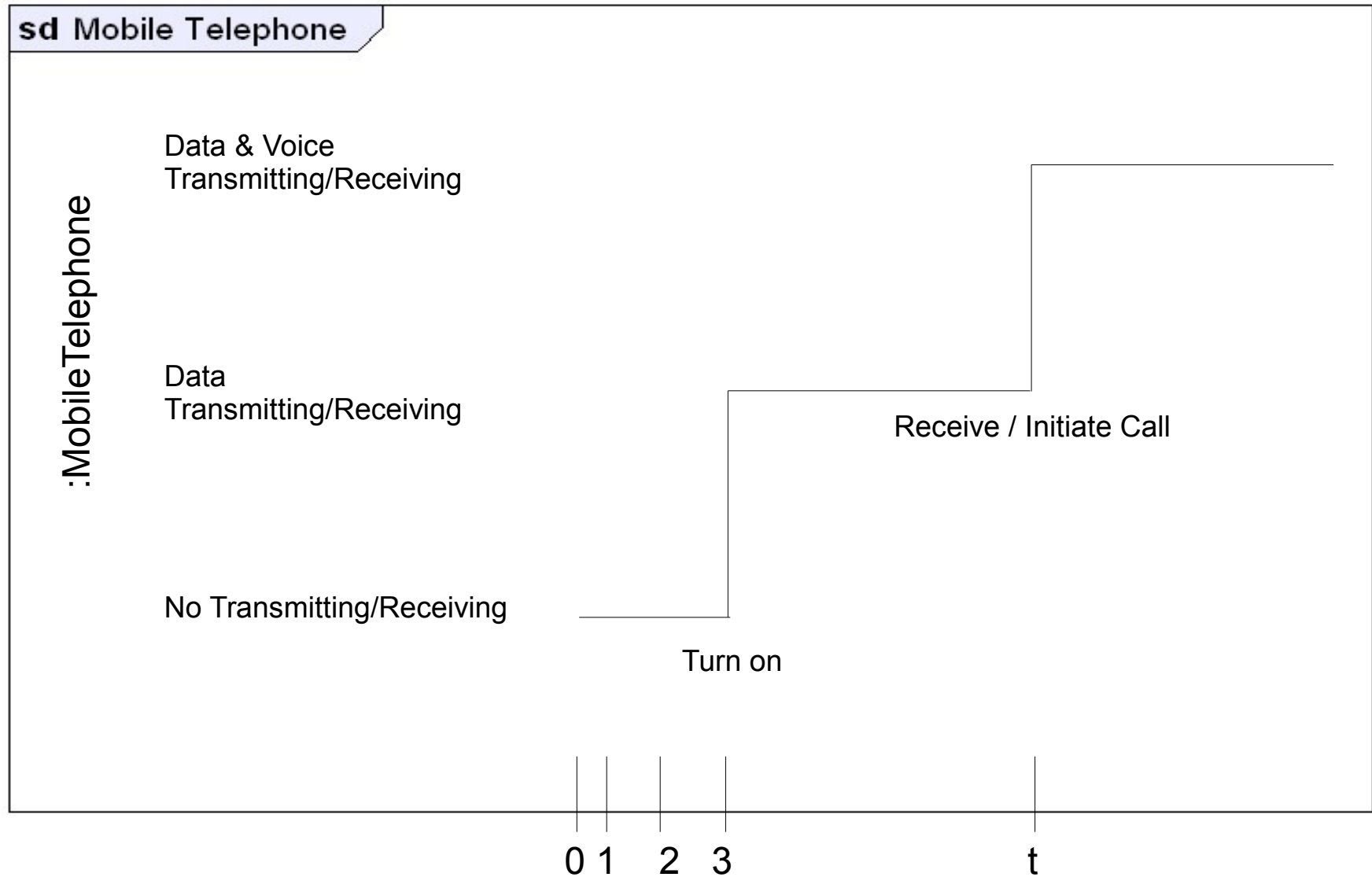


UML Timing Diagrams

Introduction

- The UML timing diagrams focus on the specific timing in which the messages are sent from one object to another and on the specific timing in which objects change their state.
- Timing diagrams are common when dealing with real time systems.

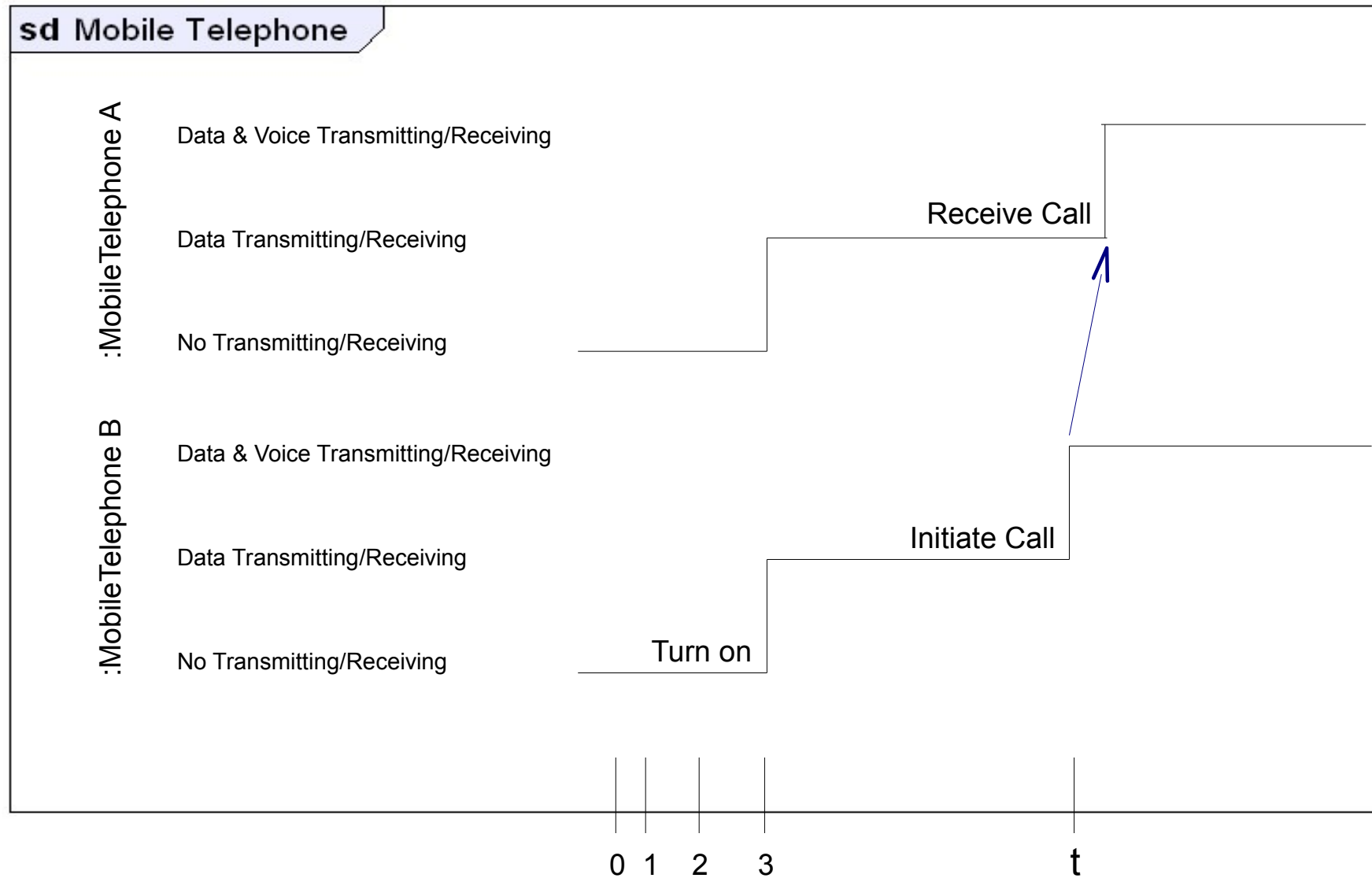
Simple Timing Diagram



More Than One Object

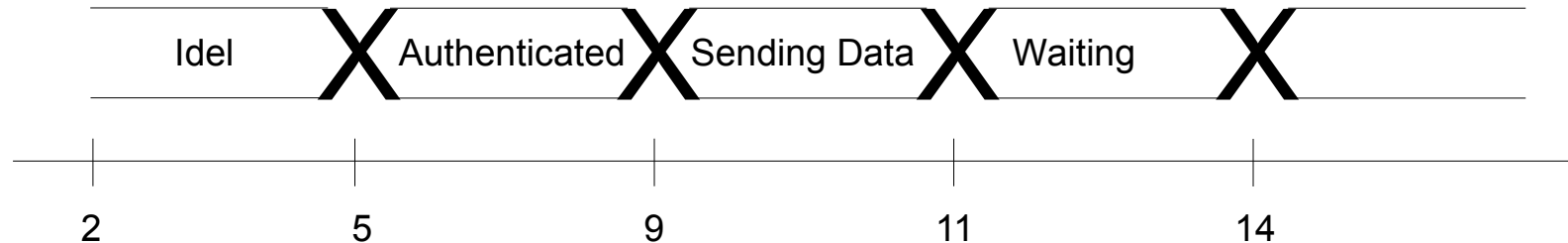
- It is possible to stack several life lines of different objects in the same timing diagram. One life line above the other.
- Messages sent from one object to another can be depicted using simple arrows. The start and the end points of each arrow indicate when each message was sent... and when it was received.

Timing Diagram Of Two Objects



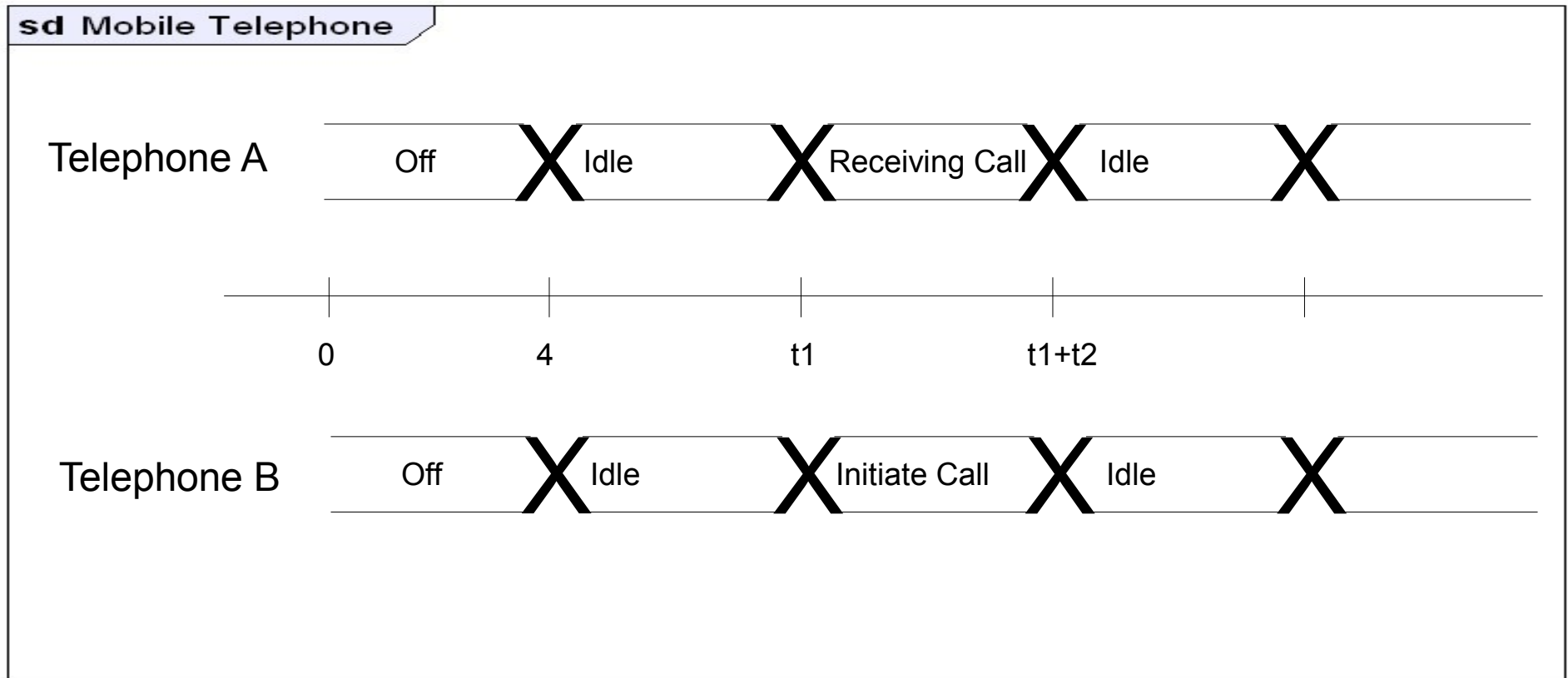
Alternative Time Line Notation

- Showing the state of the object between two horizontal lines that cross with each other each time the state changes is an alternative possibility UML allows.



- Using this alternative time line notation it is impossible to present the messages that trigger the transition from one state to another.

Alternative Time Line Notation



UML Timing Diagrams

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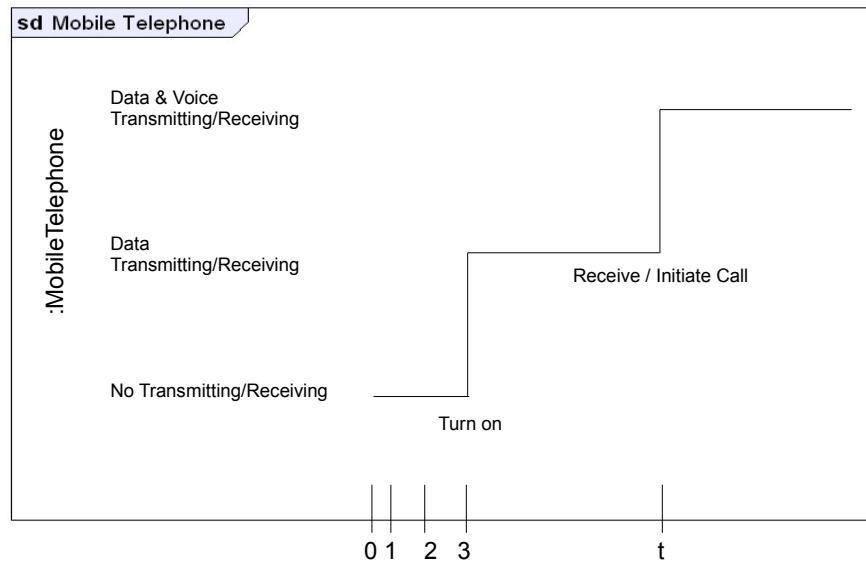
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Introduction

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Simple Timing Diagram



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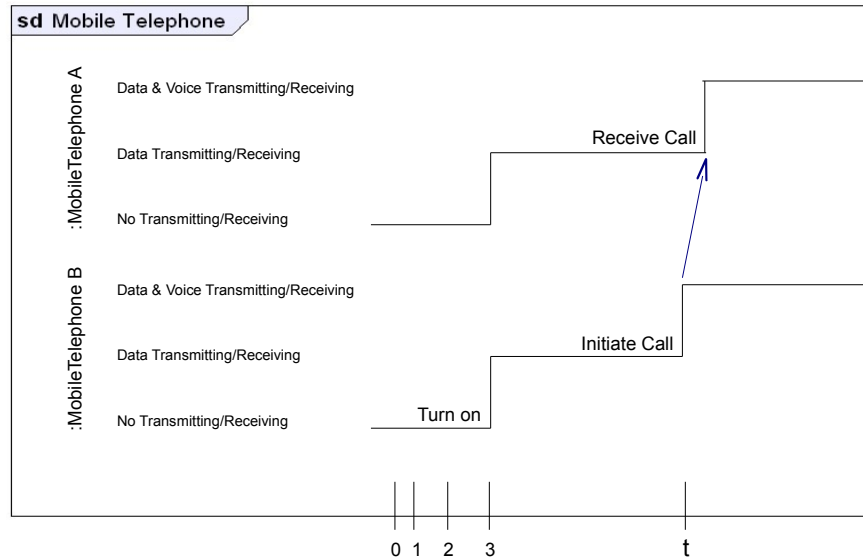
3

Using a changed length of time line it is possible to indicate how long the object remains in each one of the states (listed on the left side of the diagram).

More Than One Object

- It is possible to stack several life lines of different objects in the same timing diagram. One life line above the other.
- Messages sent from one object to another can be depicted using simple arrows. The start and the end points of each arrow indicate when each message was sent... and when it was received.

Timing Diagram Of Two Objects



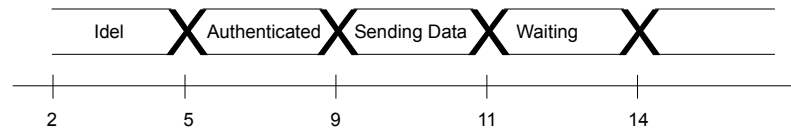
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Alternative Time Line Notation

- Showing the state of the object between two horizontal lines that cross with each other each time the state changes is an alternative possibility UML allows.



- Using this alternative time line notation it is impossible to present the messages that trigger the transition from one state to another.

Alternative Time Line Notation

