies** at CEITEC MU (excluding management of the institute with 50:50 share).

Relevant norms, legislation, guidelines:

- Act No. 262/2006 Coll., Labour Code (par. 16, 17), as amended
- MU Directive No. 6/2015, MU Academic and Professional Employee Code of Ethics (Art. 2, par. 3, 4), available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- MU Instruction No. 1/2016, Rules of Procedure of the Equal Opportunity Panel of the MU
- Rector's Directive No. 2/2010, MU Career Code
- CEITEC MU Gender Equality Plan (2016-2019)

28. Career development (-/+)

No.	40 principles of C&C	Definition	Keywords
28	Career development	Employers and/or funders of researchers should draw up, preferably within the framework of their human resources management, a specific career development strategy for researchers in all stages of their career, regardless of their contractual situation, including for researchers on fixed-term contracts. It should include the availability of mentors involved in providing support and guidance for the personal and professional development of researchers, thus motivating them and contributing to reducing any insecurity in their professional future. All researchers should be made familiar with such provisions and arrangements.	 HR management HR strategy Career development strategy Career system Mentoring Career development

Current status:

In 2016, CEITEC MU started several activities with the aim of unifying classification of research positions according to international standards and moving towards having a standard career development system. Firstly, the systemization of job positions was implemented by the Director's Measure No. 4/2016, Rules for Jobs Systemization. A part of the measure is dedicated to characterizing early career researcher positions like PhD student and postdoc. Such a definition was absent before the rules for jobs systemization were approved and a group of employees categorized as "postdocs" was



quite heterogeneous, also including typical "staff scientists" (researchers after PhD that are rather permanent members of the group, e.g. guarantors/holders of specific accreditation).

The Institute is constantly moving forward in the field of defining a career system and researcher's career track. In 2017, preparatory works and discussions on a new career system were launched and are currently ongoing, with expected approval and implementation in 2018. The career system is planned to be approved as an internal regulation. The career system proposal specifies all positions at CEITEC, career track for all positions, requirements on individual types of positions and the research group life cycle. It should also confirm the principle that a research group is formed around a group leader selected on the basis of open selection procedure and is dissolved upon the group leader's departure. Traditionally, in the Czech context, research groups or teams have rather been viewed as permanent units ("department-like"), leading to an inheritance system. It has also been proposed that PhD graduates from MU wouldn't be eligible for hire as postdoctoral researchers without spending at least 3 years elsewhere (although they might be employed as staff scientists).

CEITEC MU has no policy on mentoring. Current practice involves installing the position of the Ombudsperson for PhD candidates, who can partially be considered as a mentor. Another initiative in this area was the decision to "appoint" mentor(s) to all newly hired junior group leaders. This was firstly applied in 2018. A new career system should also include a part focused on career development. *Please refer also to principles 12, 13, 21 and 22 for information on the career system.*

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Career development" principle, as defined in the Charter and Code, through a wide range of questions listed below:

- I am satisfied with the amount of contact with my supervisor (11)
- The guidance/mentoring (on science, publishing, funding opportunities, career opportunities, etc.) of my supervisor is valuable to me (12)
- The career track at CEITEC is clear to me (e.g. regulation of inbreeding, requirements for positions, option to switch to technical career, etc.). I know what my career options at CEITEC are after I finish my PhD/postdoc stay (21)
- What are your future career plans? (50)

For all these questions, the histograms and median tests were conducted. **Data analysis indicates a** gap to be addressed in the Action Plan in this area:

Unclear career track in both groups

In case of remaining questions, no gaps were identified.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

1. **Absent rules for career development (career system)** is one of biggest gaps that have been identified while preparing the Gap Analysis.



2. As perceived unclear career tracks were identified within the gap analysis in the group of researchers, CEITEC MU needs to pay attention to career system development, defining a clear career track for research and technician positions and offering a means of career development, including mentoring. (This is to be addressed by the new Career System as described above.)

Relevant norms, legislation, guidelines:

- Act No. 262/2006 Coll., Labour Code (par. 227-235), as amended
- MU Employment Code (Art. 4, par. 2g), available at: https://www.muni.cz/en/about-us/official-notice-board/masaryk-university-employment-code
- MU Directive No. 8/2017, Grant Agency MU
- MU Directive No. 4/2017, Sabbatical Leave
- Rector's Directive No. 2/2010, MU Career Code (Art. 5, 6, 10, 11)
- Academic Psychodiagnostic Centre MU
- Career Centre MU
- Students' Advisory Services MU

29. Value of mobility (+/-)

No.	40 principles of C&C	Definition	Keywords
29	Value of mobility	Employers and/or funders must recognize the value of geographical, intersectorial, inter- and trans-disciplinary and virtual mobility as well as mobility between the public and private sector as an important means of enhancing scientific knowledge and professional development at any stage of a researcher's career. Consequently, such options should be built into the specific career development strategy and fully value and acknowledge any mobility experience within their career progression/appraisal system. This also requires that the necessary administrative instruments be put in place to allow the portability of both grants and social security provisions, in accordance with national legislation.	 Mobility Intersectorial mobility Inter/Trans-disciplinarity mobility Mobility between the public and private sector Appraisal system and mobility Grants supporting mobility Social security provisions

Current status:

CEITEC MU management is aware of the importance and value researcher mobility. In the Strategy 2020, CEITEC MU aims to "increase mobility and internationalization of CEITEC MU staff".

PhD students at CEITEC PhD school in the Life Sciences programme, have a duty to complete at least one internship during their doctoral study. Any type of internship (intersectoral, trans-disciplinary, between public and private sectors) that fits the purpose of their doctoral topic is supported. IT is highly recommended to realize the internship abroad.



PhD students are offered mobility opportunities via mobility projects (e.g. Twinnings), schemes (e.g. ERASMUS+) and scholarships.

Within the EU-LIFE alliance, a Visiting scientist programme is available. This programme is an opportunity for PhD students, postdocs, technicians, staff scientists and Pl's to visit another EU-LIFE institute to participate in several types of training activities, plug in each other's core facilities, visit colleagues to learn a specific method and / or technique, and start scientific collaborations. CEITEC MU supports this programme from its central budget (budget programme supporting mobility).

The costs of mobility are usually covered from the Research Group's budget (resp. from the supervisor's budget). There are also institutional (project related) sources for supporting mobility, including a centralized budget programme "Visiting Programme" aiming to:

- 1. attract internationally recognized researchers ("visiting professors") and enable transfer of know-how and initiate/develop joint cooperation,
- 2. enable research stays for PhD students (from other institutions) in order to motivate/attract them for a possible postdoc position at CEITEC MU.

In 2017, there was budget allocation of 500 000 CZK (app. 18 500 EUR) – however the spending was only 190 000 CZK (38 % of the allocated budget). Therefore, we need to analyse what are the causes of the rather lower spending and react adequately.

In present practice, the term "scientific internship" covers a few different types of intern stays in the workplaces of CEITEC MU - most often internships within the ERASMUS+ project, exchange visits, student stays from another universities or persons from companies cooperating on a particular project, high school students during the implementation of the Students' Professional Activities (SPA / SOČ), prospective MU students, etc. The majority of interns are from abroad. An Agreement on Scientific Internship is signed with a person who does not have an employment relationship with CEITEC MU or is not a student of Masaryk University. Systematic evidence of internships, including small-scale internships, was introduced in the course of 2017. During 2016, the implementation of 29 internships (ranging from a few days to several months) was initiated, during 2017 – 32 internships.

Researchers' assessment:

In the CEITEC MU researchers' group, we have tried to identify the researchers' view on complying with the "Value of mobility" principle, as defined in the Charter and Code, through a wide range of questions focused on having opportunities for mobility (17), being encouraged by supervisor to spend some time abroad (or in different lab or company) (18) and future mobility plans (19).

For all these questions, the histograms and median tests were conducted. **Data analysis indicates gap** in these areas:

- Relatively high number of researchers having no opportunity to spend some time abroad / in another lab / company
- Relatively big group of researchers not being encouraged for mobility by their supervisor
- Existence of some institutional and personal obstacles for mobility

In the remaining questions, no gaps were identified.



For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

- A gap in the area of mobility is definitely in having no direct link between an evaluation system (on the level of individuals, but also groups) and existence/absence of mobility experience.
- 2. As the survey results show, there is a gap in the relatively high number of existing researchers having no opportunity to spend some time abroad/in another lab/company (personal assessment without specifying the reason for such a statement) and a relatively big group of researchers not being encouraged by their supervisor for mobility.
- 3. Institutional and personal **obstacles for mobility**, as indicated by PhD students and postdocs, need to be further analysed and addressed.

Relevant norms, legislation, guidelines:

- MU Directive No. 4/2017, Sabbatical Leave
- MU Directive No. 8/2011, Rules for the Recognition of Credit from Foreign Study and Occupational Stays by Students of Masaryk University

30. Access to career advice (+/-)

No.	40 principles of C&C	Definition	Keywords
30	Access to career advice	Employers and/or funders should ensure that career advice and job placement assistance, either in the institutions concerned, or through collaboration with other structures, is offered to researchers at all stages of their careers, regardless of their contractual situation.	Career adviceJob placement assistance

Current status:

At the university level, Masaryk University offers career advice consultations through **the Career Centre at MU**. The Centre is an official recruitment and consulting agency for Masaryk University. The primary target groups are BA and MA students, but recently new services for MU employees were implemented into the catalogue of services:

- 1. Training of employees (focused on development of skills, competencies and know-how of employees)
- 2. Development centre
- 3. Individual / Team coaching
- 4. Development psychological testing
- 5. Teambuilding



Activities relevant directly for researchers as provided by the Career Centre of MU:

- In 2017, an event called "Industry ShowCase" was organized for PhD students, offering them
 information on future career options. The event consisted of presentations of selected MU
 absolvents in the area of applied research, basic research and business. In the second part of the
 event, a panel discussion and informal part was organized.
- Summer school for presentation skills for MU employees.

In 2017, CEITEC MU cooperated on some pilot projects in cooperation with the MU Career Centre, but focused on managing the institute, not researchers. Based on very positive feedback, CEITEC MU will review the possibility to extend the cooperation for the target group of researchers.

At the institute level, even though there is no central conception/system on career advice established, individual measures and activities are implemented:

- CEITEC PhD School students have access to career advice from their supervisors, but also specific career consultations provided by Strategy and Science Department and Grant Office Department.
- For the early stage researchers an event called "Meeting with..." is organised twice per year at CEITEC MU. The main idea of this meeting is to present young researchers the other possibilities in their career paths than classical academic one. Usually, the successful people from business with a PhD degree are invited to introduce their professional career and discuss the advantage and disadvantage of jobs in industry, business, etc. In 2018, the scope of the event will be extended for successful scientists from academia, sharing their experience with building career but also with maintaining a good work-life balance.
- In 2017, CEITEC MU hosted EURAXESS "Science Career Fair" focused on young researchers, offering them presentation of potential employers both from academia and industry.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Access to career advice" principle, as defined in the Charter and Code, through questions related to awareness on new job opportunities (22) and questions focused on relationships with supervisor (please refer to principles 36-40 for more information).

For all these questions, the histograms and median tests were conducted. Data analysis indicates **low** level of awareness on new job opportunities inside and outside CEITEC.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

- Although the services by the Career Centre at MU for employees were launched in 2017, there
 is still a gap in missing conception of cooperation between CEITEC MU and the Career
 Centre of MU on access to career advice for researchers (at all stages of career).
- For the future, all above mentioned activities should be unified into one system covering career development, including career system, for researchers at all levels from PhD student to independent group leader. The system should combine career advice provided by



HR professionals (mainly the Career Centre of MU) and the employees' superiors (group leader for group members, deputy director for science for group leaders, senior group leaders for junior group leaders). (This is to be addressed by the new Career System as described above and its implementation plan.)

Relevant norms, legislation, guidelines:

Rector's Directive No. 2/2010, MU Career Code

31. Intellectual Property Rights (+/-)

No.	40 principles of C&C	Definition	Keywords
31	Intellectual Property Rights	Employers and/or funders should ensure that researchers at all career stages reap the benefits of the exploitation (if any) of their R&D results through legal protection and, in particular, through appropriate protection of Intellectual Property Rights, including copyrights. Policies and practices should specify what rights belong to researchers and/or, where applicable, to their employers or other parties, including external commercial or industrial organisations, as possibly provided for under specific collaboration agreements or other types of agreement.	• IP • IP rules at CEITEC MU / MU

Current status:

Technology Transfer Office at MU (also: TTO) is available for all the scientists at MU. TTO provides all the services/trainings and information brochures regarding IPR and related topics including.

See principle 7 and 8 for detailed information.

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Intellectual property rights" principle, as defined in the Charter and Code, through questions focused on data and confidentiality protection (23) and copyrights policies (25).

For all these questions, the histograms and median tests were conducted, showing **no major gaps to be identified**.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

See principles 5, 7 and 8.



Relevant norms, legislation, guidelines:

- MU Directive No. 10/2013, Intellectual Property at MU
- MU Directive No. 6/2013, on Research Data
- Rector's Measure No. 9/2013, to Ensure the Sustainability of Outputs in the Field of Intellectual Property
- MU Instruction No. 6/2017, Valuation and Evidence of Intellectual Property
- Director's Measure of CEITEC MU No. 01/2012, to Calculation of the Price of Commercial Orders, available at:
 - https://is.muni.cz/do/1471/uredni deska/opatreni reditele/70921299/Measure No. 1 2012.pdf
- Director's Measure of TTO MU No. 2/2014, to Support the Commercialization of Results Proof of Concept Phase

32. Co-authorship (+)

No.	40 principles of C&C	Definition	Keywords
32	Co- authorship	Co-authorship should be viewed positively by institutions when evaluating staff, as evidence of a constructive approach to the conduct of research. Employers and/or funders should therefore develop strategies, practices and procedures to provide researchers, including those at the beginning of their research careers, with necessary framework conditions so that they can enjoy the right to be recognised and listed and/or quoted, in the context of their actual contributions, as co-authors of papers, patents, etc., or to publish their own research results independently from their supervisor(s).	Co-authorshipEvaluation system

Current status:

Co-authorship is positively viewed by CEITEC MU. Co-authorship is evaluated during the admission procedure for all stages of researchers. Also, while evaluating research groups, all the publications including those with co-authorship are evaluated. There is a good practice of adding the early stage researchers as co-authors of scientific publications.

However, there is a case where a national grant provider requires so called "unique publications" as obligatory indicators, going directly against the principle of co-authorship. "Unique publications" are those publications whose authors are 100% from one (supported) institute. This case has been extensively discussed with the Ministry of Education, Youth and Sports of the Czech Republic and contact persons of the "National Sustainability Programme", however arguments raised not only by CEITEC MU, but also by other universities and research institutes from the Czech Republic, were not accepted. Therefore, CEITEC MU has to produce 83 unique publications in the period of 2016-2020.



Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Co-authorship" principle, as defined in the Charter and Code, through questions focused on being aware of the copyright and the publication policies (25) but also on research environment that supports networking and co-operation (3).

For all these questions, the histograms and median tests were conducted, showing **no major gaps to be identified**.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

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- MU Directive No. 6/2015, MU Academic and Professional Employee Code of Ethics (Art. 4, 7, par. 2a), available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- MU Directive No. 5/2015, Research Ethics at MU
- MU Directive No. 10/2013, Intellectual Property at MU
- MU Directive No. 6/2013, on Research Data
- MU Instruction No. 6/2017, Valuation and Evidence of Intellectual Property



33. **Teaching (+)**

No.	40 principles of C&C	Definition	Keywords
33	Teaching	Teaching is an essential means for the structuring and dissemination of knowledge and should therefore be considered a valuable option within the researchers' career paths. However, teaching responsibilities should not be excessive and should not prevent researchers, particularly at the beginning of their careers, from carrying out their research activities. Employers and/or funders should ensure that teaching duties are adequately remunerated and taken into account in the evaluation/appraisal systems, and that time devoted by senior members of staff to the training of early stage researchers should be counted as part of their teaching commitment. Suitable training should be provided for teaching and coaching activities as part of the professional development of researchers.	 Teaching Career track – teaching Research and teaching career Remuneration for teaching Training for teachers

Current status:

CEITEC MU is a university institute without its own study program at any level from BC, MA to PhD. CEITEC PhD School is accredited at the Faculty of Science at Masaryk University. For this reason, CEITEC MU also does not employ any persons in "teaching position".

Beside double affiliation (having two work-loads, one at CEITEC MU on research and one at the faculty on teaching), there are also cases when a CEITEC MU researcher is 100 % at CEITEC MU and participates in teaching at the CEITEC MU PhD School (within his/her workload at CEITEC MU). The benefit for researchers participating in courses is an opportunity to receive an academic title (Assoc. Prof., Professor) related to the number of hours spent teaching, number of courses and number of students (inter alia).

In general, the systemization of job positions supports researchers to be fully at CEITEC MU and to focus on research.

Researchers' assessment:

The principle "Teaching" was not directly covered by the PhD and Postdoc Survey 2018".

Gap(s) identified:

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Relevant norms, legislation, guidelines:

MU Study and Examination Regulations, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-study-and-examination-regulations



- MU Lifelong Learning Regulations, available at: https://www.muni.cz/en/about-us/official-notice-board/rad-celozivotniho-vzdelavani-mu
- MU Directive No. 6/2015, MU Academic and Professional Employee Code of Ethics (Art. 3, 5, 9), available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- Rector's Directive No. 9/2014, on the Studies of Persons with Special Needs at MU
- Rector's Directive No. 8/2014, on Ensuring Accessibility of MU for Persons with Disabilities
- MU Scholarship and Bursary Regulations, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-scholarship-and-bursary-regulations

34. Complains/appeals (+/-)

No.	40 principles of C&C	Definition	Keywords
34	Complains/ appeals	Employers and/or funders of researchers should establish, in compliance with national rules and regulations, appropriate procedures, possibly in the form of an impartial (ombudsman-type) person to deal with complaints/appeals of researchers, including those concerning conflicts between supervisor(s) and early-stage researchers. Such procedures should provide all research staff with confidential and informal assistance in resolving work-related conflicts, disputes and grievances, with the aim of promoting fair and equitable treatment within the institution and improving the overall quality of the working environment.	 Ombudsman Complaints/appeals Conflict between supervisor and early-stage researcher Work-related conflicts Equal treatment Quality of working environment

Current status:

The submission of complaints at Masaryk University is governed by Rector's Directive No. 3/2008, on the Processing and Registration of Complaints, Motions and Petitions at Masaryk University. In accordance with this directive, a complaint constitutes a submission whereby individuals turn to MU or its constituent parts for protection of their personal or legally stipulated rights. Complaints also include submissions made by affected persons in accordance with section 175 of Act No. 500/2004 Coll., the Administrative Procedure Code.

The complaints are best addressed to senior university employees, authorities or the immediate superiors of the persons or authorities against whom the complaint is being lodged. The complaint is resolved in 60 days from the date of a flawless submission delivery. By the end of the period, the complainant shall be informed of the final disposition of his/her complaint.

Anonymous submissions will be processed only when their content suggests the occurrence of serious misconduct or a breach of the law. Confusing complaints which fail to communicate the matter at hand will not be processed.



A formal system is therefore in place, and at the CEITEC MU level there has not been any case recorded of a complaint nor motion submitted, however there are some indications that the system is not well-known and there is a gap in the form of a lack of awareness (see Researchers' assessment).

At the level of CEITEC MU, there is a culture of an "open door policy" built within the Institute, repeatedly formulated and communicated by the Director and other members of the Management towards all group leaders and problems they face. For PhD students, there is a position of PhD Ombudsperson, helping to solve difficult situations relating to the PhD and his/her supervisor (see principle 40 Supervision for detailed information on PhD Ombudsman).

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Complains/Appeals" principle, as defined in the Charter and Code, through the questions "In case of any complaint/appeal on interpersonal relations (incl. the one with my supervisor), I do not know how to proceed and solve it." (Note: Some questions/statements of the Survey were formulated in negative form.)

For all these questions, the histograms and median tests were conducted showing a gap in the PhD student group (having a relatively large share of employees that do not know how to solve their complaints or appeals).

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

There are some indications (also shown by the PhD and Postdocs Survey) that the formal system on complaints (even being well-defined) is not well-known and there is a gap in the form of lack of awareness. CEITEC MU needs to transform the existing formal complaints system structure into a more vital and functioning system that is much closer to people, their needs and is well-known.

- MU Employment Code, available at: https://www.muni.cz/en/about-us/official-notice-board/masaryk-university-employment-code
- Rector's Directive No. 3/2008, on the Processing and Registration of Complaints, Motions and Petitions at MU
- Organizational Rules of MU



35. Participation in decision-making bodies (+/-)

No.	40 principles of C&C	Definition	Keywords
35	Participation in decision- making bodies	Employers and/or funders of researchers should recognize it as wholly legitimate, and indeed desirable, that researchers be represented in the relevant information, consultation and decision-making bodies of the institutions for which they work, so as to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution.	 Participation in decision-making bodies Consultation

Current status:

According to Article 4 Par. 1 of the Rules of Organization: "CEITEC MU is managed by means of direct line management system, applying the principles of methodological management, participation and consultations."

Researchers are involved in the consultations and decision-making of the institute through several means. The structure of the Management, with the participation of researchers as evolving from the Rules of the Organization, but also, there is a constantly cultivated culture of participation and good awareness on current issues by the management.

The Institute's internal structure is managed by the Director and divided into scientific centres (i.e. research centres, research groups and other sites such as core facilities), an administrative section and Director's Office. See Annex 4 Structure of Organization of CEITEC MU.

Researchers are actively participating in the Scientific Board (typically ERC holders are invited into the Scientific Board), Director's Board (Heads of Research Centres, Chairs of the Committees and Senators from CEITEC MU in the MU Academic Senate), Committees and other advisory bodies (there is at least one representative of each Research Centre in each committee).

Furthermore, there are **regular group leaders' meetings** organized and moderated by the Director in order to ensure a high group leader awareness on current developments in the Institute's management and operation. There are typically three to four group leaders' meetings organized during a year. There is a culture of an "**open door policy**" built within the Institute, repeatedly formulated and communicated by the Director and other members of the Management.

Particularly in the Institute's Committees and regular meetings, the group leaders have an opportunity to participate in formulating major policies at the Institute (i.e. IT concept, space allocation rules, finance management, preparation of the Strategic Plan, Career System).

The Strategical Plan of CEITEC MU up to 2020 supports the principles of participation and consultations within its strategic priority 4, Sustainable and efficient institute with good governance. Specifically, in goal 4.3 Strengthen one CEITEC identity across research centres, there are four specific activities defined and implemented:



- Increase involvement of group leaders and other key constituencies into governance of the institute
- Hold regular research group leaders' meetings
- Develop internal networking through common events (including events available to family members)
- Enable a platform for junior researchers' representation

On a whole university level, academic employees are entitled to be a candidate **to the Senate of Masaryk University** and participate in decision-making processes connected with the management of the university as whole. An area of academic rights and participation on university management are regulated by national legislation (Law No. 111/1998 the Higher Education Act).

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Participation in decision-making bodies" principle, as defined in the Charter and Code, through a wide range of questions on internal communication (9), but mainly of satisfaction with the way researchers can represent their group interests (as PhD students / as postdocs) within CEITEC (40).

For all these questions, the histograms and median tests were conducted. Data analysis indicates a gap being present in the PhD student and postdoc group, related to their satisfaction level regarding their group interests (large group of people "without opinion").

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

- There is a low representation of rather junior researchers PhD students and postdocs (rather in area of consultations). There are currently discussions on how to enable PhD students and postdocs to participate and to represent their group interests on a management level at the institute. In 2016, Director's Board discussed a "Postdoc Platform", that should be further developed and implemented.
- 2. Group leaders need to be further educated on the role of group leader in the management of the Institute (low awareness and personal involvement/dedication of some group leaders to serve the whole institute and not just his/her group) this point is closely connected with principle no. 37 (Supervision and managerial duties).

- Act No. 111/1998 Coll., the Higher Education Act
- CEITEC MU Strategic Plan up to 2020 (see Annex 1)
- Rules of Organization of CEITEC MU (wording effective as of 15 February 2016), available at:
 https://is.muni.cz/do/1471/uredni_deska/organizacni_rad/Rules_of_Organisation_CEITEC_MU_20
 16-02-11_FINAL_EN.pdf



AREA 4: TRAINING

36. Relation with supervisors (+/-)

37. Supervision and managerial duties (+/-)

No.	40 principles of C&C	Definition	Keywords
36	Relation with supervisors	Researchers in their training phase should establish a structured and regular relationship with their supervisor(s) and faculty/departmental representative(s) so as to take full advantage of their relationship with them. This includes keeping records of all work progress and research findings, obtaining feedback by means of reports and seminars, applying such feedback and working in accordance with agreed schedules, milestones, deliverables and/or research outputs.	 Supervision Records of work progress and research findings Feedback Planning (schedules, milestones, deliverables, outputs)
37	Supervision and managerial duties	Senior researchers should devote particular attention to their multi-faceted role as supervisors, mentors, career advisors, leaders, project coordinators, managers or science communicators. They should perform these tasks to the highest professional standards. With regard to their role as supervisors or mentors of researchers, senior researchers should build up a constructive and positive relationship with the early-stage researchers, in order to set the conditions for efficient transfer of knowledge and for the further successful development of the researchers' careers.	 Supervision Managerial duties of GL Science communication Leadership Mentoring Career advisors

Current status:

Managerial duties of senior research staff (specifically research group leaders and heads of other research worksites) are specified by the Rules of Organization of CEITEC MU.

General tasks for executive employees at all management levels (including group leaders, heads of other research worksites) include (Article 6 Par. 2 of the Rules of Organization):

- a) managing the work of employees within the scope of their management powers and take care of the employees' expert and professional development;
- b) taking care of the conceptual development of the relevant worksite's activities in line with the Institute's strategy plan and promoting cooperation with other sites at the given level;
- c) ensuring responsible, lawful, purposeful and efficient use of financial resources and assets;
- d) ensuring compliance with applicable legal regulations and internal regulations in the course of the relevant worksite's activities.

The research group leader (Article 9 Par. 2 of the Rules of Organization):



- a) presides over the research group and is responsible for the overall management of the research group's activities in line with the strategy plan of the Institute, the concept of the research group focus, and activities approved upon its establishment and the approved research group budget;
- b) prepares the draft budget of the research group;
- c) defines the criteria for tenders for the research group employees in line with the internal regulations and the personnel system management;
- d) proposes the establishment, changes and termination of employment of the employees allocated to the research group, as well as their remuneration.

Further details of group leaders' duties in finance management, project management, personnel policy, safety rules, etc. are specified in individual internal norms of the Institute or the university.

The Strategical Plan of CEITEC MU up to 2020 includes the principle of Supervision and managerial duties of senior research staff (group leaders) in its strategic priorities 2, Leadership in science, and 4, Sustainable and efficient institute with good governance. Specifically, in goals 2.1, Attract and help scientific leaders grow, and 4.3, Strengthen one CEITEC identity across research centres, these specific activities are defined and implemented:

- Increase group leaders and other key constituencies' involvement into governing the institute
- Hold regular research group leaders' meetings
- Implement a career scheme for researchers
- Implement a postdoctoral training programme

Group leaders' responsibilities and duties are formulated in a wide spectrum of internal regulations, but some duties are still not formalized. This causes a **lower group leader awareness about their role as managers**. Historically (period before approval of the Strategic Plan 2020), group leaders were not viewed as managers and supervisors managing a team of people, and that should develop their people and assess their performance. On the other hand, the institute did not provide training for supervisors in order to enable their growth in supervising a team so far (at least in a systematic way).

While assessing the supervision system at CEITEC MU, it seems to be logical to distinguish between PhD students and postdocs (being supervised by group leaders). As a part of CEITEC PhD School, students' supervision rules and standards are defined (see principle 40 for detailed information on supervision within the CEITEC PhD School). There is no system established to ensure proper postdoc supervision (by their superior, group leader).

The employee evaluation takes place at least once a year and shall be carried out in paper form (based on Director's Measure No. 10/2017). The evaluation interview shall be carried out by the line manager directly superior to the evaluated employee. However, there is a clear gap in a missing control/evidence system that is not in place, including the motivation factor (or penalty system) for all heads of workplaces.

Science communication skills have been developed at CEITEC (CEITEC MU) since its beginning (2011). The importance of science communication was perceived by CEITEC management and is strongly supported by the CEITEC MU Director. As a part of implementation of the Strategy 2020, CEITEC MU actively works with group leaders – both on an individual and group level. E.g. in December 2017, CEITEC MU organized training in science presentation skills for a selected group (12) of group leaders and core facility leaders and a group of 4 group leaders will go through deep individual training



specifically designed for the purpose of CEITEC MU in I.Q. 2018. For more information on science communication, please refer to principle "Public engagement".

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Relation with supervisors" and "Supervision and managerial duties" principles, as defined in the Charter and Code, through a wide range of questions focused on the amount of contact with supervisor (11), assessment of guidance and mentoring as provided by supervisor (12), amount of written/oral performance evaluations (13, 14), perceived role of supervisor during CEITEC MU on-boarding (15) and how clear supervisor's expectations are (16).

For all these questions, the histograms and median tests were conducted. **Data analysis indicates** gaps in the area of performance evaluations, identifying many respondents having no evaluation interviews with their supervisor, the prevalence of oral evaluations, and the absence of clear expectations from the supervisor.

In case of remaining questions, no gaps were identified.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

- 1. A gap is clearly identified in **supervising postdocs**. There is no system established to ensure proper supervision of postdocs (by their superior, group leader).
- 2. There is a gap in **missing control/evidence system of employee' annual evaluation interview**, including motivation factor (or penalty system) for all heads of workplaces.
- Regarding amount of contact between supervisor and supervised researcher, our data suggest that there is no a gap, however a gap could be identified while talking about quality, structure and comparable system across the institute (groups).

- Act No. 262/2006 Coll., Labour Code (par. 227-235), as amended
- Act No. 111/1998 Coll., the Higher Education Act, as amended
- Act No. 1/1993 Sb., the Constitution of the Czech Republic, as amended
- MU Employment Code, available at: https://www.muni.cz/en/about-us/official-notice-board/masaryk-university-employment-code
- MU Statutes, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-statutes
- Masaryk University Degree Programme Quality Approval, Management and Evaluation Regulations, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-degree-programme-quality-approval-management-and-evaluation-regulations
- MU Educational, Creative and Associated Activities Quality Assurance and Internal Evaluation
 System Guidelines, available at: https://www.muni.cz/en/about-us/official-notice-board/pravidla-systemu-zajistovani-a-vnitrniho-hodnoceni-kvality-vzdelavaci-tvurci-a-s-nimi-souvisejicich-cinnosti-na-mu



- MU Directive No. 6/2016, Management of Projects
- Rector's Directive No. 2/2010, MU Career Code
- CEITEC MU Strategic Plan up to 2020 (see Annex 1)
- Rules of Organization of CEITEC MU (wording effective as of 15 February 2016), available at:
 https://is.muni.cz/do/1471/uredni_deska/organizacni_rad/Rules_of_Organisation_CEITEC_MU_20

 16-02-11 FINAL EN.pdf
- Director's Measure of CEITEC MU No. 10/2017, On Evaluation and Rewarding Rules for CEITEC MU Employees, available at:
 https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Directors_Measure_CEITEC

 MU 10-2017 On Evaluation and Rewarding Rules.pdf
- Director's Measure of CEITEC MU No. 6/2016, Internal Budget Rules of CEITEC MU, available at:
 https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Directors_Measure_CEITEC
 MU_06-2016_Internal_Budget_Rules_As_Amended_2017-11-15.pdf
- Director's Measure of CEITEC MU No. 4/2016, Rules for Jobs Systemization, available at:
 https://is.muni.cz/do/1471/uredni_deska/opatreni_reditele/70921299/Measure_04_2016_Rules_for_Jobs_Systemisation.pdf
- and other internal norms specifying responsibility of the heads of workplaces (including research group leaders and core facility heads)



38. Continuing Professional Development (+/-)

39. Access to Research Training and Continuous Development (+/-)

No.	40 principles of C&C	Definition	Keywords
38	Continuing Professional Development	Researchers at all career stages should seek to continually improve themselves by regularly updating and expanding their skills and competencies. This may be achieved by a variety of means including, but not restricted to, formal training, workshops, conferences and elearning.	 Professional development Skills and competencies
39	Access to research training and continuous development	Employers and/or funders should ensure that all researchers at any stage of their career, regardless of their contractual situation, are given the opportunity for professional development and for improving their employability through access to measures for the continuing development of skills and competencies. Such measures should be regularly assessed for their accessibility, take up and effectiveness in improving competencies, skills and employability.	 Professional development Skills and competencies Employability

Current status:

At CEITEC MU, the institute's culture supports researchers to improve themselves by updating and expanding their skills and competencies. However, there is no formal plan nor conception. Currently available courses and trainings are offered rather on a project (ad hoc) basis.

It is obvious that researchers in different positions from PhD to group leaders need different types of courses and trainings. It is important to offer trainings not only to junior researchers (PhD students, postdocs) but also to senior researchers – this target group needs more managerial skill training, data management know-how, how to be a good mentor, financial skills, etc. in order to be a good manager of a research group.

From February 2018, there is a manager for research and development responsible for preparing and conceptualizing research trainings and other courses for CEITEC MU researchers (at all levels, but mainly for PhD students and postdocs).

Currently, CEITEC MU researchers can benefit from these activities:

- CEITEC MU, as a partner in EU-LIFE consortium, can benefit from sharing information and privileged access to research trainings, conferences and other events organized by EU-LIFE partners;
- Courses offered as a part of CEITEC PhD School (both research topics and soft skills);
- MU central courses (e.g. Grants Week);
- Summer/Winter Schools are regularly organized at CEITEC MU;



- Trainings/Courses/Events organized as a part of individual projects (e.g. Meeting with... junior researchers meet representative from business or other research institutes, sharing their experiences; Training of presentation skills adapted to researchers' needs intensive one-to-one training with professional; etc.);
- Research internships (both short and long terms) are organized as a part of projects such as Twinnings (currently three Twinning projects are implemented at CEITEC MU).

Researchers' assessment:

In the CEITEC MU researchers' group, we tried to identify the researchers' view on complying with the "Continuing professional development" and "Access to research training and continuous development" principles, as defined in the Charter and Code, through a question assessing offered courses and workshops from the perspective of content, frequency and quality (20).

For this question, the histogram and median test was conducted. **Data analysis indicates a gap in the postdoc group that needs to be addressed.** In the PhD student group, no gap was identified.

For detailed information and background data, including the design of the PhD and Postdoc Survey 2018 and all histograms, please refer to Annex 2 "PhD and Postdoc Survey 2018 Analysis".

Gap(s) identified:

- In general, we can say that there are enough opportunities for research trainings and professional development. However, CEITEC MU is missing a system/conception of trainings that would put all parts together and would benefit from synergizing the system.
 The conception should address all stages of a research career and be tailored to specific needs for each position from PhD student to group leader.
- 2. Postdocs are a specific group and should be offered tailored trainings.
- On a general note, there is no system of supervisor training on "how to be good supervisor". This issue needs to be addressed.

- MU Lifelong Learning Regulations, available at: https://www.muni.cz/en/about-us/official-notice-board/rad-celozivotniho-vzdelavani-mu
- MU Employment Code, available at: https://www.muni.cz/en/about-us/official-notice-board/masaryk-university-employment-code
- Rector's Directive No. 2/2010, MU Career Code



40. Supervision (+/-)

No.	40 principles of C&C	Definition	Keywords
40	Supervision	Employers and/or funders should ensure that a person is clearly identified to whom early-stage researchers can refer for the performance of their professional duties and should inform the researchers accordingly. Such arrangements should clearly define that the proposed supervisors are sufficiently expert in supervising research, have the time, knowledge, experience, expertise and commitment to be able to offer the research trainee appropriate support and provide for the necessary progress and review procedures, as well as the necessary feedback mechanisms.	 Supervision Quality supervisor Training for supervisors Feedback mechanisms

Current status:

For PhD students, the role of a supervisor is defined as a part of CEITEC PhD School. A person (typically at position of a group leader, but can be also professor, associate professor, independent researcher) becomes a supervisor based on her/his application (description of topic) and assessment and approval by the dean based on the doctoral board proposal or at his/her own discretion, subject to discussion with the chairman of the doctoral board. In justified cases, the dean may, with the approval of the Scientific Board of the faculty, appoint the supervisor for a particular student and a specific thesis topic for an academic employee who does not hold the title of professor or associate professor, but holds at least the title Ph.D., Csc., Dr. or an equivalent title.

The doctoral board may decide to replace a supervisor if it finds out any facts (including facts found upon the student's initiative) preventing the existing supervisor from properly leading the given student. The supervisor may resign from the position of a student's supervisor if any circumstances arise that prevent the supervisor from properly leading the given student. In the case of any supervisor change, the doctoral board shall promptly appoint a new supervisor and inform all the replaced supervisor's students and people who may be affected by the change. The doctoral board shall decide, so as to minimize any negative impact of the supervisor's replacement on the student. Until a new supervisor is appointed, the student shall continue to be supervised by the former supervisor. Further information regarding the obligations of supervisors are set out in the Rules of Study and Examinations of MU (Part 4, Art. 28).

The number of students per supervisor is not defined, but good foreign practice tends to accept approximately 5 students per supervisor. Ideally, one new student each year. At the CEITEC PhD School, the number of students per supervisor is limited by the amount of financial resources, due to the obligation to pay out scholarships for a period of 4 years by the supervisor.

As a part of the Life Sciences study program (a part of CEITEC PhD School), the ombudsman position has been established, the function of which has proven beneficial at a number of foreign universities. At CEITEC, this position has also been receiving positive feedback.



The ombudsman is an independent party providing informal and confidential help and assistance to students in resolving various problems associated with their study. He/she also acts as an impartial mediator in the case of difficult issues and conflicts between students and their supervisors.

During the existence of the ombudsman function (2016-2017), there has been one case of a conflict between a supervisor and a student addressed, where the final solution was to replace the supervisor. However, this case was not raised by the PhD student (based on his/her complaints on quality of supervision) but by a supervisor that was not satisfied with the mutual cooperation and communication.

The ombudsman meets on a regular basis, twice a year (at the start of each semester), with all the students for whom he/she is responsible and subsequently meets individual students as required in particular cases.

Researchers' assessment:

Please refer to principles "Relation with supervisors", "Supervision and managerial duties".

Gap(s) identified:

- 1. A gap was identified in **supervising postdocs**. There is no system established to ensure good supervision of postdocs (by their superior, group leader).
- 2. Generally, there is **no system of training supervisors on** "how to be good supervisor". This issue needs to be addressed. (Already stated as a gap in principles 38 and 39.)

- MU Degree Programme Quality Approval, Management and Evaluation Regulations, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-degree-programme-quality-approval-management-and-evaluation-regulations
- MU Educational, Creative and Associated Activities Quality Assurance and Internal Evaluation
 System Guidelines, available at https://www.muni.cz/en/about-us/official-notice-board/pravidla-systemu-zajistovani-a-vnitrniho-hodnoceni-kvality-vzdelavaci-tvurci-a-s-nimi-souvisejicich-cinnosti-na-mu
- MU Employment Code, available at https://www.muni.cz/en/about-us/official-notice-board/masaryk-university-employment-code
- MU Lifelong Learning Regulations, available at: https://www.muni.cz/en/about-us/official-notice-board/rad-celozivotniho-vzdelavani-mu
- MU Statutes (Art. 6, 8), available at: https://www.muni.cz/en/about-us/official-notice-board/mustatutes
- MU Study and Examinations Regulations (Part 4, Art. 28), available at:
 https://www.muni.cz/en/about-us/official-notice-board/mu-study-and-examination-regulations
- Directive of MU No. 6/2015, MU Academic and Professional Employee Code of Ethics, available at: https://www.muni.cz/en/about-us/official-notice-board/mu-academic-and-professional-employee-code-of-ethics
- MU Directive No. 5/2014, Inspection Code



MU Measure No. 2/2017, Statute of the Research Ethics Committee



MAIN FINDINGS FROM THE PHD AND POSTDOC SURVEY

The analysis shows that the overall experience in the PhD students' group responds to the normal distribution. While looking for determinants of satisfaction for PhD students, the most important variables for PhD students are a stimulating and motivating work environment, networking opportunities and scientific interactions, being informed on rights and responsibilities as employees and last but not least, perceiving CEITEC as an institute with open, international, fair and friendly environment.

Compared to PhD students, postdocs assess their overall experience more positively, there are almost none who see their overall experience negatively. Based on the analysis, the most important variables for postdocs are a stimulating and motivating work environment, clear career track at CEITEC, clear definition of what is expected from postdocs (including clarification of reasons) and mutual agreement on what should (and should not) be a part of their job, being informed of their rights and responsibilities as a CEITEC employee, having functional lab management, including health and safety rules that are not only well-defined, but also properly implemented.

To summarize, when trying to make the CEITEC experience the best for postdocs, we recommend providing a stimulating and motivating environment. Likewise, we recommend informing them of their rights and responsibilities in the most thorough way, while also explaining why they have these responsibilities and exactly what they mean. This may relate to the fact that for an excellent experience, postdocs should not perform tasks which they do not see as their responsibility (or if these tasks are their responsibility, the organization should help them not to perceive these tasks this way). Note that for an excellent experience, it is also important not only to understand the CEITEC regulations but also to see them as fulfilled by the whole organization.

Table 8 summarizes items assessed positively (negatively) by PhD students and Postdocs. For detailed data, including differences according to gender and nationality, *please refer to the Annex 2 PhD and Postdoc Survey 2017.*



Table 8 Distinctly positive and negative items as perceived by PhD students and Postdocs

PhD Students	Postdocs
Distinctly positive item results	Distinctly positive item results
Ethical standards and practices are followed accordingly	Ethical standards and practices are followed accordingly
 Research relevant to society, not duplicating research previously carried out elsewhere 	 Research relevant to society, not duplicating research previously carried out elsewhere
On-boarding (by supervisor)	On-boarding (by supervisor)
Gender equality during recruitment process	Gender equality during recruitment process
	Appropriate amount of autonomy
Distinctly negative item results	Distinctly negative item results
Appropriate amount of autonomy	Internal communication needs changes
Performance evaluations by supervisor	Mobility (having opportunity)
 Internal communication needs changes 	Unclear career track
Complaint/appeal system	Being aware of job opportunities
Mobility (being encouraged by supervisor)	Competences in grant area
Mobility (having opportunity)	Work-life balance
Unclear career track	Child support
Being aware of job opportunities	Representation of group interests
Competences in grant area	Job description / real job
Work-life balance	Instability regarding employment contract and
Social benefits	conditions
Child support	Training for postdocs
Housing	
Representation of group interests	
Job description / real job	
 Instability regarding employment contract and conditions 	



CONCLUSIONS

When using the basic quantitative approach, we can see that the most pressing area is **recruitment**, followed by **supervision** (having the lowest self-assessment rankings of the compliance with the Charter and Code, see table below). But obviously the area of human resources management cannot be reduced just to ratings.

Table 9 Overview of self-assessment

Principle / Rating	+	+/-	-/+	-
1 Research freedom				
2 Ethical principles				
3 Professional responsibility				
4 Professional attitude				
5 Contractual and legal obligations				
6 Accountability				
7 Good practice in research				
8 Dissemination, exploitation of results				
9 Public engagement				
10 Non-discrimination				
11 Evaluation/appraisal systems				
12 Recruitment				
13 Recruitment (Code)				
14 Selection (Code)				
15 Transparency (Code)				
16 Judging merit (Code)				
17 Variations in the chronological order of CVs				
18 Recognition of mobility experience (Code)				
19 Recognition of qualifications (Code)				
20 Seniority (Code)				
21 Postdoctoral appointments (Code)				
22 Recognition of the profession				



Principle / Rating	+	+/-	-/+	-
23 Research environment				
24 Working conditions				
25 Stability and permanence of employment				
26 Funding and salaries				
27 Gender balance				
28 Career development				
29 Value of mobility				
30 Access to career advice				
31 Intellectual Property Rights				
32 Co-authorship				
33 Teaching				
34 Complains/appeals				
35 Participation in decision-making bodies				
36 Relation with supervisors				
37 Supervision and managerial duties				
38 Continuing Professional Development				
39 Access to Research Training and Continuous Development				
40 Supervision				

In the area of **ethical and professional aspects**, the Action Plan (HR Strategy) should address improving internal culture of the institute in which group leaders play wider role. Beside their research work, they should be supported in also being team leaders, supervisors, managers (incl. managing their budget) and last but not least, being active partners in institute life, management and strategical direction. Such an expectation should be openly articulated by the management, but also supported by the means of soft skills training. The other gaps identified were of rather smaller intensity, often related to non-HR areas such as data management and technology transfer. These issues are to be included into the institute's operation policy.

Next for the gaps, there were a few areas identified, having "+" rating and/or being very positively evaluated by the researchers, mainly research freedom and ethical principles, accountability, non-discrimination and also lab management together with health and safety management. These areas should be further supported in order to maintain their good quality and assessment.

As already mentioned, the **recruitment policy** was identified as an important topic to be further developed in the Action Plan. Even though CEITEC MU has already implemented some rules on



recruitment procedures for academic and non-academic staff, those rules do not include some of the principles as formulated by the Charter and Code. The institute should address the missing guidelines on the process, training of the selection committee members, communication with applicants, giving feedback, etc. Cooperation between group leaders and the HR Department should be strengthened, showing the benefits of such cooperation to all researchers. The administrative burden should be minimized and preferably handled by the HR Department.

Recruitment is only the first step in the employee's cycle, followed by **retention and career development for employees** and in the case of mainly transitional positions, also followed by leaving the institute (becoming alumni network). As perceived instability and unclear career track were identified within the gap analysis in the researchers' group, CEITEC MU also needs to pay attention to career system development, defining a clear career track for research and technician positions, and offering a means of career development, including mentoring.

As the **research and working environment** were positively assessed by researchers, the institute should continue in building an open, international working environment, using transparent and fair principles in its cultivation and development.

The institute should also focus on **unifying working conditions**, namely wage policy, unifying conditions for all PhD students (without regard to their specific PhD programme), including conception of offered trainings.

In order to attract and retain the best talents, **diversity management with a focus on equal opportunities** should be further maintained. CEITEC MU has already established various tools and activities supporting equal opportunities as a part of the Gender Equality Plan and is therefore on a good track. However, changing such complex conditions needs time and needs to be implemented with a long term perspective. The institute should actively contribute to shaping the role of researchers at all levels from PhD students to group leaders. The role of group leaders as managers and an active compound of the institute's management and life has already been mentioned. For the PhD students and postdoc groups, their representation should be addressed.

In general, in the area of **supervision and trainings**, we can say that there are enough opportunities for research trainings and professional development for junior researchers, however, CEITEC MU is clearly missing a system/conception of trainings that would put all parts together and would benefit from synergizing the system but also offering a tailored approach based on the specific needs of PhD students/postdocs/group leaders. A complex training system for group leaders, related to their managerial role, is also missing e.g. "How to be a good supervisor/mentor". What CEITEC MU should focus on is supervision and feedback mechanism that ensure comparable quality of supervision.



Lists of Abbreviations

CEITEC Central European Institute of Technology

CEITEC consortium Central European Institute of Technology

CEITEC MU Central European Institute of Technology of Masaryk University

Charter and Code European Charter & Code for Researchers

ERIC European Research Infrastructure Consortium

ESFRI European Strategy Forum on Research Infrastructures

FTE Full-time equivalent

HC Headcount

HR Award HR Excellence in Research Award

HRS4R Human Resources Strategy for Research

ISAB International Scientific Advisory Board

MU Masaryk University

RIs Research Infrastructures

Strategic Plan CEITEC MU Strategic Plan up to 2020

Strategy 2020 CEITEC MU Strategic Plan up to 2020

The Institute Central European Institute of Technology of Masaryk University

TTO Technology Transfer Office at Masaryk University

VBCF Vienna Biocenter Core Facilities



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Annex 2 PhD and Postdoc Survey 2018 Analysis

Annex 3 Open, Transparent and Merit-based Recruitment Check-list

Annex 4 Structure of Organization of CEITEC MU

Annex 5 Endorsement Letter by CEITEC Consortium (30th July 2012)

Annex 6 Endorsement & Notification Letter by CEITEC MU (25th January 2018)

