BACC II Report

CHAPTER 3.c.ii. Terrestrial cryosphere (Preliminary outline of the chapter contents)

1. Introduction
    - 1.1 Background – roles and importance of the terrestrial cryosphere components
    - 1.2 Short description of the mean cryospheric conditions, regional variation and extremes (based on the BACC I Appendix A.1.3.5)
    - 1.3 Summary and analysis of the BACC I finding
    - 1.4 Sources of data and uncertainties

2. Seasonal snow cover
    - 2.1 Recent and present changes in seasonal snow cover formation, duration and melt
    - 2.2 Recent and present changes in snow depth and snow water equivalent
    - 2.3 Recent and present changes in snow cover extent
    - 2.4 Recent and present changes in structure and properties
    - 2.5 Extreme events

3. Ground frost
    - 3.1 Recent and present changes in seasonal ground frost formation, duration and melt
    - 3.2 Recent and present changes in ground frost depth
    - 3.3 Recent and present changes in ground frost extent
    - 3.4 Extreme events

4. Discussion and conclusions
    - 6.1. Synthesis of the findings.
    - 6.1. Discussion on the possible reasons for changes (climatic and non-climatic)
    - 6.3. Discussion on the effects on and interactions with other biotic and abiotic systems

And if also the river and lake ice will be included in this chapter, these sub-chapters will be needed:

River ice
- Recent and present changes in river ice formation, duration and brake-up
- Recent and present changes in ice thickness in rivers

Lake ice
- Recent and present changes in lake ice formation, duration and brake-up
- Recent and present changes in ice thickness in lakes

Contributing authors for Chapter 3.c.ii.; Terrestrial cryosphere (Preliminary list)

Following contributing authors have confirmed their participation in this process:

Lev Kitaev
Institute of Geography RAS; Russia (lkitaev@online.ru),

Jaak Jaagus
Department of Geography; University of Tartu; Estonia (jaak.jaagus@ut.ee)

Malgorzata Falarz
Department of Climatology; University of Silesia; Poland (malgorzata.falarz@interia.pl)

Agrita Briede
Department of Geography; Latvian University; Latvia (agrita.briede@lanet.lv)

Egidijus Rimkus
Vilnius University; Lithuania (egidijus.rimkus@gf.vu.lt)

No official CA:s have been named from Sweden, Germany or Denmark yet. From Denmark, John Cappelen from DMI has provided some references to snow and ice time series. Peter Jansson from University of Stockholm and David Gustafsson from KTH have been asked to provide some help with the Swedish data.