Land use trajectories – Drivers and processes of landscape changes in Europe
This report presents existing knowledge about the drivers and processes of land use changes in the VOLANTE case areas under the following themes

**Land use trajectories**
The main landscape trends in the areas are very diverse. In mountainous or remote areas, land abandonment, with sometimes forest regrowth, is occurring (Stâncuţa, Râteşti, Reichraming, Aegean and Portofino). In areas of intensive agriculture, the dominant trend may be production increase and intensification of cultivation of former meadows and wetlands (Stâncuţa, Heerde) or stability, in some cases hiding a significant change in land owner composition from full to part-time (Heerde, Roskilde, Portofino). This also characterizes some areas of marginal potential for agriculture, which are close to urban areas offering other economic possibilities (Reichraming, Aegean2). Conversion of land use from agriculture to urban occurs in several areas. In Roskilde, it follows clearly designated zonation boundaries while in Aegean land owners own initiative occurs and not always following legislation. Nature improvement can be caused by land abandonment (Stâncuţa, Râteşti) or through policy measures (afforestation, agro-environmental schemes) (Reichraming, Heerde, Roskilde, Portofino).

**Main drivers of land use changes**
Drivers of land use change are identified at external level (regional, national, international) and internal in the areas (local community, land users). Externally, market conditions have a strong impact on the viability of agriculture and on land use. It may lead to land abandonment, in areas where agriculture has difficulties competing with other sources of income (Stâncuţa, Râteşti, Reichraming, Aegean and Portofino) or it may lead to specialisation, e.g. increase in maize production (Heerde) or grass seed production on fertile soils (Roskilde). The conditions set by market conditions and policy measures, have an intensifying and extensifying effect in different contexts and a shift from agriculture to (semi-) urban functions (Roskilde, Heerde). The designation of an area (National park, Natura2000) normally has a stabilizing effect. Subsidies may preserve certain characteristics or legislation will stop land use changes (Stâncuţa, Reichraming, Heerde and Portofino). In the socialist era, production plans (e.g. drainage and rice plantations) had an opposite, destructive impact on landscape, especially on nature values (Stâncuţa). The change in land owner composition from full to part-time carries a shift in preferences and priorities. The new owners have residential and recreational interests, which can lead to more diverse and natural landscape with a range of urban-oriented activities (Roskilde, Heerde).

**Landscape change processes**
Afforestation occurs in all case areas. It may involve the original land owner who benefits from subsidies to plant trees (Roskilde) or through public authorities following purchase of land (Stâncuţa, Reichraming, Heerde). It may also occur as natural regrowth following land abandonment. In some cases, owners do not live on the property, but in nearby towns (Aegean2, Portofino) or are absentee land owners who received land under the post-socialist privatization program but are not farmers or consider it not profitable at present (Stâncuţa, Râteşti). Land fragmentation may also be a result of post-socialist privatization (Stâncuţa, Râteşti). Forest fires may have a devastating effect, especially in the Mediterranean (Aegean2, Portofino). Intensification of land use was a characteristic of the socialist era (Stâncuţa, Râteşti) and is still occurring in several highly intensive case areas, leading to loss of small-scale landscape features and monofunctional landscapes (Roskilde, Heerde).

**Main actors**
Private land owners, who live on the property and use it for production or pleasure are important actors in all areas. They may be full-time or part-time farmers. In addition, public authorities are also land owners or managers in all areas. Entrepreneurs/investors with non-agricultural interests are found in some areas, as are legal entities: (bequests, charities and the Church) (Aegean2). NGO’s, special interest organisations or cultural institutions are especially important in areas with high-profile landscape designations, such as national parks (Portofino, Heerde).