Guidelines for annotation

At each frame/scan we should mark the users by delineating a bounding box to each one. At each frame, the bounding box of a user is the minimum box that covers **every** pixel (or point for a scanner) of him/her. In some cases the bounding boxes of different users are overlapped, i.e a part of a one's user bounding box is on the top of a bounding box of another user. Moreover there are some other guidelines that indicate the state of a user and in which frame one state changes to another one:

- State "**Lie**": when the user is lied down completely, where his/her head is in the same "imaginable straight line" with his/her feet
- State "**Lie2Stand**": when it is obvious that the user gets up from the bed (ex he/she makes the move to get up) until he/she reaches the "Sit" state (i.e. he/she sits on the bed and both feet are touching on the ground)
- State "**Stand2Sit**": when the user is standing still and it is obvious that he/she starts to sit (i.e. makes the characteristic move when he/she sits)
- State "**Sit**": when a user sits on a chair/sofa
- State "**Sit2Stand**": when it is obvious that the user gets up from the chair (ex he/she makes the move to get up) until he/she reaches the maximum height of standing up (i.e he/she stands up completely)
- State "**Stand**": when the user stands up and stands still, even if he/she moves his/her body a bit or makes a step back or forth
- State "**Walk**": when it is obvious that the user starts to walk and moves around the place. The first frame for walking is the one where the user raise his/her leg, while the last one is where he/she stands still (just before putting his/her leg on the ground).
- State "**Pill Intake**": when the user takes and picks up the bottle with the pill until he/she swallows the pill and removes the bottle of his/her mouth
- State "**Watch TV**": when the user turns on the TV (from the remote control) until he/she turns it off or stops watching and starts to be in another state (i.e. he/she starts the *Sit2Stand* or *Walk* State etc)
- State "**Eat**": when the user picks up the food (with a fork or his/her hand) from the plate until he/she leaves the plate on a table or he/she changes state (i.e. he/she starts the *Sit2Stand* or *WatchTV* State etc)

PS: If there is no State "**Stand2Sit**" , then state "Sit" becomes …
State "**Sit**":: when the user is standing still and it is obvious that he/she starts to sit (i.e. makes the characteristic move when he/she sits). This state is remaining while the user sits on a chair/sofa.