Core Facility       Actor(s)       Recommendations         General       CMS       Proper user committees to be established by all core facilities	Timeline     Ist draft in Sept: final version by the     Ist draft in Sept: final version by the		
GeneralCMSProper user committees to be established by all core facilitiesto upgrade the format of the user committee in the document "Common rules" based of the best practices.GeneralWGRIAcknowledgements – when research groups do not acknowledge core facilities in publications, they shall get a financial punishmentto upgrade the format of the user committee in the document "Common rules" - the core facility head is responsible for the acknowledgements. Further I suggest in case of clear evidence that any scientist does not follow the rule for acknowledgement to change the payment policy for usage of instruments/services - to be concrete the RG will be charged by full price for the following 1 year.	end of 2017         Image: Control of the second secon		
General       CMS       Quality assessment in the relation with core facilities/research infrastructure by invitation the expert in this field (Andreas Tiran or his deputy). Based on his talk, each of CF heads should prepare the plan for quality assessment in the relation with in 1 year.	by the end of 2017		
GeneralCMSCEITEC booking systemOndrej H. together with Miroslava Z. will prepare the analysis of finance needed for upgrade of the system. Further the outcome will be discused with OUs in order to identify the courses. What is the plan of CEITEC Nano with current booking system?GeneralKatka V./PR dptm/CFPublic relations - in the centre of attention shall be not individual pieces of equipment, but what kind of scientific questions the is CF ready to there is a catalogue list in preparation within the project RIAT. More information about this activity will be added by Katka V.	By the end of the year 2017     Image: Constraint of the year 2017       Image: Constraint of the year 2017     Image: Constraint of the year 2017		
General       heads       answer and find solutions for         Interests a catalogue its in preparation within the project NR1. More monitor about ans activity with oc about on sector y Nature 1.         Interests a catalogue its in preparation within the project NR1. More monitor about ans activity with oc about on sector y Nature 1.         Interests a catalogue its in preparation within the project NR1. More monitor about ans activity with oc about on sector y Nature 1.         Interests a catalogue its in preparation within the project NR1. More monitor about ans activity with oc about on sector y Nature 1.         Interests a catalogue its in preparation within the project NR1. More monitor about ans activity with oc about on sector y Nature 1.         Interest a catalogue its in preparation within the project NR1. More monitor about ans activity with oc about on sector y Nature 1.         Interest a catalogue its in preparation within the project NR1. More monitor about ans activity with oc about on sector y Nature 1.         Interest a catalogue its in preparation within the project NR1. More monitor about ans activity with oc about on sector y Nature 1.         Interest a catalogue its in preparation within the project NR1. More monitor about ans activity with oc about on sector y Nature 1.         Interest a catalogue its in preparation within the project NR1. More monitor about ans activity with oc about on sector y Nature 1.         Interest a catalogue its in preparation of new data processing platform). Unfortunately, our progress is "balanced" with continuous of the work on shortening the data processing/reporting phase (implementation of new data processing platform)	done		
PROTEOMICS Zbyněk Zdráhal demand for CF services. As mentioned in last year's report, there is a space for increasing service fees for internal and academic users. Such fees may be reinvested back to facility to further improve provided services. Increase of the more complex orders. The instrumental capacity will improve purchase of new LC-MS/MS system in 2018. Despite increased workload. I prefer to stav with current pricing policy to retain this temporary advantage for our users, especially for internal ones. It resonates with our mission to make our services available. On the other hand, we have to remind our users of the situation after the			
PROTEOMICS Zbyněk Zdráhal Main comments - 3) CF head wants to direct expertise of CF towards applications in basic science as opposed to diagnostics. This is a wise program.			
PROTEOMICSInventory cores - All equipment is listed on CEITEC website. I would appreciate more information on provided services (eg. what CF offers in terms of protein analysis, experimental pipelines, data processing, etc.). It would be also good to provide explanation what is Perun and its usage as a guideline in our internal system.We consider to change the content of our web pages in the direction suggested by the reviewer. We will do it within redesigning of the CEITEC web site which is currently under way. We simplified registration to our system (no knowledge about Perun is necessary). For interested users, we located presentation about Perun and its usage as a guideline in our internal system.Norteomic Ceiter Cores - All equipment is listed on CEITEC website. I would appreciate more information on provided services (eg. what CF offers in terms of protein analysis, experimental pipelines, data processing, etc.). It would be also good to provide explanation what is Perun and its usage as a guideline in our internal system.Norteomic Ceiter Cores - All equipment is listed on CEITEC website. I would appreciate more information on provided services (eg. what CF offers in users, we located presentation about Perun and its usage as a guideline in our internal system.			
PROTEOMICS Zbyněk Zdráhal Expenses and budget - The price paid by the end users is relatively low (only 5% of total cost due to heavy subsides through infrastructure projects). I believe there is further space for increasing price for the end users, especially when we take in consideration high demand for the structure of the team or redefining of activities of individual teammates. Of course there are limits of this policy. In the constant increase of workload in future years, the team has to be extended or user requests reduced (e.g. by pricing policy).			
PROTEOMICS 2byněk Zdráhal Diversity of services - CF is adding new techniques in their portfolio through close collaboration with research groups – the main achievement in 2016 was whole proteome and phosphoproteome quantitative study in collaboration with Bryja group. They also plan to introduce cross-linking techniques that are demanded by some users at CEITEC.			
PROTEOMICS       Zbyněk Zdráhal       The data processing is already standard part of our services. It is also reflected in the service prices. The price of each service consists of cost of the technician time, researcher time (planning the experiment, MS analysis and data processing), consumables for sample preparation and MS analysis and instrumental time. The cost matrix is updated annually, the new services are added as needed. All cost matrix updates are done by Katerina Vagnerova who also examines and approve pricing of individual orders within the system. For users with knowledge of sample preparation and data processing we also offer only instrumental usage (only one user up to now).         As the user survey was anonymous, we contract the cost matrix is updated annually, the result of this comparison. It would be useful feedback for us.			
The majority equipment offered in CELLIM was tailored for specific needs of plant biology oriented research community, whereas the services for researchers using animal cells, organs and tissues are limited. Therefore also most of the external users approaching CELLIM are plant			
CELLIM       Martin Anger    (microinjection) will create more attractive facility for external users. These changes will create new possibilities for promoting our core facility in Brno, Czech Republic and also abroad.	2017-2018		
CELLIM       Main comments - 4) Core facility shall clearly promote its main focus (serving the local MU campus user community), with a decent number of external users (as demanded by CzBI and EuBI)         Main comments - 5) Existing and planned devices will use existing CE space. It is possible that CE will require more laboratory space in the	2017-2018		
Addit normments - 5) Existing and planned devices will use existing CF space. It is possible that CF will require more laboratory space in the future.       Addit normments - 5) Existing and planned devices will use existing CF space. It is possible that CF will require more laboratory space in the future.       Almost certainly the space used by CELLIM currently will not be sufficient in near future with arrival of new equipment and techniques. It is also important to mention that implementation of research in CzechBioimaging VVV will require additional wet lab space and offices.         CELLIM       Diversity of services - As the CF comprises mainly the equipment purchased originally by RGs, the technologies provided are limited to the research focuses of these RGs. Purchase of new instruments planned for the next years is necessary and well oriented to increase the diversity       Almost certainly the space used by CELLIM currently will not be sufficient in near future with arrival of new equipment and techniques. It is also important to mention that implementation of research in CzechBioimaging VVV will require additional wet lab space and offices.	- <u>?</u> ??		
CELLIM       Martin Anger       of the technology offer.         CELLIM       Access/Utilization - There is no equipment with low usage, but users were only internal (CEITEC MU, MU Medical Faculty). Focusing of the CEITEC MU, MU Medical Faculty and to ceitect must be carefully balanced to available funding and especially demands of the Iocal scientific community.	NA         Image: I		
also external users. CF shall clearly define its role (possibly to serve mainly to the users in MU campus) to keep the main focus. For external users (demanded by conditions of CzechBioImaging and EuroBioImaging) a set of really attractive and unique services shall be established and clearly communicated. Pricing seems to be an issue that was highlighted by user survey (compared to other facilities). The strategy is to cover service and the possibility how to attract them was discussed above.			
maintenance costs from the user fees. Suggestion: provide discounts for heavy users of the facility.The benchmark usage of equipment is 2.000 hours per year (MPI-CBG light microscopy facility).CELLIMMartin Anger	Solved		
CELLIM       Communication and promotion - CF is promoted via related conferences, Czech- and EuroBiolmaging networks. The website does not reflect       With new major equipment arriving 2017/2018 (new confocal with superresolution, light sheet microscope, data analysis software and hardware, sample preparation, microinjection etc.) the web information will be changed accordingly and immediately.         CELLIM       Communication and promotion - CF is promoted via related conferences, Czech- and EuroBiolmaging networks. The website does not reflect       With new major equipment arriving 2017/2018 (new confocal with superresolution, light sheet microscope, data analysis software and hardware, sample preparation, microinjection etc.) the web information will be changed accordingly and immediately.	2017-2018		
CELLIMMartin AngerWith new major equipment arriving 2017/2018 (new confocal with superresolution, light sheet microscope, data analysis software and hardware, sample preparation, microinjection etc.) the web information will be changed accordingly and immediately.NANOBIOPetr SkladalMain comments -2) Scientific results of CF are excellent. However this reflects main use of the facility by the associated research group.Thanks; evidently, the current arrangement is generating good scientific results. Science should be more important than administrative ideas.	2017-2018		
NANOBIO       Main comments -3) Greater attention should be paid to a more proactive approach to potential external users to the extent that CF capacity       In current activities are fully consuming the provided resources for the staff of the CF. The proportion of external users seems to be substantial, and we will surely continue to promote our services to new potential external users.         NANOBIO       Vert Skladal       Main comments -3) Greater attention should be paid to a more proactive approach to potential external users to the staff of the CF. The proportion of external users seems to be substantial, and we will surely continue to promote our services to new potential external users.         NANOBIO       Wain comments - along with purchasing of a new high-end microscope, core facility FTE should be increased accordingly.       The current activities are fully comprise students Msc, PhD.	continuous     Image: Continuous <td></td> <td></td>		
Cryo-EM       Jiří Nováček         Ind additional nires Will primarily comprise students Msc, PhD.         Ind additional nires Will primarily comprise students Msc, PhD.         Ind additional nires Will primarily comprise students Msc, PhD.         Ind additional nires Will primarily comprise students Msc, PhD.         International scientific community. The CF was presented at the CIISB (Czech Infrastructure for Integrative Structural Biology) workshop in December 2016 and CEITEC Research Group Leader Retreat in February 2017. The services offered under CIISB were further promoted at the NMR Valtice 2017 meeting, which is the main national NMR conference with good attendance from other Central European nations. The 2nd Annual Users Meeting of iNEXT (Infrastructure for NMR, EM			
NMR Radovan Fiala Main Comments - 1) PR and marketing activities nave to be improved, communication has to be accessible also to non- experts in structural biology and NMR conference with good attendance from other Central European nations. The 2nd Annual Users Meeting of iNEXT (Infrastructure for NMR, EM and X-rays for Translational Research) was held in Brno on May 22-24, 2017 thanks to the fact that NMR and EM facilities are partners in the consortium. The gathering brought together not only the participating laboratories but also past, current and potential users. The CF is responsible for the practical part of the' Dynamics of disordered proteins' course organized under BISON project at CEITEC on September 4-7, 2017. Se also the comment to recomendation 2.	s Continuously		
NMR Radovan Fiala Main comments - 2) In the centre of attention shall be not individual pieces of equipment, but what kind of questions is the IT staff is waiting for the lost information to be recovered from the backup. The pages should be put up within days.	August 2017		
NMR         Radovan Fiala         With the CIISB and iNEXT projects well under way the interest from the outside users is increasing. No doubt it has been also the effect of the effort described in the response to the recommendation 1. The good thing is that, besides new users, the users from previous projects and interest from the outside users is increasing. No doubt it has been also the effect of the effort described in the response to the recommendation 1. The good thing is that, besides new users, the users from previous projects brings also projects that return with new proposals. Under iNEXT we have already provided the planned number of access days for the project, more that two years too early. We will continue the effort as long as the resources are available. The increasing number of outside projects brings also projects that are outside our main area of operation. If the projects are of good scientific value and we see a genuine interest on the side of the user we are doing our best to help even if it means spending extra man-power and resources. However, we refuse projects without scientific merit or attempts to abuse our resources for someone else's benefit.			
NMR       Radovan Fiala         NMR       Additional point: Acknowledgements of the facility			
GEN     Boris Tichý     main comments - 3) CF seems to be understaffed - introduction of user fees for offered services should be considered (on top of paying for the chemistry).	Since 2018         Image: Contract of the second secon		
GEN       Boris Tichý       Inventory cores - The web page still has not been updated. It contains list of all equipment which currently belongs to the facility.         GEN       Boris Tichý       Inventory cores - The web page still has not been updated. It contains list of all equipment which currently belongs to the facility.	First meeting of new user committee     Image: Committee       until end of 2017.     Image: Committee		
GEN       Boris Tichy       Nevertheless, the web page should reflect services that CF offers, not just the list of instrumentation. Discussion with Boris Tichý indicates that CF mainly covers three areas of instrumentation: NGS, real time PCR and FACS – this should become apparent from the web site.       Web page rewrite to be more informative.         GEN       Boris Tichý       Expances and budget - Currently, internal users pay only for chemistry. I strongly encourage introduction of fees for internal users that could an internal users that could       Here areas of instrumentation and budget - Currently, internal users that could			
GENBoris Tichýprovide resources for new positions and equipment maintenance. Another important issue are service contracts and long term sustainability Introduction of small fee from internal users (10-25%).GENBoris TichýDiversity of services - The CF now mainly focuses on NGS - they maintain and run sequencers, help with library preparation and provide	Since 2018         Image: Since 2018 <tht< td=""><td></td><td></td></tht<>		
GENBoris Tichýconsulting and basic data analysis (quality control). CF further operates real time PCR cyclers and a capillary sequencer in a user/access mode. Pricing of flowcytometry services is calculated and fee from internal users will be introduced to cover flowcytometry lab operation.GENBoris TichýImpact and outcomes - So far, there are no publications with acknowledgement of the CF. CF must encourage its users to do so.Acknowledgement of offers, will appear on CF website, we encourage users by mail and personal communication. Year 2017 seems to be better (at least 5 publications are in review or print process).	Since 2018		
XRAYJaromir MarekMain comments - 4) Must be more robust in communicating its capabilities outward and get external users from nearby region (e.g. Vienna, Bratislava).viz. line 43 Communication and promotion			
There is significant change in area of HR in CF: One of members of CF (= Mgr. Babiak) had informed the head of CF at the end of Q2/2017 that he will not renew his temporary contract in CF (ending at the end of Q4/2017). Reason: change of Babiak's professional orientation from crystallography using diffraction of X-ray to different emerging methodology (analysis of micro/nano crystals by electron diffraction tomography, EDT) Impacts to CF:			
RAY       Jaromir Marek       Staffing - Is staff development properly addressed? No, the contracts are all very short-term. Which is a psychological stress. Without is a psycho			
fully dedicated to the core services. - September-October 2017 – meetings with "big users" of services/analysis performed by Babiak - September-December 2017 – seeking for crystallographer with PhD in the CR and Slovakia or between recent students of MU			
- 2018 – consultations/negotiations with MEYS (=the CIISB governing body) – is it possible to increase FTE of CF covered by CIISB (from recent 1.6)?need a decision to support the core at an institutional level and not have part-timers, fully dedicated to the core services This suggestion is in direct contradiction to the current practice in CIISB, where (scientific) data analysis is carried out under contracts of members of CF in individual RGs.			
Image: Construct of the			
RAYCzech, abroad, commercial)? No, mainly MU users. Are there some interdisciplinary users (across CEITEC research programmes)? The core is starting to look at non-biological samples. Is the usage of equipment sufficient? Generally not, but getting better over last year. There have been some complications with smaller part on the equipment, leading to down time. Also, the cooling system in the summer is not adequate and leads to down time this core can manage to assemble (multi-component) complexes of moleculesVRAYJaromir MarekCzech, abroad, commercial)? No, mainly MU users. Are there some interdisciplinary users (across CEITEC research programmes)? The core is starting to look at non-biological samples. Is the usage of equipment sufficient? Generally not, but getting better over last year. There have been some complications with smaller part on to down time. Also, the cooling system in the summer is not adequate and leads to down time this core can manage to assemble (multi-component) complexes of molecules Comment: Comment: CF has (at least at the moment) no room/laboratory equipment necessary for "wet" molecular biology/biochemistry experiments (=preparing of samples). Studied subjects (= "Assembly" = multi-component complex with unknown 3-D and/or quaternary structures) are therefore prepared by scientists from RGs in their own laboratories.			
Would you recommend any tips for increase of users? Solution, do not compete on price but rather service. The core should develop a unique specialty to be the very best. For example, if this core can manage to assemble (multi-component) complexes of molecules to give good quality data, it would be a definitely an advantage, and scientifically interesting. Similar activity can be around the data analy sis by specify ing - August 2017 – CF is/was invited by people from HTW Dresden (=former user of CIISB) to participate (as "an expert in solving crystal structures") in prepared EU project with the topic of lithium sulfur batteries			
Lpackages for arranging data analysis and appropriate user fees for them September 2017 - meeting of researchers from CEITEC and MU with people from HTW DresdenXRAYJaromir MarekComment: CF lacks the instruction from management of CEITEC (e.g. list of suggested questions, case study,) how to prepare the proper comparative study/benchmarking			
Autom       Quality assessment - Is CF involved in comparative studies and benchmarking with other sites? No.       In Is CF properly communicating with current and potential users? No         Image: Charles the instruction non-marked ender the proper comparative study assessment - Is CF involved in comparative studies and benchmarking with other sites? No       Image: Charles the instruction non-marked ender the proper comparative study, now to prepare the pr			
But similarly as CEITEC OA/CIISB requires "tests of feasibility" and "reviews" of external user/experiment/project prior start of experiment with external sample in CF, external users probably need (at least from our experience) their own "tests of feasibility" (= a positive feedback = good results/structures obtained from X-ray data collected in CF) prior outsourcing of X-ray experiment/methodology to abroad. The core is too reliant on the local customers			
An alternate form of a sentence cited above is this sentence: The core is reliant on customers capable to prepare sample with unknown 3D/4D structure and to transport it with unchanged 3D/4D structure to CF. And we have, unfortunately, a good experience with transport of samples for only two (of four) types of our services (=with stable crystals of "small molecules" and with transport of non biological nanoparticles as a studied subject for SAXS). Is CF using the right channels? No, this is a real weakness			
<ul> <li>A K K K A Backing Matches</li> <li>A K K K Backing Matches</li> <li>A S C using the right channels? No, this is a real weakness</li> <li>Timetable and the current state of the solution for "new channels":</li> <li>- May 2017 – it has been identified that instrumentation of CF is missing in lists of laboratories equipped for structural biology and supported by EU project Instruct, https://www.structuralbiology.eu/platform-category/x-ray-data-collection/</li> <li>- July – September 2017 - CF starts to play with card "integrated structural biology" and/or "integrated structural crystallography". Existing users of DLS are informed about similar/alternate methodology in CF (=identified external users of CF BIC can use SAXS) and vice versa, users of X-ray single crystal diffraction are informed about alternative methodologies in other CFs (e.g. XRD in CEITEC Nano or EDT in CF Cryo-Electron Microscopy and Tomography)</li> <li>- 2017-2018 – CF will be added to lists of laboratories for project Instruct-ultra</li> </ul>	of		
X-ray single crystal diffraction are informed about alternative methodologies in other CFs (e.g. XRD in CEITEC Nano or EDT in CF Cryo-Electron Microscopy and Tomography) - 2017-2018 – CF will be added to lists of laboratories for project Instruct-ultra Is CF using the right channels? No, this is a real weakness. The core is too reliant on the local customers.			
BIC Michaela Wimmerová Expenses and budget - Sometimes it happens that user books equipment or service, but does not show up on time, or not at all without notice, which blocks capacity of instruments and CF staff.	We decided to charge to users the time that was booked regardless on a real measurement starting time if CE       Image: CE		
Index         Index <th< td=""><td></td><td></td><td></td></th<>			
International and	n		
Impact and outcomes - As for the co-authored publications, I recommend for the sake of transparency that MW clearly separates publications, I recommend for the sake of transparency that MW clearly separates publications, I recommend for the sake of transparency that MW clearly separates publications resulting from activities of CF and from her research group in the CF Annual Report.         BIC       Michaela Wimmerová resulting from activities of CF and from her research group in the CF Annual Report.       Impact and outcomes - As for the co-authored publications, I recommend for the sake of transparency that MW clearly separates publications resulting from activities of CF and from her research group in the CF Annual Report.         main comments       1) The MAFIL powerletter and we arree that the target group schedule be as large as pescible. We are continuous ly cogning for arreer channels for distribution of our powerletter and general propagation of CE conjects to pescible external users. E.g. MAFIL powerletter and	It will be clearly remarkable in the next evaluation report. However, many       It will be clearly remarkable in the next		
MAFIL Michal Mikl	continuous     Image: Continuous <td></td> <td></td>		
MAFIL Michal Mikl core facility, coupled with some decrease in overall FTE dedicated to the facility. Separation between service (CF) and research personnel (RG) shall further continue. MAFIL Michal Mikl Main comments - 4) Streamline the core facility boards to form a single user committee and avoid conflict of interest. MAFIL Michal Mikl Main comments - 4) Streamline the core facility boards to form a single user committee and avoid conflict of interest. MAFIL Michal Mikl Main comments - 4) Streamline the core facility boards to form a single user committee and avoid conflict of interest.	continuous     end of 2017		
Minicipal Winter Win	50 Jul 2017		
MAFILMichal MiklMain comments - 5) Establish clear operational procedures for the facility and establish a culture of quality assurance.specific documents describing how researchers can use CF and what formalities should be carried out. We have presented new procedures to researchers during the first half of 2017. We are continuously working on standardization of processes and improvement of quality of our services. On the other hand - the main challenge is to push these practices into routine behavior of all users, as the users sometimes prefer fast and specific solutions for their projects.Image: Main Comments - 5) Establish clear operational procedures for the facility and establish a culture of quality assurance.specific documents describing how researchers during the first half of 2017. We are continuously working on standardization of processes and improvement of quality of our services. On the other hand - the main challenge is to push these practices into routine behavior of all users, as the users sometimes prefer fast and specific solutions for their projects.Image: Main Comments - 5) Establish clear operational procedures for the facility and establish a culture of quality assurance.specific documents describeng how researchers during the first half of 2017. We are continuously working on standardization of processes and improvement of quality of our services. On the other hand - the main challenge is to push these practices into routine behavior of all users, as the users sometimes prefer fast and specific solutions for their projects.			
MAFIL       Michal Mikl       This point cannot be addressed by CF alone. There is an existing strategy common to all CFs and to CEITEC MU organizational unit. Acknowledgement is being reminded and the exact form is being proposed in each quarterly accounting to RGs. Members of our CF propose and remind this issue at each meeting with users and with user committee (programme board). See other point (below) for detailed explanation of current state.         Main comments - 6) The core facility is not acknowledged in a single publication! This needs to improve.       Michal Mikl	end of 2017		
The discrepancy between coauthored papers and no single acknowledgement to CF is as follows. There was not any paper published in 2016 (meaning final publication date/issue in 2016) using data measured in CF MAFIL, CEITEC MU. All paper published in 2016 used older data acquired in hospitals (measured approximately till the end of 2014) and researchers understood that acknowledgement is relevant only to data acquisition. First papers with data acquired within new CEITEC MU labs were accepted in 2016 but these papers will appear in 2017 list of publications. Twoical period between start of project and accepted publication is about 2 years (several weeks of preparation, testing, piloting; several months of data measurement - it is highly variable and depends on specific project; several months of data analysis; and finally	f		
MAFIL Michal Mikl Michal Mic	end of 2017		

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