







Secondly, the algorithm which used in the generalization and parameters of the algorithm are put in the case base. And finally, the intelligent self-adopting algorithm selecting method is constructed with the help of the case base and knowledge lab.

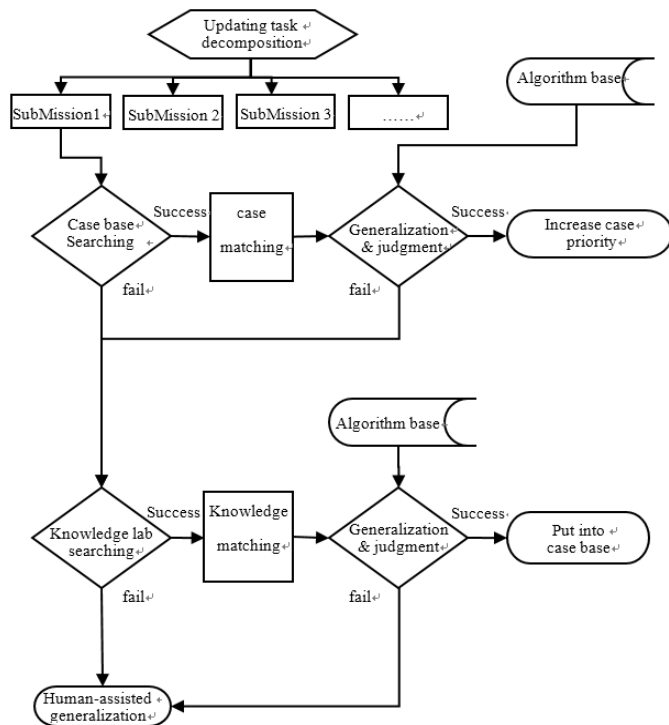


Fig. 6 the flow diagram of intelligent self-adopting algorithm selecting method

In actual generalization process, the algorithm and parameter selecting steps is shown in figure 6. Firstly, generalization tasks are decomposed by work control produce. The long line of work is decomposed into segments. Secondly, the characteristic of generalization step is abstracted from the generalization scene of every part, which will be used in case base searching. Thirdly, if proper case can be found in case base, the generalization segment will be finished with the step of found case and parameters. Fourthly, if generalization succeeded, the priority and experience of the case will be increased, and if fail or proper case can't be found in the case base, then the rules will be searched from knowledge lab through generalization scene and updating surroundings. If usable rules is found, then use it to fulfill the last generalization steps, if generalization succeeded, put the generalization scene and algorithm into case lab, if fail or nothing be found in knowledge lab, it is the last way to deal with the work by helping of experts.

#### IV. CONCLUSIONS

Multi-scale spatial data updating process involves scale-transformation of spatial objects. Due to the variety of settlement shape, the scale-transformation algorithms will vary with the updating area and map usage. Through deeply studying the flows of multi-scale spatial data updating process, an intelligent cartographic generalization algorithm selecting

mode is proposed. Firstly cartographic generalization algorithm base, knowledge base and case base is built in this mode. Secondly, based on the step of resolving the cartographic generalization process into segments, a self-adaption cartographic generalization algorithm selecting architecture is constructed. Thirdly, an intelligent cartographic generalization algorithm selecting and using flow is established and put into effect. Overall, this mode provides a new idea to solve the automatic problem of multi-scale spatial data updating.

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