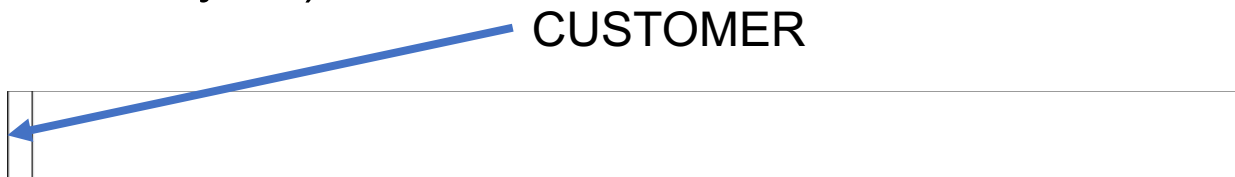


BPMN LEVEL 2: _ANALYTICAL

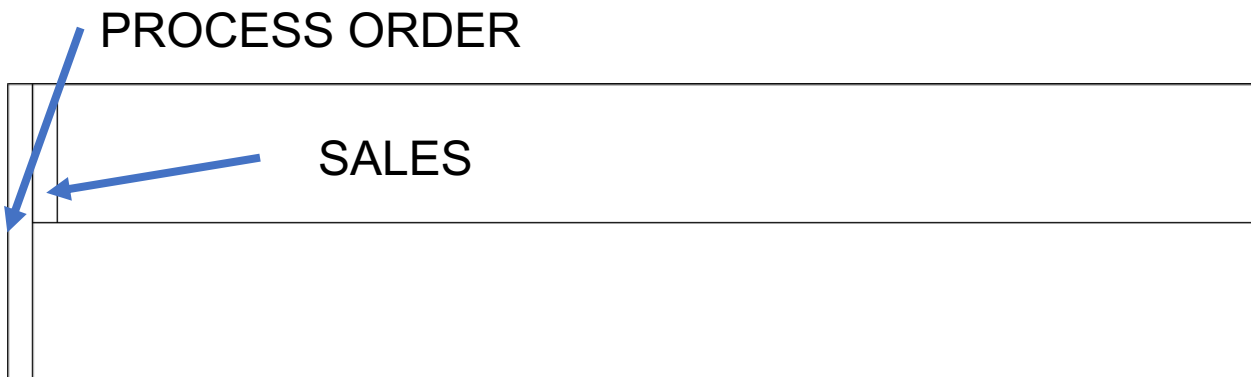


POOLS AND SWIM LANES

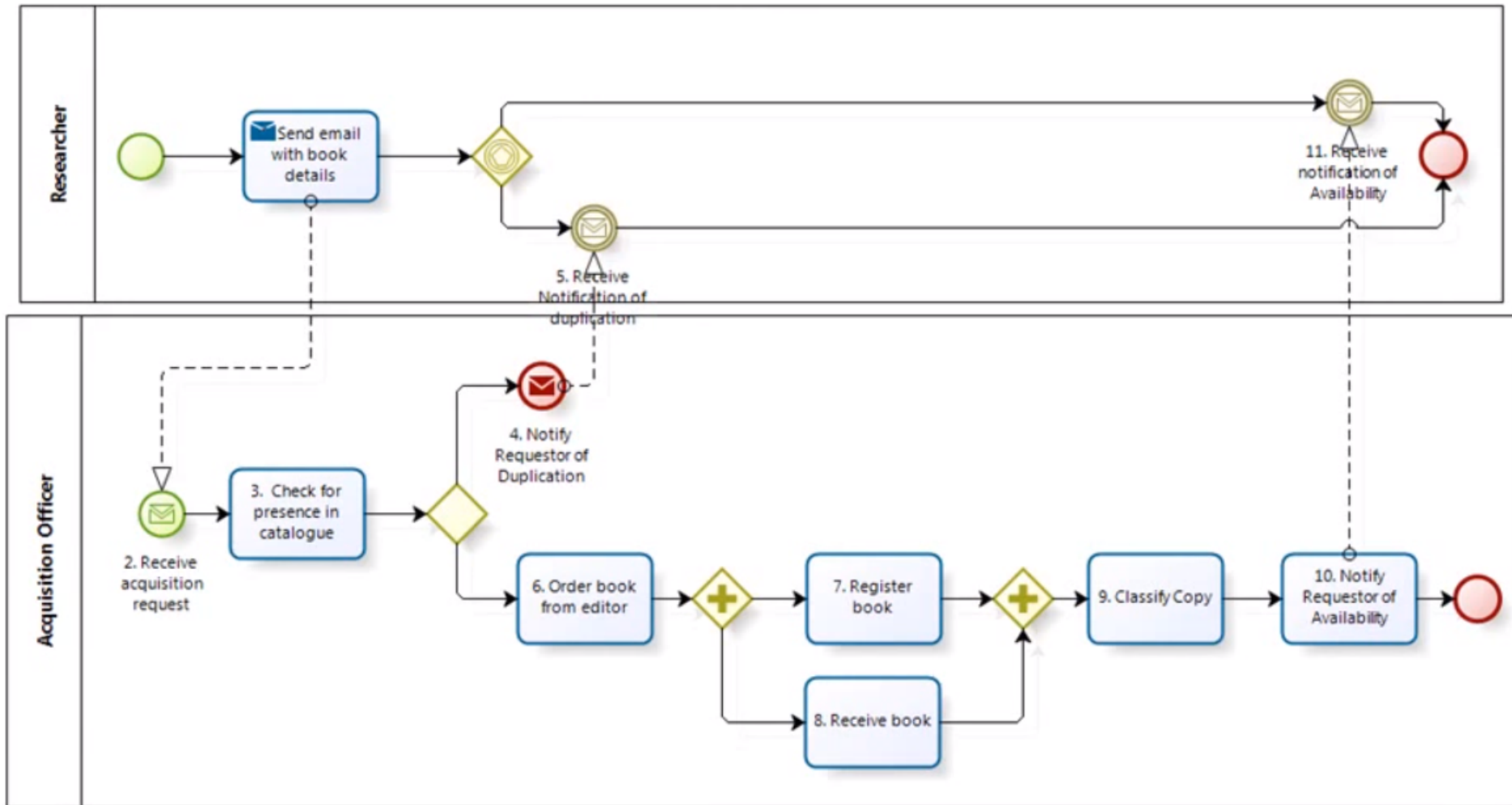
Pool: 1 for process, 1 for each external party (customer, tax authority, ...)



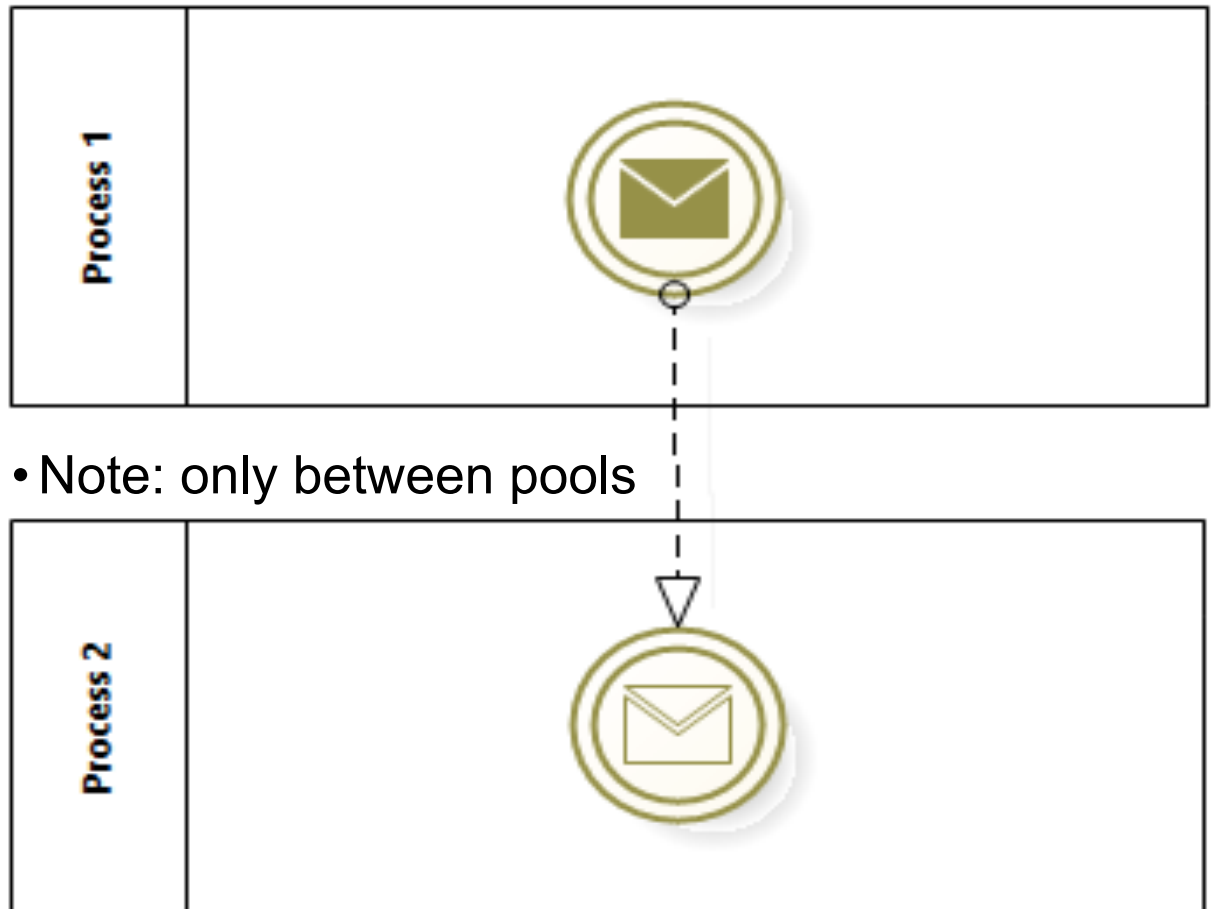
Swim Lanes: 1 for each 'actor' (function, department)



CATCH AND THROW EVENTS



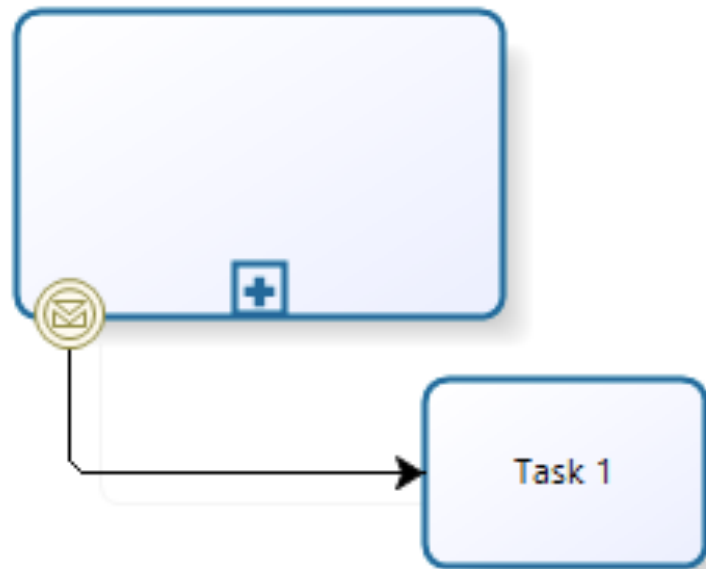
MESSAGE FLOWS



BOUNDARY EVENT

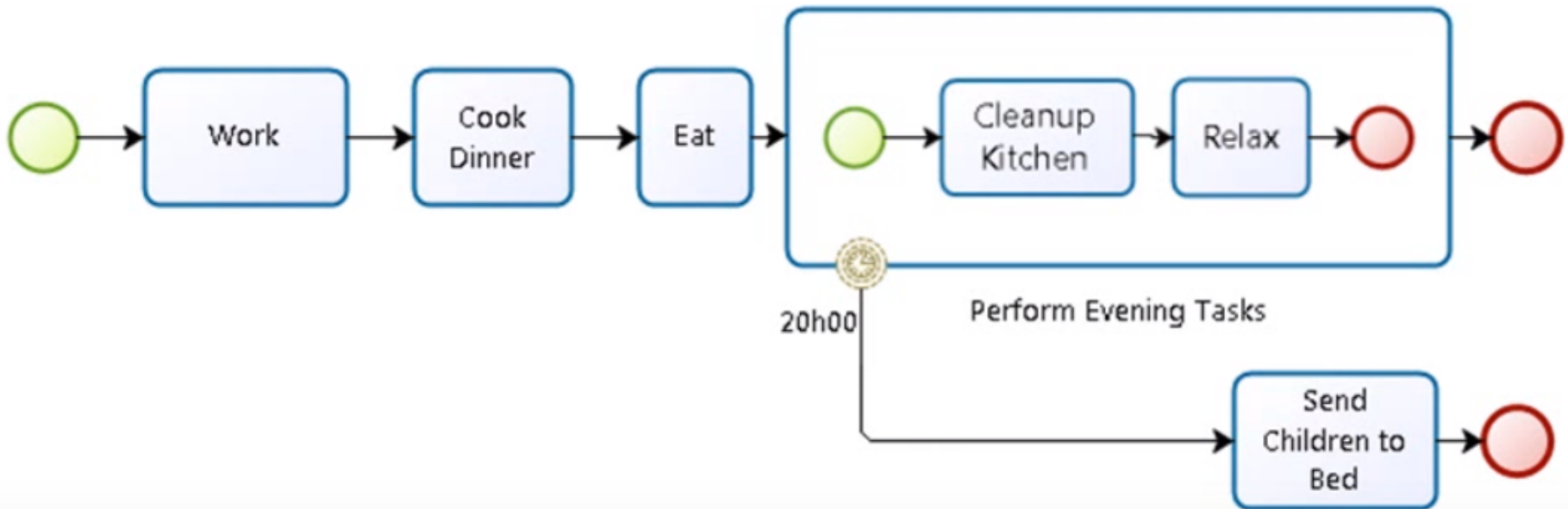
Useful if we want to influence a running task:

- Start an optional extra process
- Interrupt a running process (message, timer, error...)



BOUNDARY EVENT

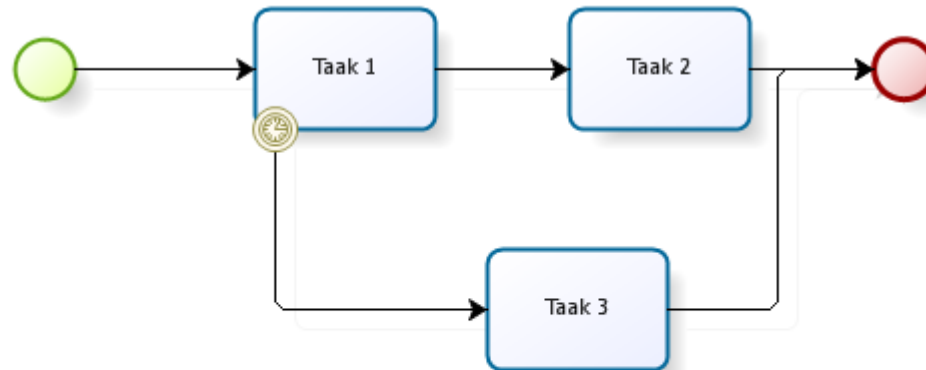
Whatever evening task is being performed,
at 20h00 the children must be sent to bed



BOUNDARY EVENT

Useful for what deviates from the 'happy path':

- Incidental additional task
- Interrupts
 - External events
 - Error handling
- ...



Is either:

- **Interrupting:** process is terminated at once
- **Non-interrupting:** process continues

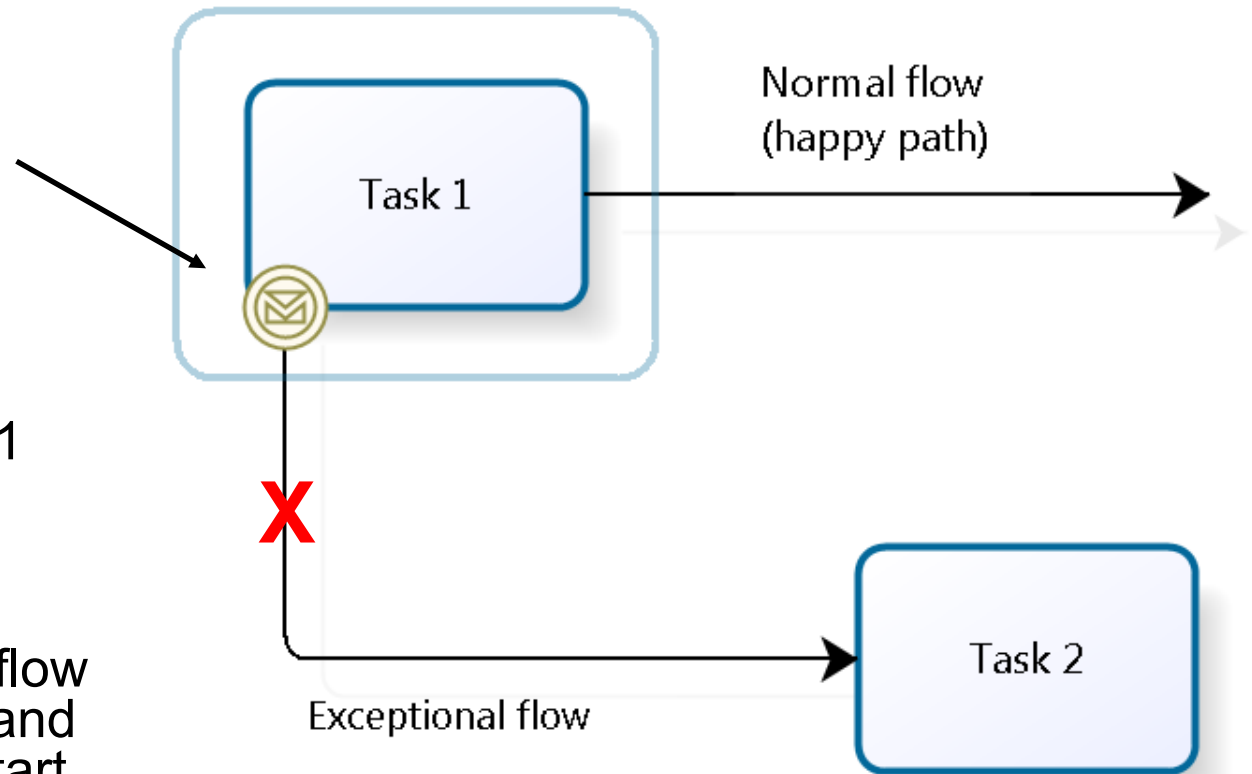
BOUNDARY EVENT

Interrupting:
boundary event
has solid lines

If no message
arrives

then when task 1
ends,
the normal flow
is followed;

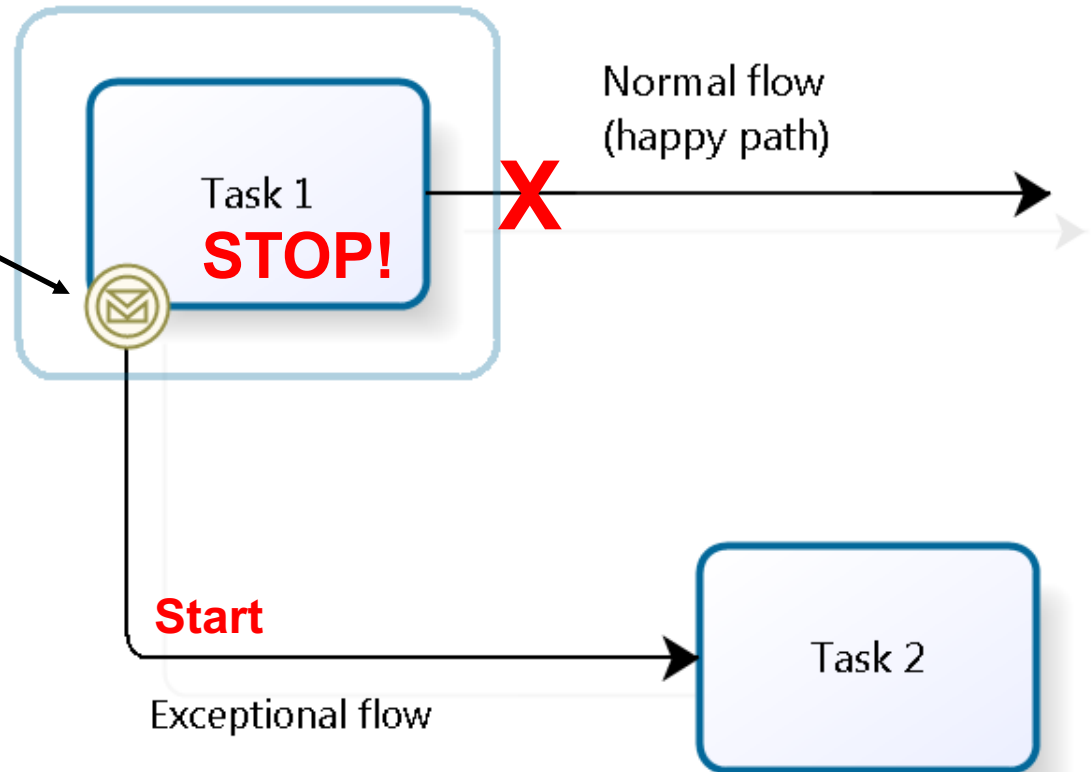
the exceptional flow
is not followed, and
task 2 doesn't start.



BOUNDARY EVENT: INTERRUPTING

Interrupting:
boundary event
has solid lines

If a message arrives
then task 1 stops,
and the normal flow
is not followed;
the exceptional flow
is followed instead,
and task 2 starts.

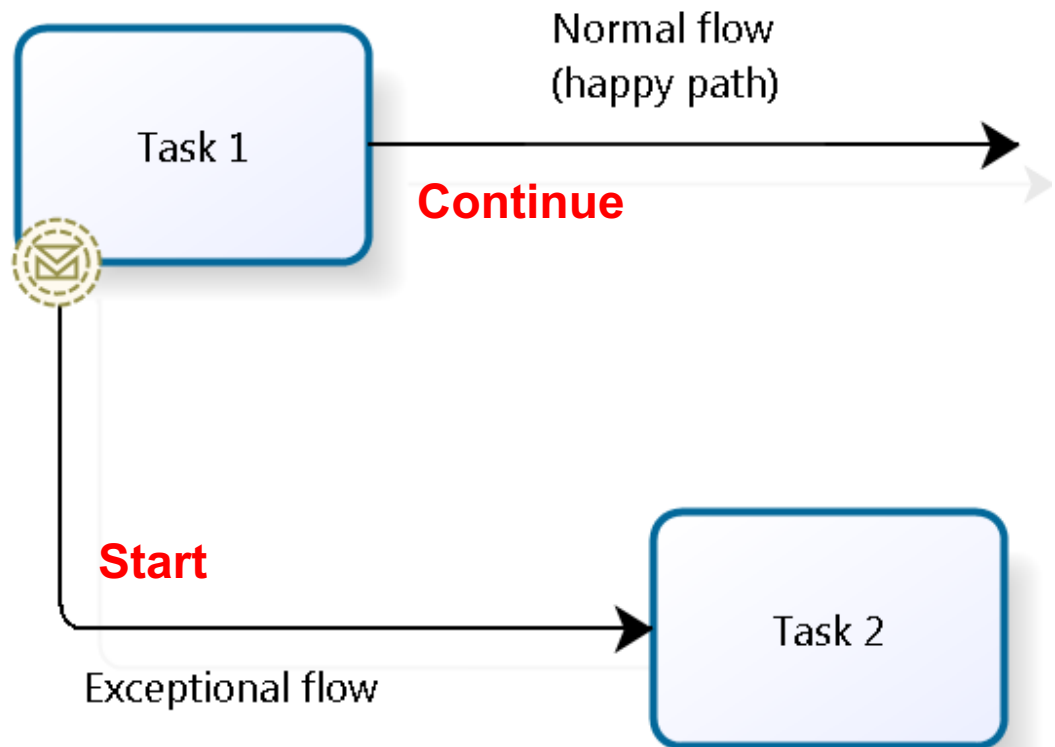


BOUNDARY EVENT: NON-INTERRUPTING

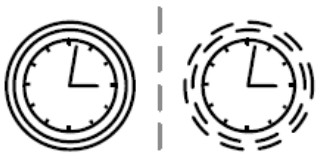
Non-interrupting:
boundary event
has dashed lines

If a message arrives
then task 1 continues,
the exceptional flow
is activated
and task 2 starts

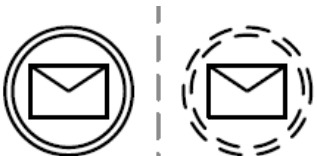
When task 1 ends,
the normal flow
is followed as well



TYPES OF BOUNDARY EVENTS



- Timer: independent of task



- Message: on boundary: only CATCH from outside task to inside



- Error: on boundary: only CATCH from inside task to outside (details inside task must specify the corresponding throw)

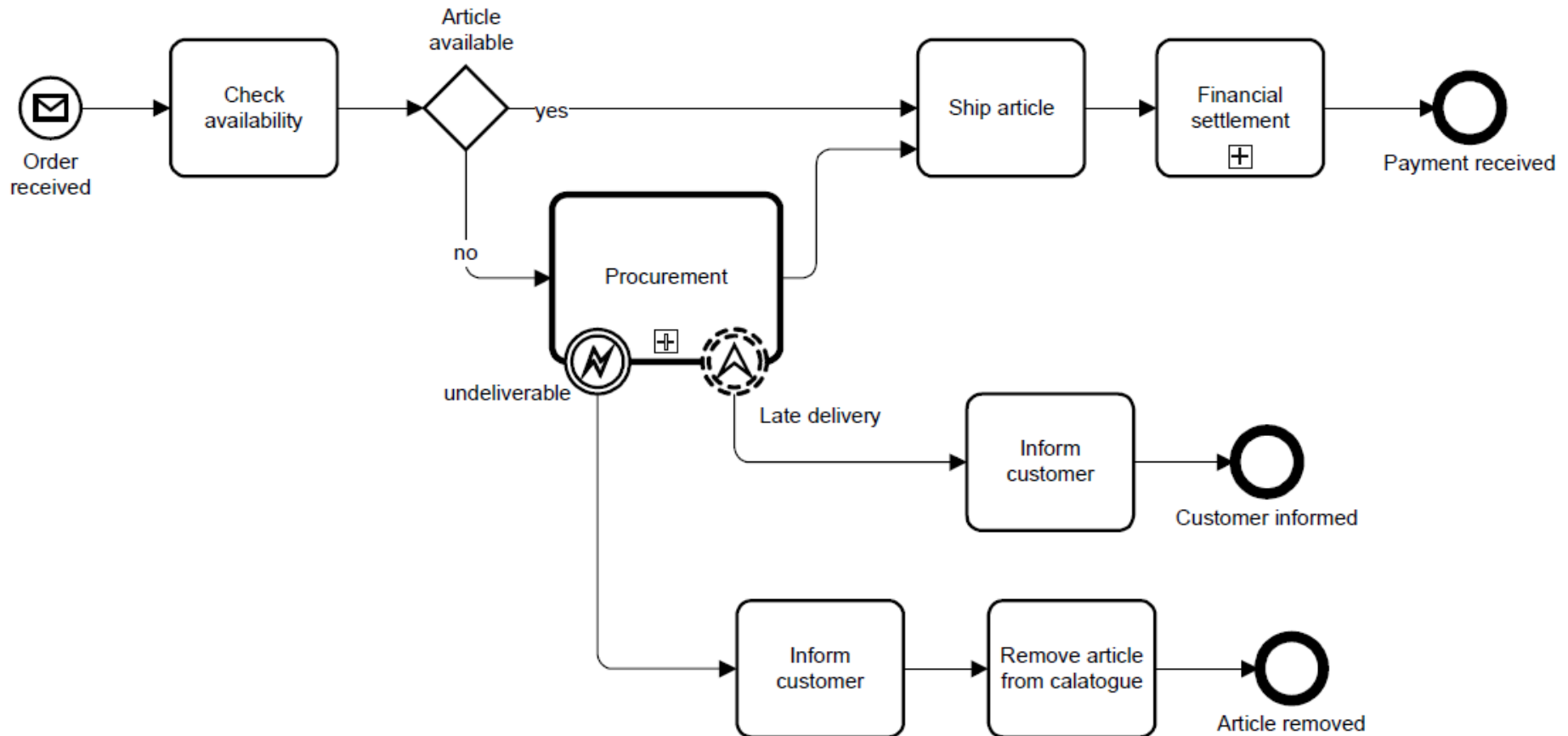


- Escalation: on boundary: only CATCH from inside task to outside (details inside task must specify the corresponding throw)

- ...

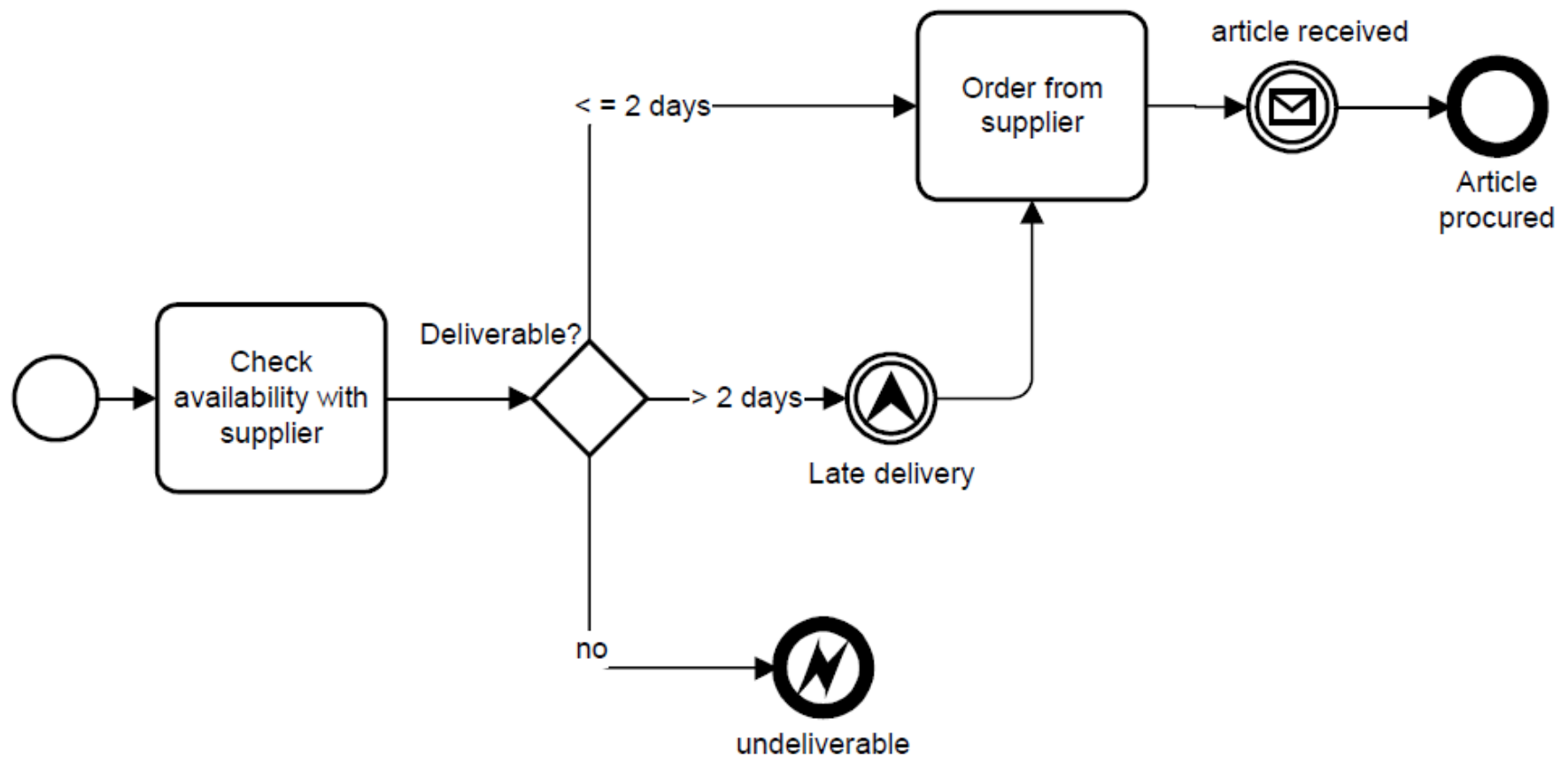
EXAMPLES BOUNDARY EVENTS

Procurement (outside) with catch boundary events



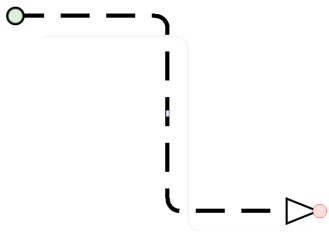
EXAMPLES BOUNDARY EVENTS

Subtask Procurement (inside) with throw events



DATA ITEMS AND FLOWS

Starting points for collecting examples of data!



- Data flow (message flow)



- Data object: volatile
(data gone when tasks complete)

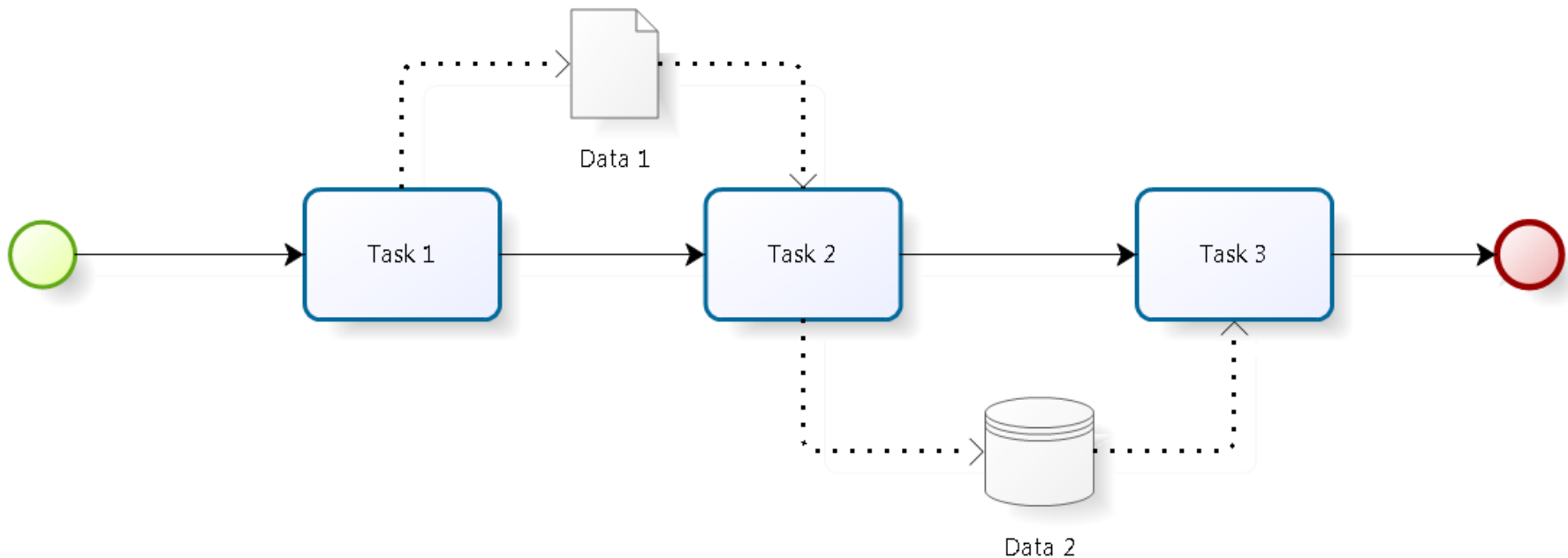


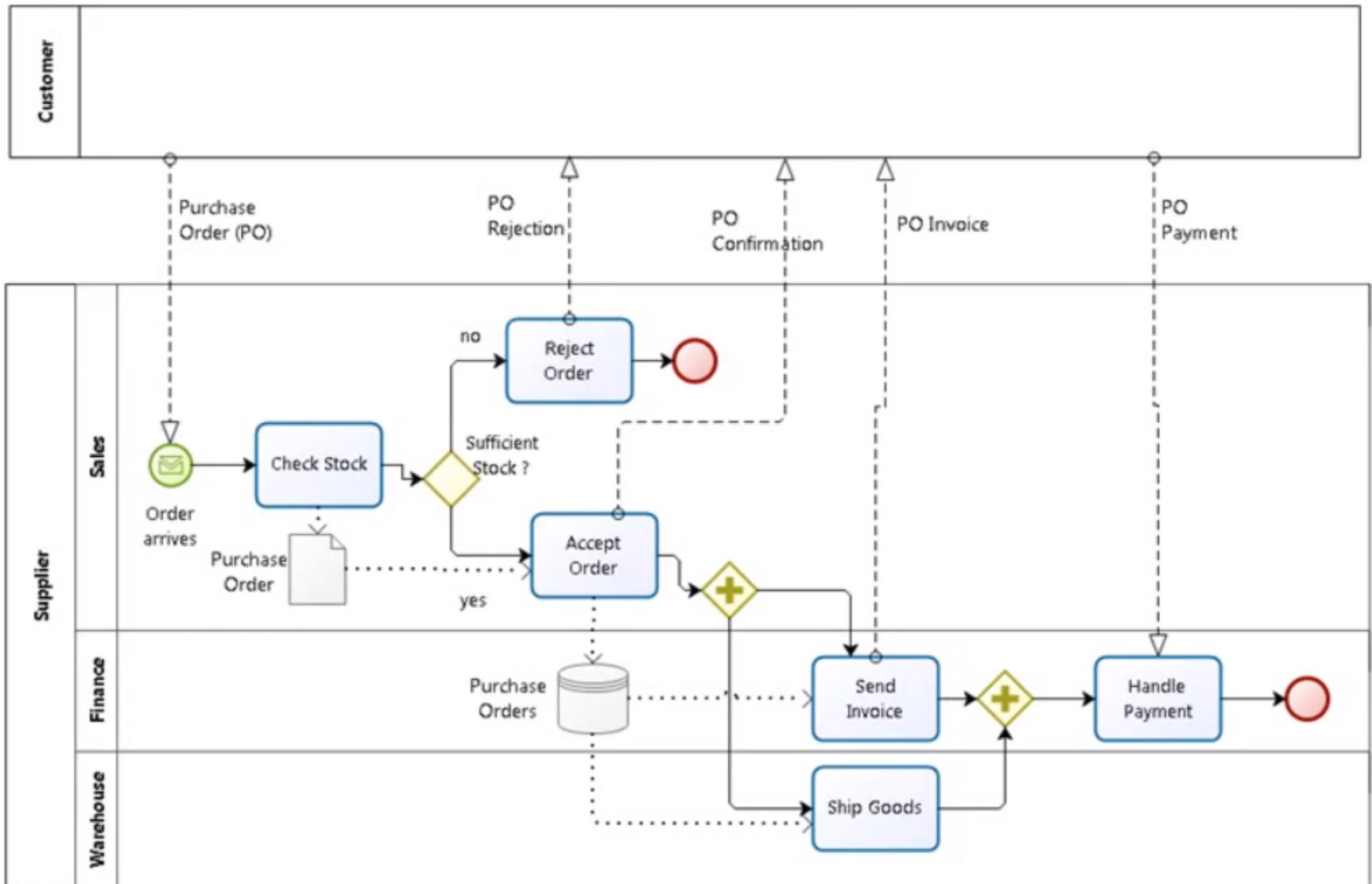
- Data store: permanent
(data still exist when task completes)

DATA ITEMS AND FLOWS

Data 1: volatile,
only passed from task 1 to task 2, then gone.

Data 2: permanent,
retained when all processes have terminated.





BPMN ADVANCED MODELING

For more details watch the following lessons:

- BPMN Advanced Activities
- BPMN Advanced Modeling - Events

<https://www.youtube.com/watch?v=cwdRNCICP5M>