NAME
         sendmmsg – send multiple messages on a socket

SYNOPSIS
         #define _GNU_SOURCE
         #include <sys/socket.h>

         int sendmmsg(int *sockfd***, struct mmsghdr ****msgvec***, unsigned int** *vlen***,**
                 unsigned int *flags***);**

DESCRIPTION
         The **sendmmsg**() system call is an extension of **sendmsg**(2) that allows the caller to transmit multiple mes-
         sages on a socket using a single system call. (This has performance benefits for some applications.)

         The *sockfd* argument is the file descriptor of the socket on which data is to be transmitted.

         The *msgvec* argument is a pointer to an array of *mmsghdr* structures. The size of this array is specified in
         vlen.

         The *mmsghdr* structure is defined in *<sys/socket.h>* as:

                 struct mmsghdr {
                     struct msghdr msg_hdr; /* Message header */
                     unsigned int msg_len; /* Number of bytes transmitted */
                 };

         The *msg_hdr* field is a *msghdr* structure, as described in **sendmsg**(2). The *msg_len* field is used to return
         the number of bytes sent from the message in *msg_hdr* (i.e., the same as the return value from a single
         sendmsg(2) call).

         The *flags* argument contains flags ORed together. The flags are the same as for **sendmsg**(2).

         A blocking **sendmmsg**() call blocks until *vlen* messages have been sent. A nonblocking call sends as many
         messages as possible (up to the limit specified by *vlen*) and returns immediately.

         On return from **sendmmsg**(), the *msg_len* fields of successive elements of *msgvec* are updated to contain
         the number of bytes transmitted from the corresponding *msg_hdr*. The return value of the call indicates the
         number of elements of *msgvec* that have been updated.

RETURN VALUE
         On success, **sendmmsg**() returns the number of messages sent from *msgvec*; if this is less than *vlen*, the
         caller can retry with a further **sendmmsg**() call to send the remaining messages.

         On error, −1 is returned, and *errno* is set to indicate the error.

ERRORS
         Errors are as for **sendmsg**(2). An error is returned only if no datagrams could be sent.

VERSIONS
         The **sendmmsg**() system call was added in Linux 3.0. Support in glibc was added in version 2.14.

CONFORMING TO
         sendmmsg() is Linux-specific.

NOTES
         The value specified in *vlen* is capped to **UIO_MAXIOV** (1024).

SEE ALSO
         recvmmsg(2), **sendmsg**(2), **socket**(2), **socket**(7)