```
def lstm_full(inp, dout, dstate):
with tf.name_scope('dimensionality'):
    T = len(inp)
    n = inp[0].get shape()[0]
with tf.name_scope('states'):
    state = tf.Variable(tf.zeros([n, dstate]), trainable=False)
    out = tf.Variable(tf.zeros([n, dout]), trainable=False)
for t in range(T):
    with tf.name scope('step' + str(t)):
        out, state = lstm_step(inp[t], out, state)
        state = tf.layers.batch_normalization(state)
        out = tf.layers.batch_normalization(out)
        state = tf.nn.dropout(state, keep_prob=keep_prob_)
        out = tf.nn.dropout(out, keep prob=keep prob )
return out
```