Stability issues for multi-component systems involving wave, plate or beam equations with localized damping mechanisms are examined. The operator defining the damping is degenerate. First, some of the existing results in the framework of simultaneous stabilization will be reviewed; here systems having the same damping mechanism in all equations are discussed, and exponential stability as well as unique continuation results are presented. Next, the case of indirect damping mechanisms is addressed; here, the damping mechanism occurs in only one of the components of the system and the coupling should transmit it to the undamped component(s) of the system, polynomial and exponential stability results are presented. (Received January 08, 2019)