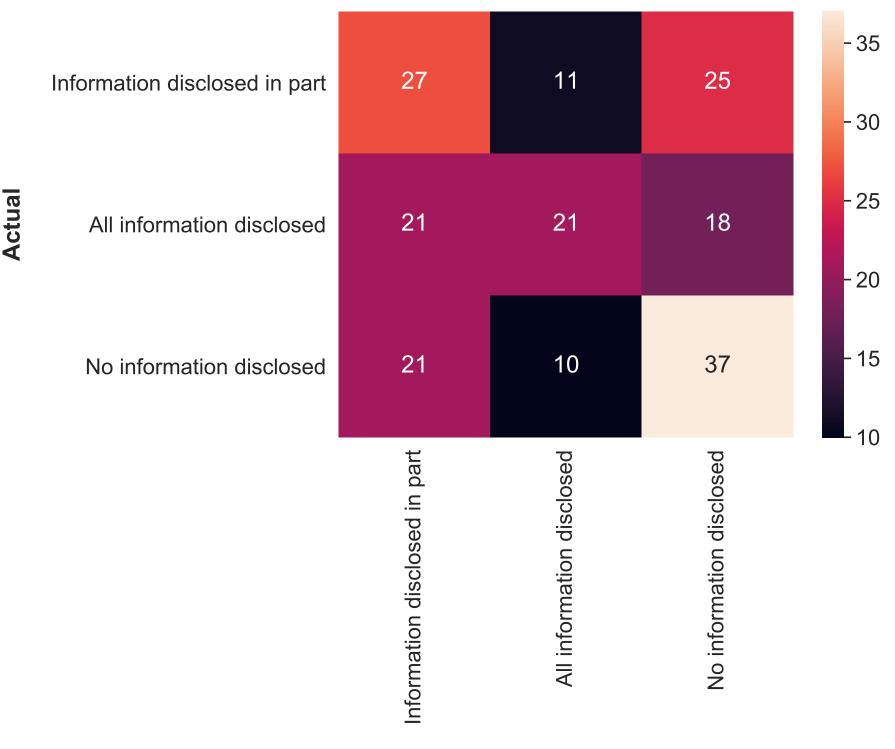LogisticRegression, tf-idf, 3 bins