INSEA - Potential Impact

1.1. Contributions to standards

The main coordinating organisation of the project has a long-standing history in contributing to IPCC assessment reports both with respect to land-use issues and mitigation measures. Through publication from the project and direct involvement in a variety of IPCC processes it can be expected that INSEA will be able to substantially contribute to the formation of standards assessing land-based mitigation measures. In terms of the standards, it is worthwhile to mention the IPCC Good Practice Guidance and the IPCC Guidelines 2006, currently under preparation. INSEA can make contributions to the latter, thus contributing to the setting of standards for the next 10 or 15 years.

1.2. Contribution to policy developments

The prime goal of the INSEA project is to make *available tools that will support the implementation of the Kyoto Protocol commitments in the European Union and more so the preparation of the Post-Kyoto negotiations, by providing analytical input, for targets beyond the first commitment period.* Potential policy impact of the proposed project on a societal level has multiple characteristics:

- Improved capacity to formulate (**post-**)**Kyoto** climate mitigation and adaptation strategies on local, national, European and global levels.
- Reduced uncertainty of the role LULUCF measures in a prospective emission-trading scheme under the Kyoto protocol subsequent international climate policy regimes. Thereby, **economic efficiency gains** can be expected and robust decision making in carbon trading will be facilitated.
- Integration of spatial information in a consistent and openly accessible decision making toolbox will facilitate increased stakeholder involvement, **through a better dialogue between scientists and decision makers**, in LULUCF issues and consequently allow for increased consistency of various EU policies. The use of spatial explicit databases allows us to reap the benefits from large EU investments in remote sensing technologies and will contribute to improved system specifications of Earth observation systems. Thus, INSEA provides a coherent research base that aims at **increasing integration of EU policies with climate change policies both in the long- and short run**.
- Assess the environmental and economic impact low emission scenarios by the deployment of large-scale **negative emission technologies** including scenarios of a biomass based hydrogen energy system.

1.3. Risk assessment and related communication strategy

There are **no direct risks** for society associated with model building within the INSEA project. However, there are a number of controversial issues associated with the assessment of sink enhancement measures. In particular, the sustainability of the implementation of such measures will be scrutinized by the INSEA project from a purely scientific point of view. In this respect **our communication strategy** is to clearly distinguish in our assessment between technological feasible, economically suitable and sustainability constraints respecting mitigation measures. As both the UNFCCC and the Kyoto Protocol demand sustainable management of biological sinks the assessment of sink enhancement measures will make particular reference to the need to respect issues such as nature reserves, biodiversity conservation, food security, sustainable forest management, renewable energy systems, clean air and water policy, management of natural catastrophes and sustainable rural development.