Attn:
Assessment committee for Dagmar Rychnovská for defence at Charles University (Prague), Institute of Political Studies

RE: The Politics of Bio(in)security: Science, experts and the dilemma of dual-use
Assessment of the PhD Thesis: Presented by Dagmar Rychnovská for defence at Charles University (Prague), Institute of Political Studies

This assessment takes stock of the revisions made by Dagmar Rychnovská to her dissertation between the first round of commenting and the second public defence. Already the first version of this dissertation was a thoroughly elaborated work that made “interesting contributions to the discussion about expertise, scientific knowledge and the politics governing these specifically in the case of ‘dual use’ sciences” as I wrote in my original assessment. I find this second and revised version of the dissertation to have responded to the comments made on this work in satisfying manner. The dissertation summary helpfully gives an overview of the argument. Dagmar Rychnovská has further improved the quality and presentation of her dissertation. Overall, my assessment is that the dissertation is now an original contribution to international relations that fully lives up to the expectations and requirements of the PhD. I therefore have no hesitation in recommending it for public defence take place. Below I briefly underline the foundation of this judgement and then proceed to point to some issues I think would deserve further elaboration and would be interesting to discuss.
Overall this is now a clearly articulated and stringently argued dissertation. The contributions are clearly formulated both in the summary document and in thesis itself. Dagmar Rychnovská makes a theoretical contribution by conceptualizing three mechanisms through which “boundary work” is reshaping the relation between science and security. She terms these mechanisms bordering, hybrization, and stabilization. She further contributes empirically. She analyses how these mechanisms related to boundary work fashions governance in the context of the Biological Weapons Convention and in the Czech CBRN policies. She enhances our understanding of these fields empirically. And, finally, Dagmar Rychnovská makes her findings relevant to the policy discussion about the governance of science.

In the process of revising her dissertation Dagmar Rychnovská has done considerable work to bring these contributions to the fore. She has reworked significant passages of the dissertation, clarifying core aspects of her argument and linking them more effectively. She has removed parts of the dissertation that were not centrally related to the core argument developed. She has highlighted the significance and focus of her dissertation. I am particularly appreciative of the work done to further clarify the evolving role of experts and expertise, the “new social contract for science” and the discussion of the decentralization of governance and related responsibilization of the scientist. Dagmar Rychnovská has also introduced a range of tables and figures to more clearly convey her ideas and further enhance the readability. These revisions have effectively turned Dagmar Rychnovská’s dissertation into a clearly argued and well-presented work, amply meeting the requirements associated with a PhD.

The dissertation continues to open issues that merit further elaboration and discussion. Below I briefly point to four of these.
First, **theoretically** the revised dissertation has engaged in a clarification of, elaboration of and focus on the notion of boundary-work and the mechanisms associated with it. This has lifted this revised version of the thesis theoretically. I would therefore like to ask if Dagmar Rychnovská would consider going even further in this direction, elaborating this theoretical contribution of the dissertation. In particular, I am curious if Dagmar Rychnovská could do this in two ways. I wonder if she could not become even more specific about what exactly boundary work is in this context by further specifying her conceptualizations both of boundary work and of the mechanisms associated with it. Part of this could be done through further engagement with the literature on boundary work and boundary objects. However, more substantially, as in the previous commenting, I wonder if the boundary work that is being done is not *inside* science rather than *between* science and security. Is it not the case that the boundary is continuously being drawn and redrawn inside science (but of course involving outside experts, rules and regulations). The boundary is between different kinds of scientific activities: those that are dual use and those that are not? If so I wonder if it does not have implications for the neat sequencing of bordering, hybridizing and stabilizing? Is it not that they are different strategies and that they are all the time deployed (more or less successfully) by different actors in different contexts?

Moreover, I wonder if Dagmar Rychnovská could not be more affirmative in distinguishing and differentiating the originality of this theorization. How does her theoretical work relate to the way that other STS and IR scholars (including the ones cited) have engaged with governance of science/security? I think two points in the dissertation are particularly interesting and merit further development in this regard: (i) the decentralization of a form of scientific governance working largely through ethics and (ii) the form security governance takes as a consequence where the central place of ethics pre-empts actions and
scientific development rather than an exceptionalism (although Dagmar Rychnovská suggests that it retains elements of exceptionalism but this could also be clarified) that permits and drives. Would it be possible to be more specific here and elaborate further? I think doing so would helpfully clarify the status of this theorization, its originality and its contribution.

Second, I wonder if I would be possible to further strengthen the links between the theoretical discussion of boundary work and the mechanisms related to it and the empirical analysis. Indeed, it would be useful if Dagmar Rychnovská could clarify the ways in which the two case studies actually retake, elaborate or simply confirm this theoretical argument. What is the status of the case studies and how are they used? Indeed, it would perhaps be helpful to devote more explicit attention to this practice -- theory link also in the research design as it poses the conventional anthropological / ethnographic dilemma of how the juggle the relation between the language and interest of observation and that of the observed; how to deal with “violence” always entailed in writing. But less methodologically and more substantially, doing so would also help clarify and certainly also specify the status of boundary work and the associated mechanisms. Where and how exactly do we see the boundary work and the mechanisms at work? Does it really follow the sequencing suggested? Or is it perhaps a rather more messy and complex process where they are all at work at the same time? Being clearer on this may make it easier to bring in some of the conventional critical (security studies) questions about how exactly we end up with the governance technologies we have and perhaps also issues of what kind of science / scientists and perhaps bureaucracies they benefit and re-produce?

Third, I am curious about the political argument concluding the dissertation and find the contrast with Havel particularly interesting. However, I wonder about the logic of the argument that places much emphasis on a Real Politics of sorts that limits the virtues of liberal
pluralism. I wonder what Dagmar Rychnovská thinks about the argument that is often made in critical security about the fact that the logic of security itself makes pluralism a problematic form of government. There is no reason to think that a world where a lot of voices debate security and on risks and that hence produces spirals of insecurity as securitization becomes pervasive and inescapable is attractive. Indeed could it not be the case (as Rappert has shown for example) that there might be good reasons to preserve authority and secrecy? Either way (political realism or logic of security), I do think it would be useful to hear if Dagmar Rychnovská thinks that not following a Havel, neo-liberal mode of governance where many voices are heard and involved remains an option. As she well describes in this dissertation we are now in a context of decentralized governance through ethics. So how exactly does she think the politically salient tension between the decentralization of governance and attempts to impose public/state controls and priorities on this governance is/could be handled.

Finally, as a matter of principle (and directly following from the above), I cannot but help note that I still regret the absence of engagement with the place of markets and commercial actors and logics. In this area, as in most others, these are not marginal and there certainly is no need to be a radical to discover them. I find it politically problematic that they are constantly neglected and left out of analysis. But perhaps more saliently for a PhD viva: it is of course also problematic because this neglect leaves core parts of the theoretical, empirical and political processes central for the ambition to better grasp the dilemma of dual use technologies entirely out of the picture. Therefore, although I am pleased that Dagmar Rychnovská now makes explicit reference to the place of companies and commercial interests and the complexity involved, I of course hope that in her further elaboration and work, she will be willing to more directly look at the (so often overlooked) place of the commercial in giving the dilemma of dual use its shape, in constituting
scientific expertise and, in fact, in directing science and scientific developments.
These are four of the many interesting issues raised by Dagmar Rychnovská’s dissertation. I would much have liked to participate in the public. I have no doubt it will be interesting and rewarding occasion both for the candidate and the audience readers. However, as I cannot be there I can only confirm and reiterate my conviction that this dissertation lives up to the expectations and requirements for the degree Phd and wish you all the best for the viva.

Sincerely, Anna Leander