KTH's Administrative Assessment Exercise (AAE) 2014.

Sub-project: KTH Research Office (RO) – Support for external funding

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Preface

The panel would like to acknowledge firstly the RO openness and constructive dialogue during the evaluation process. It is the clear impression of the evaluation panel that the self-evaluation process in itself has led to important self-recognition by the RO staff.

Secondly the panel would like to acknowledge the high level of competence, dedication and commitment represented by the RO staff. Clearly the RO staff is an important asset to KTH in fulfilling the objectives set for KTH university ranking, external research funding and more specifically H2020 and ERC participation, as formulated in the KTH Strategic Plan 2013-2016. The strategic plan does not include actions as how to reach the objectives set. Accordingly the evaluation panel will include reflections on this e.g. school contra central level responsibilities and resource allocation.

In this evaluation, the panel has aimed to follow a premise of RO resources not to increase and with attention on refocussing existing KTH resources and activities.

The focus of this evaluation is restricted to include only services and responsibilities directly associated with the process for externally funded research (EFR). By this, other RO activities e.g. related to platforms and KICs are not considered.

General reflections

The first reflection of the evaluation panel (the panel) concerns the KTH Strategic Plan 2013-2016. The plan sets some quite ambitious objectives for increased external research funding. KTH aims to be among the top ten universities receiving most funds from Horizon 2020 as well as to include more research funding consisting of global elements. The objectives regarding external research funding are to increase the international funding, from 311 MSEK in 2012 to 400 MSEK by 2016, and to increase the industry-funding, from 178 MSEK in 2012 to 270 MSEK by 2016. In regards to ERC, the goal is to increase the number of recipients. These objectives largely rely on the responsibility of each individual researcher (via the schools and platforms).

Taken that KTH research by 2013/2014 already has a 67 % external funding share the question arises: how to achieve this? Obviously, when speaking about external funding, an increased number of proposals submitted are one way to increase funding – an alternative and more efficient route is increase in application success by qualified support to pre-grant processes. This support may either be conducted at school or at central level (RO). The evaluation panel requested information on school support

competences/-services. Based on a questionnaire (and RO comments) it is the understanding of the panel that quite little pre-grant support (beside financial and formal requirements) is provided in a structured way at school level and in addition in an inconsistent manner: some schools offer more than others. Taken the premise that any KTH researcher can expect support to his/hers research application efforts (as indicated in the Strategic Plan), and in the current situation, it makes the RO the guarantor for this to the individual researcher. This calls for a KTH strategic decision to be taken: shall responsibility for pre-grant support be at level of schools or RO?

It is also not clear where the increased number of projects have to come from. The Panel has not seen any strategic plans as to the growing potential, expected number of projects and thus applications and support. This is true for the thematic funding sources (e.g. Horizon 2020 Pillar 2 and 3), but also for the Personal Grants like ERC.

The second reflection of the panel concerns the apparent lack of a clear mission to the office. In the non-mandatory pre-award stage (idea, application phase), the RO heroically attempts to cover all funding programmes and "never had to turn an applicant down". The panel suggests that the RO takes a step back and reinterprets its mission on how best to effectively contribute to the fulfillment of the KTH Strategic Plan research objectives. The final conclusion should be based on dialogue with school clients and KTH management level. As such it should optimally not just be a RO mission but an integrated KTH strategy on how to secure the objectives on increased external funding. The general trend of the research funding landscape, at both national and EU level, is to have projects of increasing complexity, leading to bigger consortia, focused on societal impact, with industry involvement and innovation activities etc. Evidently, this increases the demands on proposal quality and in parallel the level and quality of support competences and services provided. Other things being equal, this requires increased resource allocation to pre-grant support functions. The RO may achieve this either by focusing its pre-grant support activities, for instance on the most challenging and complex funding programmes such as SE Strategic partnerships, H2020 and ERC, or alternatively, to implement KTH competences from school level in RO coordinated activities. This is discussed in further detail below.

The third reflection of the panel concerns the surprisingly low awareness at school level of RO responsibilities and services. A survey conducted by the RO illustrated that roughly 50% know the different roles of the RO. This is clearly not satisfactory, both in terms of mandatory processes and non-mandatory services conducted by the RO. The panel recommends that the RO repositions itself in the KTH landscape. This should follow the reinterpretation of the RO missions and should be accompanied by a clear identity that is made visible by an increased and qualified communication. This is discussed in further detail below.

Specific considerations

New identity - mission and priority

When building the "new identity", the panel suggests the RO to engage in dialogue with clients and schools (see below) and to focus the services offered for pre-grant support on fewer funding programmes (the suggestion of focus applies to the pre-grant phase and obviously not to the mandatory contract phase).

Based on the experience of the panel members the greatest demand for support is on EU (H2020) programmes. Focusing on fewer funding instruments will increase support where it is mostly needed and will raise the quality of support offered due to increased specialization. Additionally, it will sharpen the RO identity.

The RO is a rather small group with a considerable level of vulnerability since key competences are represented by single persons. The panel believes in specialization in terms of optimal pre-grant support, since complex funding instruments require specialized knowhow in order to be competitive. The panel thus supports continued strong specialization; but with the recommendation that back up, second-in-line, competences are secured.

Implementing faculty competences

Besides focusing RO resources, taking advantage of faculty experience in RO coordinated activities is a route to increase specialized pre-grant support. Faculty members with proven hands-on experience with successful funding proposals are probably the best source of support to less experienced colleagues. The panel suggests making an inventory of school initiatives, locating the trainers and making an effort to combine this expertise. In combination with maybe some extra training ("Train the trainer") it should be possible to substantially increase the level of support and training without investing in extra staff.

Format of faculty mediated support could be e.g. focused courses (e.g. "How to write a successful H2020 proposal") or shorter face-to-face mentoring sessions. During the interviews the panel experienced willingness from faculty to take on such responsibility and the panel suggests taking this seriously. Likewise, faculty experience could be mobilized by the formation of a review panel consisting of experienced faculty. DTU has since three years had "Rectors Review Panel" with voluntary membership of 40 professors covering all research departments. All contact and allocation of research proposals for review is coordinated by the research office. The panel is reserved for "significant" proposals and each panel member receives 2-3 proposals annually. The service is voluntary, anonymous (reviewer) and considered successful and value adding.

Repositioning the RO – single point of entry

To further strengthen the positioning and increasing visibility of the RO, it is the recommendation of the panel to change the delegation of authority towards the RO being responsible for all contracts including those currently handled by the schools. This will position the RO as the single point of entry and will secure archiving in one single system. In addition, this change of procedure will counter future increase in contract complexity and associated risk even at the level of smaller national funding programmes or industrial funding under 50 KSEK. Moreover, apart from positioning the RO in its role as risk controller/mitigator, it will benefit the RO in being able to produce statistics for the whole institution and thus make recommendations for the KTH management.

Likewise, the panel suggests the current handling of Marie Skłodowska-Curie Actions (MSCA) by the PhD administration to become responsibility of the RO. The MSCA programme covers both PhD and post doc fellowships; they are complex and highly competitive and are often associated with risk. This change will further establish the RO as a single point of entry.

Documenting added value

In accordance with advice from an internal reference group (self-evaluation report 7.2) the panel points to the importance of documenting added value by the RO activities. The panel suggests the RO to document activities and derived effects. Obviously, this is not simple at all levels. Some qualitative measures can readily be monitored, more qualitative measures and derived effects are harder to document. Relevant activities and associated KPIs could be integrated as part of the process of redefining the RO mission. An annual report summarizing the RO achievements could be relevant to communicate internally and externally RO services and effect. In addition, the annual report could serve as basis for client dialogue, as discussed below.

The panel understands that no uniform and integrated registration of proposals for external research funding is available at KTH. To evaluate and optimize the significant investment put into research proposals, a system monitoring proposals and their success is highly relevant. This will allow for a statistical evaluation of the effect of RO activities in support of external funding but also and perhaps most importantly, create a documented basis for qualified funding strategy building. DTU has since 2013 implemented such a system which allows for statistically evaluation at level of university, research department, research group and down to the level of individual researchers. The system includes information from the wide palette of funding bodies and instruments assessable to DTU. Also, it allows for drawing landscapes of internal and external research collaborators. The system is built on the mandatory archiving of official documents (including research proposals) in compliance to the Danish "Public Act". A similar regulation seems to exist in Sweden.

Communication

Communication is key to RO effectiveness at all levels of responsibility and should be given sufficient attention. When communication competences are not present at RO, external consultancy could be a beneficial investment. Logically, the KTH intranet is the main communication media of the RO. The panel had a brief view on the RO web page and found reason to suggest improvement. The objective should be to fulfill the demand of updated and relevant information to the RO clients – the researchers in search for external funding. To meet this demand, the panel suggests building on dialogue with schools and clients, as discussed below. A direct quantitative measurement of webpage relevance could be a simple count of visitors on the site.

Another suggestion for maintaining adequate communication channels is also to have a generic email address to allow a single point of entry into RO for clients who do not have a point of contact.

Client feedback, school dialogue

During the process of redefining the RO mission and role in achieving the research objectives of the KTH Strategic Plan, KTH management and school clients should be consulted; the management obviously in terms of securing acceptance and consistency with strategic decisions, the clients to secure that RO services offered correspond to clients' demands.

The panel encourages the RO to engage in dialog with the schools at level of Deans and faculty. Since EFR support varies considerably between schools it is important to consult all schools. Likewise, different levels

of faculty should be consulted since demands of EFR support depends on faculty experience. Dialogue with schools and clients to secure feedback on services offered should optimally be an ongoing and integrated part of RO activities. Evaluation of activities should routinely be employed e.g. as a standard voluntary questionnaire: "satisfaction and relevance on a scale 1-5", "suggestions and comments" etc. The panel further recommends regular meetings with schools at management level as a forum to discuss and find consensus on relevant issues. The RO Annual Report could further serve as basis of discussion on RO performance and relevance of activities.

Competence / Service / Cost

Any responsible management has to focus on securing administrative competences and service at a low cost level. This balance is art and will inevitably involve compromises and trade-offs.

According to the RO's own estimate the cost related to the entire EFR process is 6,8 man-year. Of this, 0,8 man-year is related to financial advice, ERC proposals and management of KTH co-funding of EU-projects. 1 man-year is allocated supporting FP7/H2020 coordinators and 0,5 man-year spent at KTH competence building – courses and information. In view of the KTH strategic objectives of increasing H2020 and ERC participation this investment appears insufficient – in particular taken in consideration the variability of school support provided. Alone for the first H2020 call, KTH submitted around 160 proposals of which 35 coordinated by KTH (excluding 20 ERC). As a consequence, service is inadequate in volume and competence level weak due to little specialization – drafting successful EU/ERC proposals requires specialized knowhow. The direct cost of services currently provided is low, but including possible derived loss of income (and wasted investment) of unsuccessful proposals turns the equation around as high cost / little benefit.

As discussed above, the panel encourages a strategic decision be taken on responsibility (and service level) for pre-grant support at level of schools and/or RO. The panel sees advantages and disadvantages by both models. However, when summarizing; a centralized model has the clear advantage of increased competence level by specialization, uniform and equally accessible service to all KTH researchers across school affiliation, while being also the most cost effective. The major disadvantages are greater distance to the research environments and associated communicative barriers.

When a model with decentralized support at the level of schools/departments is chosen, the panel recommends that the landscape of local support is mapped qualitatively and quantitatively. This will allow identifying well/less-well performing support, provide models of best-practice and help securing uniform support across schools.

The current set-up with a centralized mandatory contract phase (according to delegation of authority) is evaluated as appropriate in terms of competences and service while being cost effective (3,0 man-year including Centra support). It is the recommendation of the panel that delegation of authority is changed towards the RO being responsible for all contracts including those currently handled by the schools – the rationale discussed above. Cost wise, this should be accompanied by a corresponding resource allocation to the RO (cost neutral since school level administration is equivalently reduced). One bottleneck, as understood by the panel, during the contract phase towards signature, is the resource allocation from the Legal Office. This appears ineffective and bad reputation falls back on the RO.

In order to be more cost-effective and to free time for the RO staff to work more as specialists than generalists, the panel also recommends that the RO gets administrative resource that can carry out time consuming administrative tasks.

Communication and central dissemination of information by internet based media together with competence building of larger groups by courses, information meetings, workshops etc., is the most cost effective general support towards schools. As discussed above, the panel recommends increased attention and investment in RO communication, specifically on improving the RO intranet webpage. Currently, the webpage does not include (enough) relevant information and it is not communicative at sufficient level. Investment should be made in redesigning the webpage both in terms of structure, design and content — but equally important, it should be kept updated on a continuous basis.

The RO estimated the KTH use of external consultancy related to Externally Funded Research to be in the order of two million SEK annually. Since the nature of this consultancy is unknown the panel cannot make concrete recommendations except to investigate in more detail the effect of this investment in comparison to investment in in-house services.

Summary

In short, the evaluation panel suggests;

- Development of a strategy/action plan in follow-up on the KTH Strategic Plan 2013-16. This should be based on a strategic decision on responsibility (and service level) for pre-grant support at level of schools and/or RO.
- Development of a new RO identity, mission and priority of services offered. This should be conducted in dialogue with KTH management, schools and clients.
- Implementation of faculty competences in pre-grant support services.
- Repositioning the RO as single point of entry. This includes the change the delegation of authority towards the RO being responsible for all contracts and the handling of Marie Skłodowska-Curie Actions (MSCA) to become responsibility of the RO.
- Documentation of added value of the RO activities, including an annual report and a system monitoring research proposals and their success.
- Improvement of the KTH intranet as the RO main communication tool and a generic email address to allow a one point of entry.
- Increased client feedback, school dialogue and evaluation of services offered.