A conceptual model for creating and maintaining cartographic products for aeronautical maps is presented. All the required aeronautical maps that are specified in the ICAO annexes require extensive background information. One way to structure this information is the proposed ICAO aeronautical information standard SICIM. A standard to exchange and store all information is essential and the suggested SICIM standard is a cornerstone, in order to design a global system for handling AIS information. When information is available in such a structured way, it also gives possibilities to produce a wide range of cartographic products. A good software architecture is needed. Database and middleware software components to achieve this are discussed. The production of aeronautical charts can also be an integrated part of the planning process in different departments within an aviation authority. User interface components to serve multiple purposes, both as cartographic chart production tools and planning tools are proposed. The strategy is to have cartographic components that both are used for interactive work and for viewing purposes. All users are working with the same information regardless if they are creators or users. This enables a faster flow of information through the organization.