Effectiveness Criteria

The Effectiveness Criteria are used by peer-reviewers in assessing competitive applications for National Design Network (NDN) resources, such as fabrication. The six criteria relate to: HQP Development, Quality of Research, Industrial Relevance, Economic and Social Benefits to Canada, Multi-disciplinary and Multi-sectoral Collaboration and Need. The criteria support the investment of NDN resources into projects that will contribute to an increasingly competitive microsystems industry and deliver more highly skilled microsystems professionals in Canada.

Effectiveness Criteria: 2010-2015

1. Contribution made to maintaining or promoting the standard and status of microsystems research and technology development that has the potential to be exceptional by international standards
   Measures include:
   a) novelty and quality of research
   b) refereed journal and conference papers
   c) documented indications of national and international recognition
   d) invited seminars, workshops, conference leadership
2. Contribution to the education of highly-trained people for industry, research and education in the field of microsystems
   Measures include:
   a) number of students post-doctoral fellows and research associates receiving relevant microsystems experience
   b) number of people moving to jobs in Canadian industry, academia or research labs
   c) number of people participating in microsystems-related continuing education programs
3. Demonstrated industrial relevance of research
   Measures include:
   a) scope and nature of industrial collaboration
   b) financial or in-kind contributions received from the private sector for research
4. Realized or potential economic and social benefits to Canada
   Measures include:
   a) contributions and prospective benefits to the National Design Network
   b) knowledge transferred between university researchers and industry (both directions)
   c) successful commercialization of research
   d) realized and prospective benefits to quality of life, health and the environment
5. Demonstrated or potential to demonstrate broad and sustained research and technology development collaboration among researchers, or among research institutions, or across disciplines, or across sectors
   Measures include:
   a) number of researchers involved in relevant research and technology development projects
   b) number of research institutions involved in relevant research and technology development projects
   c) number of disciplines involved in relevant research and technology development projects
   d) number of sector interests represented in relevant research and technology development projects
6. Demonstrated need for requested resources (such as fabrication, test access, development hardware, IP, etc.) for microsystems research, technology development and education
   Measures include:
   a) requirement for completion of research theses
   b) requirement for publication
   c) required for proof-of-concept or other pre-competitive activity

Notes:
1. Weighting of the above criteria will initially be equal but weighting may change, at the discretion of the CMC Board of Directors, to allow influence to be exercised on different areas as circumstances change. Current weightings will be communicated to applicants.
2. Effectiveness will be assessed on a sliding, multi-year basis. Information presented in applications will be limited to the preceding five years.
3. To take care of special situations the criteria should be subject to fair and open judgment