

**1) The student has to model the following business process using BPMN Collaboration diagrams. This collaboration describes the interactions of three participants.**

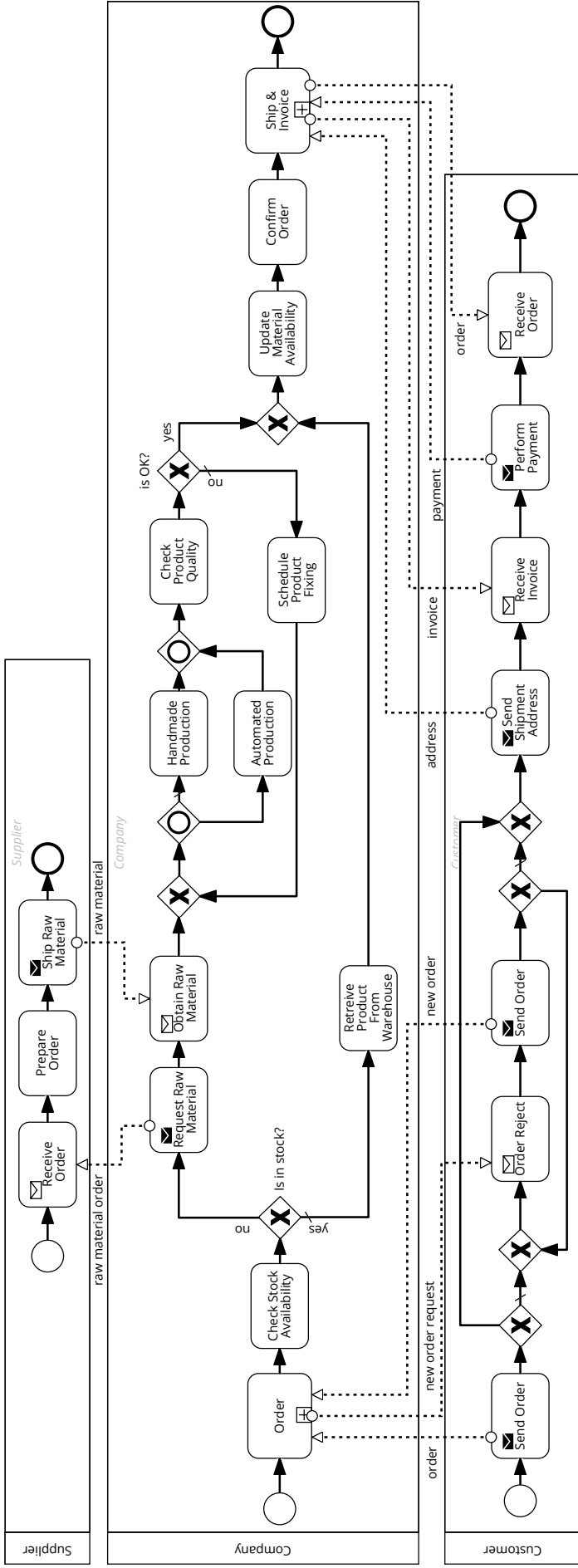
**The student has to fully describe the behavior of the Company, while the Supplier and Customer pools can be modelled as “black-box”. Notably, all the necessary messages have to be modelled.**

TEXT: A Company assembles raw materials and sells the final products. This selling procedure involves a Customer and a Supplier that can interact with the Company. This procedure starts once the Company receives an order from the Customer. The Company checks the order, if it is correct the process goes ahead. Otherwise the Company asks for a new order and, after the new order is received, checks its correctness again until it is ok. At this point the Company checks if the ordered items are in stock. If the products are available, they are retrieved from the warehouse, otherwise the Company acquires the raw materials needed for the production from the Supplier. The Company at first checks if raw materials are available. Hence, the Company requests and after receives the materials from the Supplier. Then the process goes ahead choosing the needed manufactory tasks: handmade, automated or both. Once the product is ready, its quality is checked. If this quality is not sufficient the product goes back to the manufacturing phase. Now the order is ready, hence, the Company updates the material availability and then confirms the order that is ready for the shipment. During this phase, the Company gets the shipment address, and then it ships the order. Concurrently, the invoice is emitted and the payment is received. Finally, the order is archived and the process ends.

**2) The student has to complete the modelling of the following business process using BPMN Collaboration diagrams (all the Pools have to be detailed).**

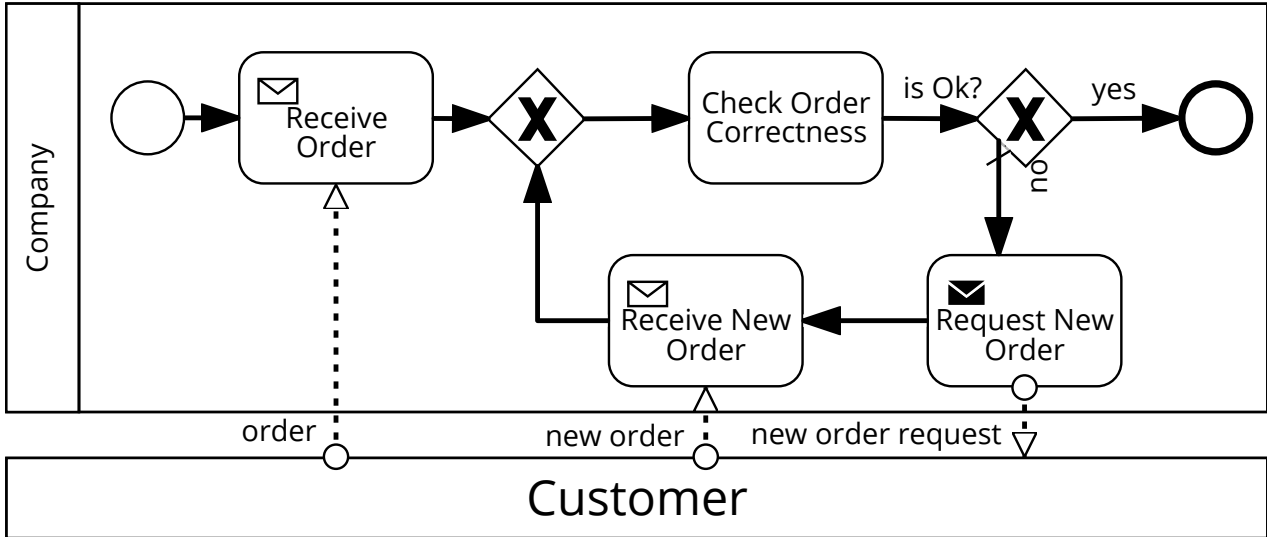
**The main collaboration diagram is already modelled and it describes the interactions of three participants. Within the model are used two collapsed sub-processes (“Order” and “Ship & Invoice”) that resume part of the Company activity.**

**The student has to describe the behavior of this sub-processes using two additional collaboration diagrams. The student can derive a possible behavior looking at the main diagram. The two diagrams must be collaborations, hence all the necessary pools and messages have to be modelled.**



SOLUTION

ORDER



SHIP & INCVOICE

