In this paper, the researchers want to briefly report on their on-going spatial research into the development of the parish system in Holland, called West Frisia until about 1100. This research builds on a previous study into the development of the Church in the Central Frisian region between Vlie and Eems (roughly covering the current Dutch provinces of Friesland and Groningen), which led to the insight that in the age between 950 and 1050 the bishop of Utrecht, in cooperation with the local nobility played a dominant role in the systematic foundation of well demarcated parishes, subordinate to the old mother churches. This process of territorialization meant a renewal in relation to the Carolingian missionary system, in which episcopal churches and churches of Carolingian abbeys functioned side by side as separate cult centers. From 950 onwards, the bishop and his staff insisted that the whole territory was demarcated in separate parish entities in such a way that all inhabitants were effectively brought under specific churches for their spiritual care, taxation and ecclesiastical justice. In Westfrisia or Holland, the bishop seems to have introduced this system as well. More than in Central Frisia however, he had to take account of other power parties such as the abbey of Echternach who originally administered all churches founded by the missionary Willibrord here, but also with the Westfrisian count who in due course acquired substantial parts of the Willibrord legacy. In the tenth and eleventh centuries the count developed into a strong ruler, deriving his power from a large conglomerate of manors and demesnes, the skeleton of which was built up in the Carolingian period and whose organization does not seem to have been interrupted during the Viking period. Traces of a strong comital manorial system can be found in all parts of early medieval Holland. In this respect, the situation of power relations in pre-1100 Holland differed considerably from that in Central Frisia between Vlie and Eems, where in the Carolingian period a high aristocracy was absent, relatively few manorial centers came into being, and the successive counts did not succeed in building up solid centers of power based on large landownership.

The questions to be answered in this study are which churches were present in 900 and 1050, who owned them and how the development of their function and place in space in relation to the development of the major centers of power can be explained. Attention is paid to the development of the landscape, especially in relation to the settlement formation on the central sandy ridges and the first phase of the reclamation of the adjacent peat areas.

Like in the Central Frisia research, the approach is to combine text study with archeology using spatial visualization in GIS. The basic data consist of information concerning the construction of the oldest wooden churches, information from early charters, data about dedications to patron saints and, above all, spatial information about parish boundaries and the location of landed church property and the manors and demesnes of the count and other secular lords. An essential aspect of this is that we try to map the earliest territorial parishes by analyzing the filiation of the younger parishes back in time. At the same time, we propose
to reconstruct a series of manorial centers on vectorized cadastral maps, as to establish their relationship to old mother churches and their earliest daughters. The intention is to elaborate on two or three specific cases, in order to establish a more general development model. As for mastering the multiple connections between the parishes in terms of hierarchy and dependency relations, these are to be based on heterogeneous and sometimes uncertain and fuzzy data. In order to deal with this uncertainty factor, the information will be transformed in a semantic data structure, using Linked Data. This will be joined to the spatial information in a GIS thus providing a more elaborate view on the provenance of the data.