**CLAIMS**

1. Method for transmitting an SMS message from an airplane, the method comprising the steps of:
- emulating an interface of a cell phone net with a base transceiver station on board of an airplane,
- receiving an SMS message from a passenger's mobile terminal unit,
- processing the SMS message, the processing comprising using the passenger's mobile terminal unit number to look up a passenger identifier in a dynamic lookup table, and replacing the header of the SMS message with a data header, the data header comprising a passenger identifier,
- sending the processed SMS message to a satellite of a satellite network,
- receiving the processed SMS message from the provider of the satellite network,
- using the passenger identifier to look up the passenger's mobile terminal unit number,
- forming an SMS header which comprises the passenger's mobile terminal unit number,
- forming an SMS message from the SMS header and the processed SMS message, and
- sending the SMS message to an addressee.

2. Method for transmitting an SMS message to an airplane, the method comprising the steps of:
- emulating an interface of a cell phone net with a base station controller,
- receiving an SMS message which is addressed to a passenger's mobile terminal unit,

- processing the SMS message, the processing comprising using the passenger's mobile terminal unit number to look up a passenger identifier in a dynamic lookup table, and replacing the header of the SMS message with a data header, the data header comprising a passenger identifier,
- sending the processed SMS message to a provider of a satellite network,
- receiving the processed SMS message from a satellite of the satellite network,
- using the passenger identifier to look up the passenger's mobile terminal unit number,
- forming an SMS header which comprises the passenger's mobile terminal unit number,
- forming an SMS message from the SMS header and the processed SMS message, and
- sending the SMS message to the passenger's mobile terminal unit.

3. Method for transmitting an SMS message from an airplane according to claim 1, the method furthermore comprising
- collecting processed SMS messages of passengers and
- after a predetermined time, sending the SMS messages in data bursts of a short burst data service.

4. Method for transmitting an SMS message from an airplane according to claim 1, the processing furthermore comprising
- identifying an SMS message as message template,
- replacing the SMS message by a template code, if data fields are present, and
- inserting the values of the data fields.

5. Method for transmitting an SMS message from an airplane according to claim 1, further comprising
before the airplane starts a new flight, synchronizing the dynamic lookup table at the airplane with a dynamic lookup table at the ground.

6. Method for transmitting an SMS message from an airplane according to claim 5, the synchronization of the lookup tables further comprising
- receiving passenger related data from an airline office,
- generating the dynamic lookup table at the ground using the passenger related data.

7. Method for transmitting an SMS message from an airplane according to claim 1, wherein
the dynamic lookup tables comprise an entry with a passenger ID and the passenger's mobile terminal unit number.

8. Method for transmitting an SMS message from an airplane according to claim 1, wherein
the dynamic lookup tables comprise an entry with a passenger ID and a link to further passenger related data.