

Appendix 3. Network analysis metrics used to identify structurally important factors in the Canadian FSC standard development process. Bold indicates key factors, based on these metrics.

| Label | Degree | Betweennesscentrality | Eigencentrality | Loop count |
|--|--------|-----------------------|-----------------|------------|
| Ability of chambers to find consensus without resorting to partisan positions | 22 | 843,695238 | 1 | 526 |
| Ability of SDG to listen, find solutions, and act as a team | 4 | 21,333333 | 0,055536 | 106 |
| Acceptance of IGI concept amongst experts | 3 | 18 | 0,017435 | 0 |
| Adequacy and timeliness of stakeholder outreach efforts | 4 | 0 | 0 | 0 |
| Adequacy of standard | 8 | 77,97619 | 0,537769 | 151 |
| Adequate time to operationalise and integrate IFL concept into standard | 4 | 31,866667 | 0,070979 | 141 |
| Ambiguity of IGIs formulated by FSC International | 4 | 8 | 0,003618 | 0 |
| Attractiveness of FSC for forest companies | 5 | 261,535714 | 0,390581 | 489 |
| Availability of prior model for negotiating cooperative conservation agreement | 1 | 0 | 0 | 0 |
| Availability, accessibility and adequacy of accepted scientific, cultural and technical expertise and data | 11 | 294,202381 | 0,208418 | 261 |
| Available resources/ capacities of a given chamber for negotiations | 3 | 8 | 0,116798 | 1 |
| Broader societal debate regarding impact of forestry on biodiversity and indigenous people | 4 | 46,8 | 0,019268 | 0 |
| Conflict between FSC-Canada and FSC-International | 6 | 123,833333 | 0,122597 | 322 |
| Constitutional protection of traditional land use rights of Aboriginal peoples | 2 | 0 | 0 | 0 |
| Continuous development of new IGIs and requirements by FSC International throughout standard development process | 3 | 6,75 | 0,003618 | 0 |
| Desk and field testing of key topics | 2 | 0 | 0,085644 | 1 |
| Development of indicators to integrate IFL concept with the concept of Indigenous Cultural Landscapes | 5 | 160,983333 | 0,161112 | 142 |
| Development of three main management options for caribou during standard negotiations | 6 | 98,154762 | 0,464485 | 129 |
| Diversity of stakeholders involved in the standard development process | 2 | 0 | 0 | 0 |
| Dual mission of Technical Expert Panels to balance biodiversity conservation with economic viability of forestry | 2 | 0 | 0 | 0 |
| Economic chamber understand what is expected of them regarding implementation of IFLs | 5 | 45,533333 | 0,061736 | 253 |
| Efficiency/ efficacy of standard negotiation process | 14 | 641,464286 | 0,600238 | 486 |
| Efforts of SDG to increase flexibility/ minimise prescriptiveness | 4 | 235,535714 | 0,131854 | 489 |
| Federal Government Strategy on Caribou Recovery | 3 | 19,066667 | 0,007629 | 0 |
| Flexibility of incorporating IGIs into national standard (adopt, adapt, drop) to promote fit with Canadian context | 3 | 7,5 | 0,007629 | 0 |
| Forest companies are solely responsible for | 2 | 0 | 0 | 0 |

implementation of standard

| | | | | |
|---|---|------------|----------|-----|
| FSC International's desire to strengthen regional/international consistency of FSC standards | 5 | 0 | 0 | 0 |
| FSC-Canada adopts consensus-based, holistic approach focused on landscape management for development of new biodiversity targets | 9 | 231,435714 | 0,162612 | 361 |
| FSC-Canada's development of innovative procedures for standard negotiations | 5 | 228,392857 | 0,22273 | 157 |
| FSC-International focused on quantitative biodiversity targets per specific forest management unit (e.g. 10% set-asides) | 1 | 0 | 0 | 0 |
| ICL concept under development | 3 | 113,333333 | 0,373438 | 142 |
| IFL concept integrated into new standard | 4 | 11,833333 | 0,417612 | 2 |
| IGIs developed as a calibrating tool across FSC regions/ nations | 3 | 3,75 | 0,003618 | 0 |
| Impact of forestry, resource exploration, road building, and other human activity on Caribou and indigenous people | 2 | 0 | 0 | 0 |
| Integration of comments into new standard | 3 | 0,5 | 0,003618 | 0 |
| Investment of unpaid time and effort by volunteer members | 6 | 300,619048 | 0,309968 | 278 |
| Lack of conformance regarding implementation of caribou indicators of previous FSC standard | 2 | 0 | 0 | 0 |
| Lack of experience of forest companies with landscape perspective | 3 | 26,666667 | 0,06688 | 114 |
| Legitimacy of new standard | 8 | 193,469048 | 0,743666 | 362 |
| Livelihood benefits from forests for local and indigenous communities in northern Canada | 6 | 37,716667 | 0,007236 | 0 |
| New standard perceived as innovative | 2 | 1,833333 | 0,06688 | 44 |
| Operational drafting of standard undertaken by staff and consultants (not SDG), with input from technical experts | 4 | 82,5 | 0,076521 | 86 |
| Perceived ease of implementation & auditability of new standard/ indicators | 6 | 66,483333 | 0,06251 | 141 |
| Perceived flexibility of forest management under new standard | 5 | 130,133333 | 0,283323 | 219 |
| Perceived negative impact of standard on stakeholders represented by economic chamber | 4 | 17 | 0,003618 | 0 |
| Perception that FSC international interfered with development of final standard, sometimes in opposition to FSC Canada | 3 | 2,5 | 0,003618 | 0 |
| Pressure from Federal Govt to integrate aspects of legislation into standard | 1 | 0 | 0 | 0 |
| Proposed indicators concerning Caribou, IFLs, and protected area networks | 3 | 15,483333 | 0,007629 | 0 |
| Request from Aboriginal chamber to resolve issues on identification, conservation, or protection of IFL | 5 | 21,25 | 0,025064 | 0 |
| SDG able to focus on most complex and contested issues | 3 | 11,25 | 0,027768 | 17 |
| Size of SDG | 3 | 27 | 0,076521 | 54 |
| Skills, knowledge and devotion of people in standard development process | 5 | 39,5 | 0,112787 | 147 |
| Stakeholders' satisfaction with process and/or outcomes | 9 | 102,47619 | 0,685928 | 283 |
| Standard development process perceived as technical exercise rather than a negotiation | 3 | 0 | 0,365417 | 72 |
| Stringency of biodiversity conservation | 5 | 100,359524 | 0,117037 | 190 |

requirements (e.g. Number/ prescriptiveness of indicators)

Trust amongst environmental chamber in forest companies to self-regulate impact on caribou habitats
Woodland Caribou as threatened, flagship species

3
4

14,083333
20,2

0,021791
0,003618

0
0