Draw a business use case diagram, a BPMN diagram and a business analysis diagram with entities and business workers for the following requirements. Use separate process pools and message exchange to model the communication between service point and the customer. Use timer events to model the time constraints.

# Home Appliances Repairs

The process of servicing a broken home appliance starts with an arriving service request. If the customer requests a door to door service, a company customer service employee will pick up the appliance, otherwise the company waits up to 7 business days for the customer to deliver the appliance to a service point. If he doesn’t do it in this time – the process ends.

When the appliance is available in the service point, it will be analyzed by a maintenance specialist in order to pinpoint the problem with it. At the same time a customer service employee will check the appliance’s warranty. If it is valid, the appliance will be repaired for free. If not, after the problem is identified, the maintenance specialist will have to estimate the repair costs. The customer will be notified of the estimation and will have to make a decision – either to pay the repair costs or get his device back without repairs. He has 7 business days to make that decision. If he makes no decision, then the device will not be repaired.

After the customer decides to pay (or if the device repairs are covered by warranty), the maintenance specialist will repair the device and then test it. Then the customer is notified to pick up his device from the service point. If the customer decided not to pay for the repairs, he is just notified to pick up the device. Then the process ends.