

Appendix C – Data Collection Matrix

Evaluation Issue	Indicators	Data Sources							
		Review of Internal and External Documents	Review of Administrative and Performance Data	Program efficiency Analysis	International Comparison Study	Case studies	Key Informant Interviews	Survey	Bibliometric Analysis
Issue - Relevance									
1. To what extent is there a continued need for the program in light of the current national and international contexts?	1.1 Evidence on the continued relevance of the CERC program in the current operating contexts (national and international) <ul style="list-style-type: none"> a. Informed opinions on continued relevance of the CERC program objectives in the current operating context b. Views of researchers on the potential impact of the absence of CERC funding on research projects 1.2 Description and type of complementary or competing funding opportunities at the national level 1.3 Description and type of competing funding opportunities at the international level 1.4 Informed opinions on the extent to which the CERC overlaps or duplicates other competing international programs	●			●	●	●	●	
2. Do the objectives of the CERC program continue to be relevant with government priorities (as articulated through the S&T Strategy)?	2.1 Informed opinions on the responsiveness of the program to meet the needs of stakeholders (federal granting agencies, IC, universities, research community, government and Canadians in general) 2.2 Degree of alignment of the CERC program objectives with government priorities (federal, provincial)	●					●	●	
3. Is there a legitimate and necessary role for the federal government in providing funding for the CERC program?	3.1 Perceptions of the role of federal government in providing funding for the CERC program <ul style="list-style-type: none"> a. Relative importance of the CERC funding in comparison to other funding opportunities at the national level (by size, type and source) 	●					●	●	

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Issue – Performance									
4. To what extent has the CERC program contributed to the capacity of host universities to attract and retain (i.e. sustain) high calibre researchers and highly qualified personnel from Canada and the world? (IMM2)	4.1 Data on the attraction and retention ⁸⁵ of Canadian and foreign high calibre researchers, Canadian and foreign students, postdocs and other research professionals to the CERC unit <ul style="list-style-type: none"> a. At time of application b. As reported in the CERC progress reports 4.2 Evidence of the CERC program’s contribution to alleviating identified barriers to attraction and retention of high caliber researchers and HQP 4.3 Proportion of students and postdocs (Cdn, foreign) involved in the CERC unit that receive direct funding (by number, by type and source – provincial – national) (e.g., Vanier, CGS, etc.) 4.4 Number of Canadian and foreign high calibre researchers that receive grant funds from other sources 4.5 Evidence and Informed opinions on the sustainability of the CERC units as well as the factors that would make them sustainable 4.6 Evidence and informed opinions on opportunities for research training, collaborations, as part of the CERC unit 4.7 Reasons cited by HQP and high calibre researchers for joining and remaining in the CERC unit 4.8 Description and impact of unintended outcomes on high caliber researchers and HQP (if applicable)	●	●		●	●		●	
4.1 To what extent are there barriers to the attraction of world-class	4.1.1 Evidence that the CERCs were awarded to world-class international and Canadian candidates within the four	●	●		●	●	●	●	●

⁸⁵ Will not be addressing retention in the current evaluation but can collect baseline data October 2014

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researchers and how has the CERC program addressed these barriers?	strategic areas of research (S&T) <ul style="list-style-type: none"> a. Proportion of the CERCs to international and Canadian candidates within the four strategic areas b. Comparison of the scientific impact of successful nominees vs. unsuccessful nominees in the first competition 4.1.2 Comparison of the scientific impact of CERC chairholders vs. Canada and the world 4.1.3 Informed opinions on factors limiting the attraction and/or retention of world-class researchers 4.1.4 Reasons why successful CERC candidates accepted or declined the award 4.1.5 Evidence and informed opinions on the presence/absence of systemic barriers for universities in accessing/obtaining a CERC 4.1.6 Evidence and informed opinions on the presence/absence of systemic barriers in successfully recruiting world-class researchers (e.g., whether universities made the required efforts to attract, immigration issues, value of award, infrastructure, partnerships, personal reasons, gender-related reasons, etc.) 4.1.7 Effectiveness of the CERC program to attenuate or redress issues of access, equity or inequity in its program design and delivery 4.1.8 Description and impact of unintended outcomes on the CERC chairholders (if applicable)								
5. To what extent has the CERC program contributed to raising awareness of Canada as a location	5.1 Evidence of the level of national and international awareness of the CERC units over time (e.g., number/frequency of branding and communication and activities, events and outputs; media hits analytics, etc.)	●	●			●	●	●	

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of choice for leading research? (IMM1)	a. Proportion of events/activities involving in depth interviews and/or reports related to the CERC units 5.2 Informed opinions on the contribution of the CERC award in increasing the visibility of the university 5.3 Increase in the number of foreign and Canadian students and Canadian researchers applying to study in fields related to CERCs 5.4 Informed opinions on the contribution of the CERC program in increasing the visibility of Canada 5.5 Description and impact of unintended outcomes (if applicable)								
6. To what extent has the CERC program contributed to enhanced and sustainable research capacity at universities in the S&T priority areas? (IMM4)	6.1 Evidence and informed opinions of the CERCs contribution to universities' enhanced and sustainable research capacity in the S&T priority areas (e.g., amount of internal/external funding invested in S&T priority areas over time; number of researchers and students (incl. reallocations and new hires; infrastructure improvements; introduction of new programs(e.g. graduate), etc.) 6.2 Comparison of the scientific impact of departments hosting the CERC vs. chairholders 6.3 Informed opinions of unintended effects of CERCs for institutions (e.g., positive/negative impacts on existing research community — e.g., re-allocation of resources within institutions, etc., as a result of the CERC)	●	●			●	●	●	●
7.1 To what extent have the CERC units established the necessary partnerships with co-creators and/or receptors of innovation? (IMM3)	7.1 Number and description of the nature and impact of networks and collaborations (incl. partnerships) established during CERC award (including co-creation of knowledge; % of graduates who have had linkages with user sector, etc.) a. At time of application	●	●		●	●		●	

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	b. As reported in CERC progress reports 7.2 Funds leveraged from partnerships and collaborations a. at time of application b. during CERC award 7.3 Perceptions of partners/research users and other stakeholders on reasons for investing in CERCs 7.4 Description and impact of unintended outcomes (if applicable)								
Issue – Program Design and Efficiency									
8. To what extent are the most effective and efficient means being used to achieve program outcomes?	8.1 Identification of potential improvements to the efficiency and effectiveness of the program (e.g., peer review process, promotion/media exposure) a. Relative effectiveness of reporting requirements (e.g., progress reports, SOA) in capturing performance information on program results and outcomes (compared to other models in use) 8.2 Informed opinions on program design (recruitment practices, duration of award, monitoring of grants, etc.) 8.3 Evidence on the impacts of program design elements on CERC program’s efficiency and effectiveness (e.g., appropriateness of the information requested and evaluated in Phase 1 and 2, multiple levels of review) 8.4 Comparison of evaluation processes and monitoring measures of program to similar peer-reviewed programs 8.5 Comparison of CERC’s operational costs to those incurred by other comparable programs	●	●	●	●	●	●	●	

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8.1 To what extent do the CERC units have the level of resources required (from the program, from universities and from other sources) to build a sustainable critical mass in S&T priority areas?	8.1.1 Informed opinions on whether CERCs have the resources required (from the program, from universities, and from other sources) to achieve the objectives of their programs of research 8.1.2 Evidence of institutional support as a result of the CERC award (e.g., financial resources, infrastructure/space, proportion of allocation for HQP) to build a sustainable critical mass in S&T priority areas: a. At the time of application b. As reported in CERC progress reports and statement of accounts	●	●			●	●	●	