

The diagram illustrates a mobile communication system with the following components and connections:

- BASE STATION (Top Section):**
 - Inputs:** TRAFFIC DATA, FROM MOBILE STATION (30) ANTENNA (38).
 - Processing:** TRAFFIC DATA is processed by a DECODER (36) and a DEMODULATOR (55). The DEMODULATOR (55) is connected to a RCVR (54) and a P.C. DECODER (100). The RCVR (54) is connected to a CONTROL PROCESSOR (58). The CONTROL PROCESSOR (58) is connected to a DATA SOURCE (60) and a P.C. DECODER (100). The DATA SOURCE (60) provides DATA to an ENCODER (62). The ENCODER (62) provides RATE to a TRAFFIC MODULATOR (63). The TRAFFIC MODULATOR (63) is connected to a TMTR (64). The PILOT MODULATOR (65) is also connected to the TMTR (64).
 - Outputs:** The TMTR (64) outputs TO BASE STATION ANTENNA (50) and TO MOBILE STATION (30) ANTENNA (38).
- MOBILE STATION (Bottom Section):**
 - Inputs:** FROM BASE STATION ANTENNA (50), FROM BASE STATION ANTENNA (58).
 - Processing:** The FROM BASE STATION ANTENNA (58) is connected to a D (39). The D (39) is connected to a TMTR (36). The TMTR (36) is connected to a MODULATOR (35). The MODULATOR (35) is connected to an ENCODER (34). The ENCODER (34) is connected to a DATA SOURCE (32). The DATA SOURCE (32) is connected to a P.C. ENCODER (47). The P.C. ENCODER (47) is connected to a CONTROL PROCESSOR (46). The CONTROL PROCESSOR (46) is connected to a RCVR (42). The RCVR (42) is connected to a TRAFFIC DEMODULATOR (43). The TRAFFIC DEMODULATOR (43) is connected to a DECODER (44). The PILOT DEMODULATOR (45) is also connected to the TRAFFIC DEMODULATOR (43).
 - Outputs:** The DECODER (44) outputs TO USER. The CONTROL PROCESSOR (46) outputs SPEED and LOCATION.