ABSTRACT

Every commercial company has the main goal to make profit, but many of them do not remember about the risk they are facing. The more the company grows; the bigger the risk will be. Being protected by insurance companies is the common way to avoid or minimize the risk to several companies. But, how about the insurance companies themselves? Insurance companies have also to have their own protection. And one of the biggest threats should be avoided is the catastrophic risk.

PT Asuransi Central Asia, a private own general insurance company, realizes that the rapid development of information technology can be used as supporting tool to eliminate catastrophic risk and enhance its business process.

The goal this thesis aims at is to secure the company against catastrophic claims and maintain its strength against the risk of bankruptcy. Geographic Information System (GIS) is suitable to meet that need, because it can map and visualize insurance object location faster. GIS also supports the management in making strategic decision; to accept or reject new business or sell it to other insurance companies.

This GIS can be accessed through web, so it can be accessed anytime and from anywhere, because the management is not always in the office. The result of this thesis is a design of GIS prototype that enables the management to monitor limit allocation easily and avoids companies from taking catastrophic risk.

Keywords: Geographic Information System, insurance, catastrophic risk, limit allocation.