**Comments MR to the BEAR draft “Multiple drivers”**

This is a complex thing. It was difficult to find a structure for this, and my solution has been to construct a matrix, or table, see the attached Excel file. Here, I have allocated impacts of all parameters on all, with “confidence levels”. The “matrix” helped me to get some order in to this chaos of interdependencies. I think it may be useful also for the reader. Needs to be updated and discussed. Hope it is clear how to read it (Drivers in the left column have impacts on drivers on the top line). See the table and text for explanation.

This is a draft, which needs further iterations, but at this stage, it should be enough to see what the idea is. Many more references and comments are needed. Individual contributions (topics, drivers) still now inhomogeneous, unbalanced, some need shortening, some need more material, same for text in bullet lists.

Few parameters are still missing but I have invited further authors and hope to fill the few gaps. Each section follows the same structure. I have for this draft taken out the figures, but I would like to have no more than one figure per section/parameter, which should be of general value and understandably underline the main message.

The main text consists of short about 2 p descriptions of a driver, followed by a bullet list, describing which impact the driver has on other drivers. The bullet list follows the descriptions and ranking in the “matrix”. Items in bullet lists are sometime speculative, according to my appraisal, must be checked, and if there are not plausible and there are no indications, should be erased. A connection, which has not been worked on but may be plausible, may get a question mark, but then that connection may be irrelevant. Some descriptions and connections may seem trivial but maybe they are important also to mention, the paper will presumably be read by non-experts, due to the wide interdisciplinary of the subject.

There have been many different concepts and wordings for these “drivers” in the literature, and prominently the DPSIR concept, but I have had some problems with applying this here, so I suggest a simpler classification, see text. You will see that still in this draft the terms “drivers”, “factors” “parameters” are still not consistently used but should be.

Some co-authors have already gave a first round of comments and they are worked into the text, sometimes I have left the comments in the text where I thought they might be useful or are open for discussion.

marcus