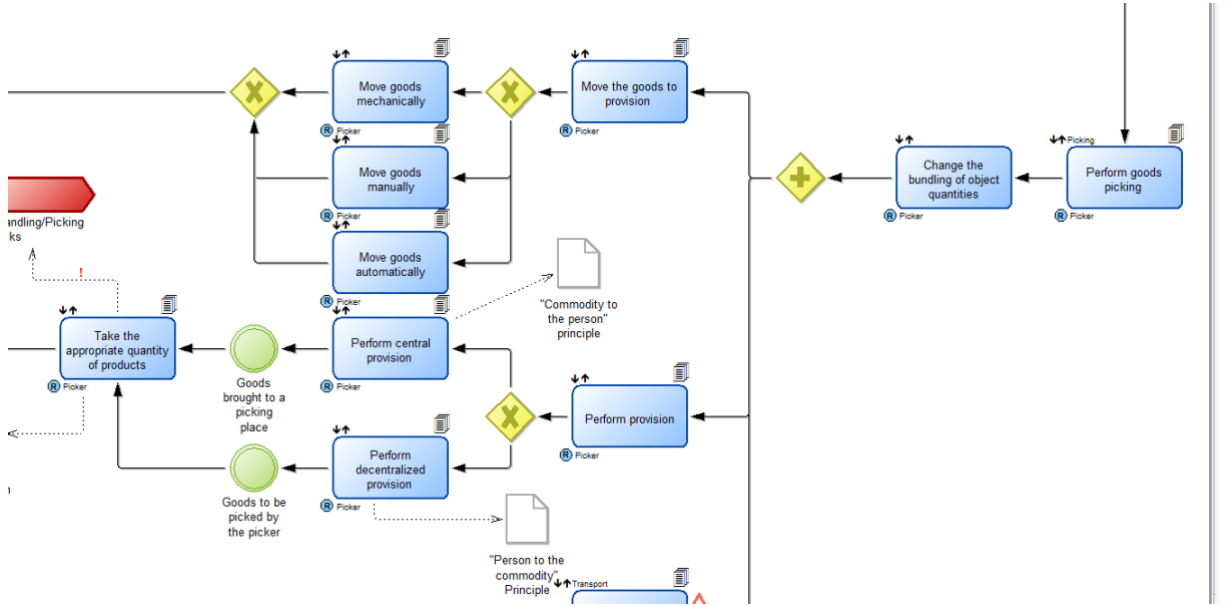
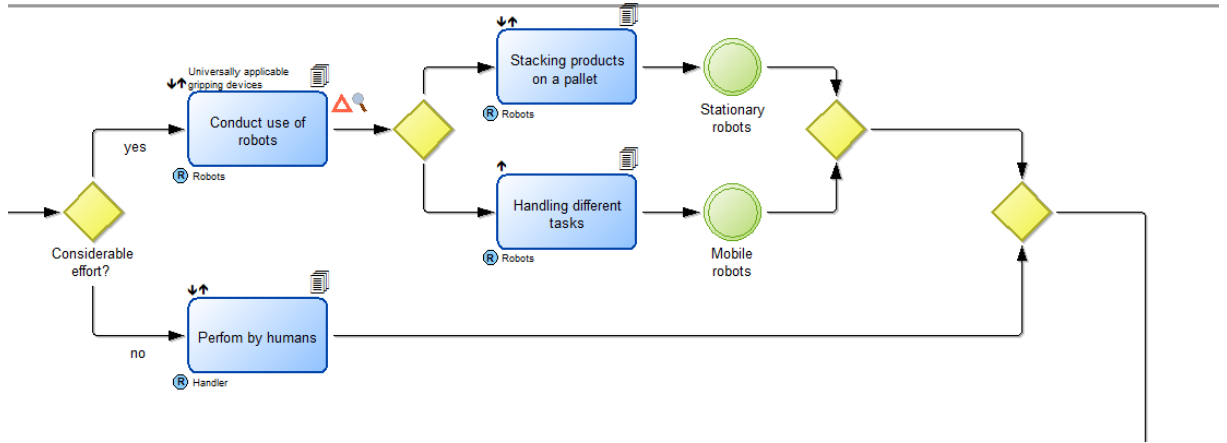
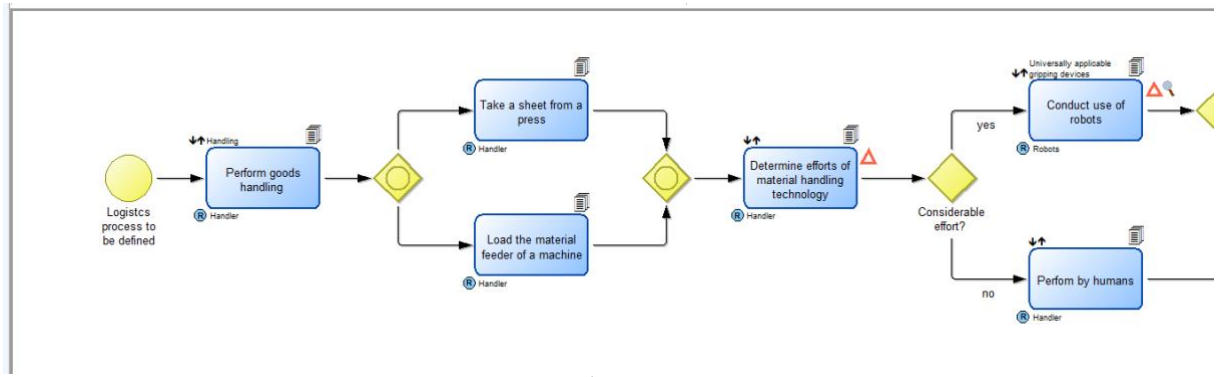


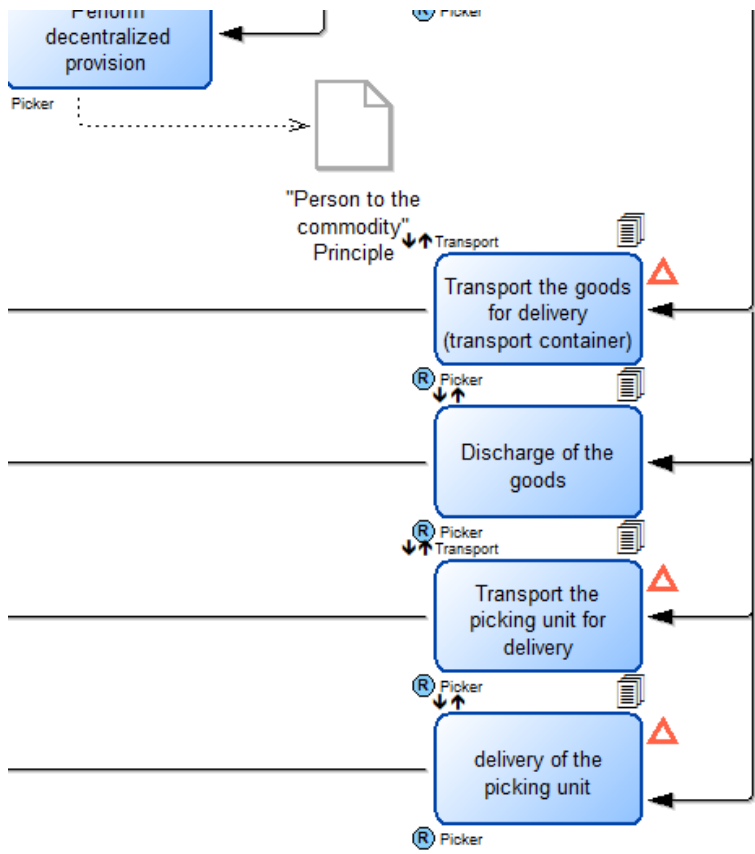
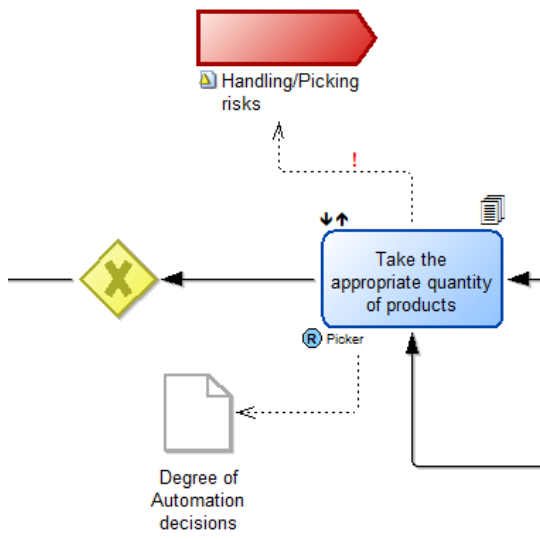
Logistic Process

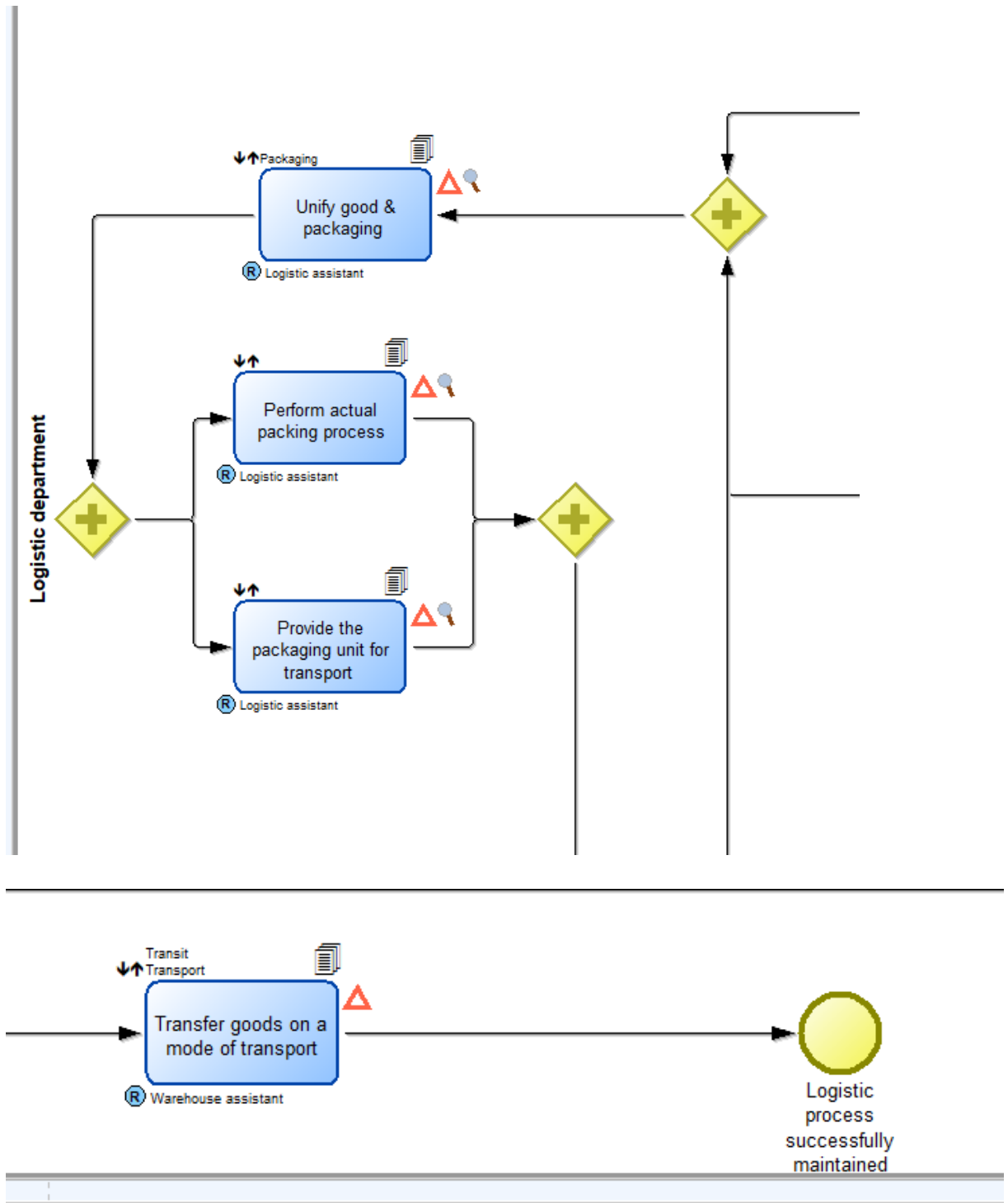
Source: Grundzüge der Beschaffung, Produktion und Logistik (see p. 349)

Transfer the following verbal description into a BPMN:

- a) Logistic process needs to be defined by the logistics department. First, the goods handling process has to be performed by the Handler based on the Handling Order received.
- b) In order to perform the goods handling, either a sheet has to be taken from a press or the material feeder has to be loaded to the machine. After doing the task given, efforts of material handling technology has to be determined.
If handling the materials have considerable effort, the usage of robots can to be conducted. However, robots need costly image processing systems in order to perform their tasks, which can be mitigated if the process is performed by humans.
Furthermore, if the required task is to stack products on a pallet, stationary robots have to be used. If on the other hand, the task is to perform different things (movable), mobile robots has to be used. In case the material handling has not a considerable effort, the handling task has to be performed by humans.
A risk may occur in this step, in that wrong assessment may be determined in considering the material handling efforts.
- c) Both options are united again to perform goods picking (Service) process by the Picker (based on the picking order & material and goods stock). First, the bundling of object quantities have to be changed (picking order).
- d) In performing this step, a series of activities have to be performed:
First the goods have to be moved for provision. In doing so, goods can be moved mechanically, manually or automatically.
Then, provision has to be performed. In this step provision can be performed on central or decentralized way. In choosing central provision goods are brought to a picking place (following "Commodity to the person" principle). The appropriate quantity of products has then to be taken out (based on the degree of automation decision) by the picker. In choosing decentralized provision, goods are to be picked by the picker himself (following "Person to the Commodity" principle). Many risks may occur in this step, which are wrong assessment, wrong product & product quantity and broken load units.
After that, the goods has to be transported to a transport container for delivery, the goods have to be discharged, the picking unit has to be transported for delivery and finally the picking unit has to be delivered.
- e) After performing all picking processes, the packaging (Service) process starts in that goods & packaging has to be unified by the Logistic assistant (based on the packaging order).
Packaging protection function has to be set as a control in this step to mitigate mechanical & climatic loads and theft occurring in this activity.
- f) After performing this step, actual packaging process & providing the packaging for transport are to be done at the same time. In this both options, a high disposal logistical effort may occur. In order to mitigate this risk, reusable packaging has to be used in this performance.
- g) Both options are united again to transit & transport (Service) goods process by the Warehouse assistant using the Transport Order received.







[Logistik Process.adl](#)