Section B:

Original Process Description

The process starts when the SO: Angebot/Auftrag receives a subsidiary order. The SO: Angebot/Auftrag prepares goods for shipment and then ships the goods, concurrently with preparing the goods and shipping them, the SO: Angebot/Auftrag prepares invoicing.

In case the customer is subsidiary and the subsidiary relationship is not yet modeled, SO: Address-management adds parent company as invoicing address, then the SO: Angebot/Auftrag create the invoice. Otherwise if the customer is independent or the subsidiary relationship is already modeled in ERP, the SO: Angebot/Auftrag directly creates the invoice.

Finally, the SO: Angebot/Auftrag sends the invoice.

Modified Process Description

The process starts when the SO: Angebot/Auftrag receives a subsidiary order. The SO: Angebot/Auftrag prepares goods for shipment and then ships the goods, concurrently with preparing the goods and shipping them, the SO: Angebot/Auftrag prepares invoicing.

In case the customer is subsidiary and the subsidiary relationship is not yet modeled, SO: Address-management adds parent company as invoicing address *and prints the document on yellow paper*, then the SO: Angebot/Auftrag create the invoice. Otherwise if the customer is independent or the subsidiary relationship is already modeled in ERP, the SO: Angebot/Auftrag directly creates the invoice.

Finally, the SO: Angebot/Auftrag sends the invoice.

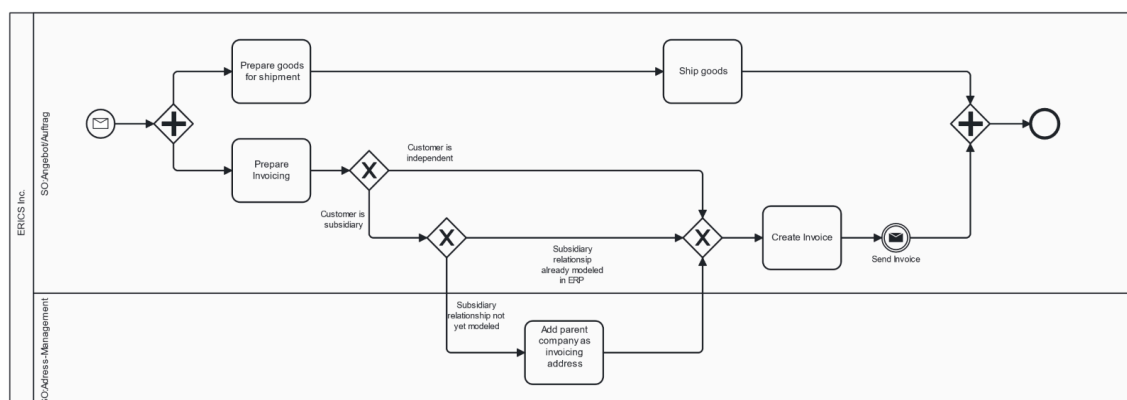**Fig. 1**   Proof of Concept Process Descriptions

Fig. 2   Proof of Concept Process Model

Answer from the aProCheCk Proof of Concept

Comparing the old and new versions of the process descriptions reveals a key difference:

In the new version, when the customer is a subsidiary and the subsidiary relationship is not yet modelled in the ERP system, the Address Management is instructed to not only add the parent company as the invoicing address but also to print the document on yellow paper. *This additional step is not present in the old version.*

Upon examining the BPMN process diagram provided, it becomes evident that the *new information* regarding the printing of the document on yellow paper is *not reflected in the diagram*. The task by the Address Management only shows "Add parent company as invoicing address" without any mention of the document colour requirement.

Management Summary:

The *process has changed* to include a new step where documents for subsidiary customers with unmodeled relationships in the ERP system must be printed on yellow paper. This change ensures a visual distinction of such cases, possibly for internal tracking or accounting purposes.

To update the BPMN diagram to comply with the new process:

The task named "Add parent company as invoicing address" should be revised to reflect the additional step or a new task should be added after this step, specifically for printing the document on yellow paper.

This additional task should be connected to the existing flow, ensuring that it occurs after adding the parent company as the invoicing address and before creating the invoice when the customer is a subsidiary with an unmodeled relationship in the ERP system.

Fig. 3   Proof of Concept Coherence Check Notification