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Inmarsat C–Email

from Universat

User Guide

September 2015

inmarsat Bronze SERVICE PROVIDER

STRATOS an Inmarsat company CERTIFIED PARTNER

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1.0 General Information

1.1 What is C-Mail?

The C-email service of Inmarsat allows Inmarsat-C users to send and receive e-mail messages. After registration at Inmarsat, land based Internet email users can send messages to mobile C terminals while vessels can send to any email address without the need for registration.

Note: The C-email service can be used in combination with other Inmarsat services: *Data Reporting and Polling, FleetNet, and SafetyNET*. For more information, contact the Customer.Services@universat.it.

1.2 About this Manual

This manual explains the following:

- How to send e-mail messages from Inmarsat-C terminals to Internet email
- How to send e-mail messages from Internet email to Inmarsat-C terminals
- How to handle (optional) attachments

Note: Sending attachments is not a standard feature.

1.3 About C-email

Inmarsat C-email links the Inmarsat C satellite network to the Internet. Emails originating from email addresses that are registered in the Inmarsat gateway will be authenticated and forwarded. Messages of non-registered Internet users will be rejected. Inmarsat-C terminals are allowed to send and receive e-mail without prior registration.

Inmarsat-C users can send email messages to any Internet address; registration is not necessary. Send the message via Special Access Code **EMAIL** or **28** on LES X12 or X02, where X is the Ocean region:

- AORW 0
- AORE 1
- POR 2
- IOR 3

Email users can send messages to any Inmarsat-C terminal by sending to: 4xxxxxxxx@c12.stratosmobile.net on LES 12, or 4xxxxxxxx@stratostmobile.net on LES 02, where 4xxxxxxxx is the 9-digit Inmarsat-C Mobile Number. **Prior registration at Inmarsat is required!**

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2.0 Things to know before you use C-email

2.1 Registration

Internet users wishing to send email from the Internet to Inmarsat-C must first register for the service by completing the application for C-email. Existing Inmarsat Sat-C customers can also request Universat to activate this optional service. You can register your email address specifically for C-email or you can request an Inmarsat-C **Registered Username**, allowing you to send from any email address.

C-terminal users have access to C-email without prior registration. Mobile terminal users should remember that only Internet users who are registered for the Inmarsat C-email service can reply to their messages.

2.2 Billing and Accounting

Registered land-based Internet users will be billed directly for all their C-email traffic. Each bill is based on the message records of the registered email address or registered username in the gateway. If a company has registered more Internet addresses, a bill will be generated for each address.

For C-terminal owners, billing of C-email traffic originating from mobiles is executed in the normal way; either via the **accounting authority**, or via **direct billing**.

2.3 Charges

Charges for email messages via the C-email service are in blocks of 256 bits or 32 bytes, where one byte (in 8-bit transparent data mode) is one character, carriage return, space, or line feed.

Messages from Mobile will be charged based on the size of the message originally sent by the mobile. The original size will depend on the alphabet used by the mobile: ITA-2-Telex (5-bits), IA5-ASCII (7-bits), or Transparent Data (8-bits).

Messages to mobile will be charged based on the size of the original message plus the LES header in case of sending the message in 5- or 7-bits. The LES header is not added for messages sent to mobile in 8-bit, and therefore, not charged.

Multiple Addresses - A message from mobile addressed to multiple Internet email addresses will be charged only once. A message from an Internet email address to multiple mobile destinations will be charged as many times as the number of mobiles addressed.

2.4 Software

For land-based Internet users, no additional or dedicated software is required for access to C-email. Also, Inmarsat-C terminals may use the existing text editor provided by the terminal manufacturer.

2.5 Plain Text Format

In many email programs, HTML (or Rich Text Format) is the standard for formatting email messages. The HTML or Rich Text Format allows the sender to use all kind of layout features, to add pictures, change the font size, alignment, etc. However; this layout information will increase the size of the message considerably and consequently increase the cost.

The C-email gateway will strip HTML before sending the message to the mobile terminal to avoid unnecessary costs. Because all layout information will be stripped off and the email message will arrive at the C-terminal in Plain Text Format, it is recommended to create them in Plain Text Format from the start.

To create email messages in Plain Text Format, consult the 'Help' function of your email program. Further, to minimize the size of your message, try to avoid email services that add unnecessary information to your messages such as company related legal statements or advertisements.

2.6 Maximum Size of an Email Message

Ensure the total size of an email message does not exceed the maximum size of 32,000 bytes for a standard Inmarsat-C terminal. This is a generic technical limitation of the Inmarsat-C network and is the maximum size that can be transmitted using a standard Inmarsat-C terminal. The maximum message size for a mini-C terminal is 10,000 bytes. Larger messages will not be transmitted. When this occurs in the 'to mobile' direction, Inmarsat will send a negative delivery notification to the email originator.

To assist in the potential transmission of large messages in error, Inmarsat offers the option to limit the maximum message size that can be sent from a specific email address, domain, or registered user name. This option is selected at time of registration. The *default* value is 32,000 bytes.

2.7 Attachments

In the event of specific application, Inmarsat offers the possibility to send attached files in your email messages to mobiles. However, use caution, since attachments such as Word or Word Perfect documents, Excel, or graphic files can be quite large in size. Charges are 256 bits (= 32bytes), so to avoid high communication costs, check the size of the attachment before you decide to send one. It is recommended that attachments only be enabled for specific proprietary applications.

In the ship to shore direction, if the terminal selects 8-bit or data mode for transmission, the text message will arrive at the email destination as an attachment to the email. Most customers select 7-bit transmission from their terminal software options such that the text simply arrives in the body of the message.

2.8 Spam and Viruses

The Inmarsat Internet environment has been equipped with spam and virus filters such that they will not be sent to the mobiles or to Internet addresses.

Some viruses, worms, and spam will cause a message to be sent or copied to all addresses in the address book of the sender. If that happens, and a message is unwillingly sent to Inmarsat -C mobiles, Inmarsat cannot distinguish whether or not the sender meant to send a message to a mobile.

In every case, and in the last case in particular, the originator of the message is responsible for its own virus protection. Universat and Inmarsat will not refund costs made by the sender due to extra text or attachments added by viruses / worms / spam or other programs that cannot be detected as a virus themselves. The best protection to avoid unwilling attachments to be sent to mobiles is not to activate the '**send attachment**' option as explained in the previous section.

2.8.1 Virus detected at the Inmarsat Internet Server

The Inmarsat Internet server will scan every message coming into Inmarsat platform(s). The scan applies to messages addressed to Inmarsat C-email service, as well as other Inmarsat services. Inmarsat will use best practices to eliminate the virus from the incoming message. If the message can be *repaired* (i.e., the virus is eliminated without destroying the original message), the repaired message will be sent to the destination. Inmarsat will add a warning to the message indicating that a virus was detected and eliminated. The receiver will be advised to inform the sender of the virus. If the message could not be repaired, the destination will receive a message saying that the originator tried to send a message which was aborted due to a virus. Similarly to the previous case, the receiver will be advised to contact the originator to inform them of the virus.

The *sender* does not receive a notification on virus detection. The reception of a **Positive Delivery Notification** does not imply that the message was finally delivered as originally sent. Content eliminated while eliminating the virus will not be invoiced to the originating cause of the virus. The originator will pay for the extra 'warning' text.

2.9 Economic Use of the C-email Service

As mentioned in the previous sections, the best way to keep satellite costs to a minimum is to send email in Plain Text Format. Caution is also required for using the *reply* function that on many email packages sends back not just the response to a message but the original message as well. Avoid unnecessary satellite costs by ensuring the original message text is deleted before sending the reply message.

3.0 Messages from Inmarsat-C to the Internet

Every activated Inmarsat-C terminal is authorized to send messages to any Internet email address. Registration of mobile terminals for C-email is not necessary.

3.1 How to send an email message

Create your message with the text editor in your terminal software. The keywords TO, CC, and SU start at the left-hand side of a line. Like the addresses, they may contain upper and lower case characters. A colon (:) follows the keywords. The keyword Subject may be abbreviated to SU.

3.1.1 How to create an email message:

1. Type **TO:** followed by the email address on the first line.
2. Leave a blank line and continue with the message text.

EXAMPLE: TO: customer.support@universatitalia.it

Message text goes here.

3.1.2 For multiple addresses

To send a message to more than one addressee, refer to the following example:

TO: customer.support@universatitalia.it
TO: sales@universatitalia.it
TO: info@universatitalia.it

Message text goes here.

3.1.3 Using the CC (carbon copy) command

To send a message and *copy* others, refer to the following example:

TO: customer.support@universatitalia.it
CC: sales@universatitalia.it
CC: info@universatitalia.it

Message text goes here.

3.1.4 Using the SU (subject) command

To send a message using the **SU c**ommand, refer to the following example:

TO: customer.support@universatitalia.it
CC: sales@universatitalia.it
CC: info@universatitalia.it
SU: Inmarsat Test Message

Message text goes here.

3.1.5 Other ways of Multi-Addressing

Rather than entering different **TO:** and **CC:** commands, more addresses can be specified as shown in the following examples:

TO: customer.support@universatitalia.it**;** sales@universatitalia.it; info@universatitalia.it
SU: Inmarsat Test Message

Message text goes here.

Note: Multiple addresses are separated with semi-colons (;). Addresses should not be truncated. For more addresses, start a new line only after the semi-colon (;). One space after: or; is allowed, but not required.

3.2 Sending an email in 5-Bits

The ITA-2 Telex (5 -bits) alphabet does not contain characters usually present in email addresses such as @ (at sign), _ (underscore), etc.

In order to send an email in 5-bits mode, Inmarsat has developed a special convention that can be used with *all terminals that are able to send messages to SAC codes using 5-bits presentation.* For example, the JRC mobile model JUE75C is not able to select 5-bits mode when addressing a message to a SAC code. In order to know whether or not your terminal can send messages in 5-bits mode to a SAC code, consult the manual provided by the terminal manufacturer.

To send emails in 5-bits format from any mobile, users are requested to replace the special characters not available in the ITA-2 alphabet by a combination of characters that can be processed by the Inmarsat platform.

Refer to the following table which contains the combination of characters to be used in case of the special characters:

Special Character	Description	Use this combination at the mobile in place of the special character
@	At sign	(a)
%	Percent sign	(p)
|	Vertical bar	(b)
_	Underscore	(u)

No other special characters are allowed in the address fields, and these special characters are not allowed in the subject field. If the above characters appear in the body text, they will not be translated into the special characters when the message is delivered to an Internet email address.

Examples:

To send an email to:

john_smith@yahoo.com

Replace with:

John(u)smith(a)yahoo.com

The Internet gateway will translate the address to the correct email format.

3.2.1 Mandatory Rules for email from Mobile in 5-bits

1. All special characters work only as such: (a) is translated into @ when you send your message in 5-bits. Do not use them when working in 7- or 8-bits!
2. Leave an empty line between the header (address with or without subject) and the body text (this is done by pressing **Enter**).
3. As the semi colon (;) is not a 5-bit character, you must use a comma (,) to separate addresses in the fields **TO:** and **CC:**
4. In the fields **TO:** and **CC:** you may use a space or a new line immediately before or after the separation character; in this case (,) between addresses.

Refer to the following examples:

Example:

Email to john_smith@yahoo.com, to w.williams@yahoo.com, and to s.mes@hotmail.com with a CC: to spare_parts@domain.com to be sent in 5-bits.

Type the following:

TO: john(u)smith(a)yahoo.com, w.williams(a)yahoo.com, s.mes(a)hotmail.com

CC: spare(u)parts(a)domain.com

Possible Errors and Consequences:

If you forget to include part of the 'special character' (e.g., you type **(a** instead of **(a)**, or **()** instead of **(u)**, etc.), in the **TO:** or **CC:** fields, the Inmarsat-C platform *will not recognize* the remaining addresses following the error. It will also ignore the addresses following the one where the mistake was made. Our platform will still send the message to the Internet but as being sent by …@relay1.station12.com or …@relay2.station12.com.

As this is a non-existent address, the mobile will receive a **Negative Delivery Notification** (NDN) indicating the email could not be delivered to this nonexistent address. In this case, send your message again and ensure the address is input correctly.

3.3 Transmission of the Message from a C-Terminal

After an email message has been created on your Inmarsat-C terminal, send it to Inmarsat Special Access Code (SAC) **28** or **EMAIL**. Both SAC codes are available for Inmarsat LES IDx x12 and x02 all ocean regions.

Your message will arrive at the destination address by being sent by:

4xxxxxxxx@c.stratosmobile.net when you use LES id 12 or

4xxxxxxxx@stratosmobile.net when you use LES id02 4xxxxxxxx

is your 9-digit Inmarsat-C mobile number.

If an Inmarsat-C confirmation is requested, confirmation **OK** status only indicates that your message was forwarded to the Internet. This does not indicate the message was successfully delivered via the Internet to the recipient. Even if the message is delivered to the mail-server, it is uncertain if the addressee has checked their mailbox for new mail.

3.4 Creating a new Address

The following example refers to Thrane & Thrane Capsat mobiles. Refer to your terminal's manual if you use a different Inmarsat-C terminal. Additional instruction sheets are also available on our website.

1. Go to **APPLICATIONS**.
2. Select **ADDRESSBOOK**.
3. Select **NEW**.
4. Give name: **EMAIL** (or any other name you would like to use)
5. Enter special access code: **EMAIL** (or **28**).
6. Select type: **SPECIAL**.
7. Select presentation: **5-**, **7-**, or **8-bits**.

Note: If you select 8-bit format, messages will be received at the shore side as text attachments. This may be desirable for some customers using specific applications to receive emails; however most customers simply select 7-bit to receive the text as normal email in the body of the message.

If your Inmarsat-C terminal is unable to accept alphanumeric Special Access Codes, you can use code **28** rather than **EMAIL**.

3.5 Delivery Notifications for Messages from Inmarsat-C

3.5.1 Positive Delivery Notification (PDN)

Asking for a Positive Delivery Notification (PDN) is of little value and the use of it is discouraged for the following reason:

Sending a **Request Confirmation** will cause Inmarsat to return a PDN as soon as the C-email service has successfully forwarded the message to the Internet. The status of the message at the log-book of the mobile will change from ' **Delivered to LES**' to '**Delivered to end-user**'. However, this does not imply that the message was successfully delivered via the Internet to its final destination. The message could still fail if for example, the recipient email address is incorrect or if their mailbox is full.

Positive delivery notifications are optional for the Inmarsat-C services. You can request this functionality when sending a message.

3.5.2 PDNs associated to a "Collective Message"

A **collective message** is one message which is sent to several addresses.

If you send an email to several addresses, Inmarsat C-email service will copy your message into individual messages (one per address) before sending them to the final email destination(s). If you have requested a PDN for this message, the Inmarsat C-email service will generate a PDN per each email address. Each PDN will be sent to your mobile. However, your mobile will only change the status of the message once. It will not change the status '**delivery successful'** unless an NDN arrives (FYI: All Land Earth Stations (LES) using a Thrane & Thrane Internet gateway behave in this way). This means that your mobile will be charged for only one message and with as many PDNs as addresses included in the message header.

Note: JRC terminals sending collective messages will behave differently from other mobiles. The status of a message sent from a JRC mobile to only one email address will change from '**Delivered to LES**', to '**Delivered to end-user**' when the requested PDN arrives to the mobile. When a message is sent to multiple addresses, its status will remain as '**Delivered to LES**' and not change to '**Delivered to end-user**'.

3.5.3 Negative Delivery Notification (NDN)

Inmarsat-C service provides free-of- charge **Negative Delivery Notifications** (NDN) for messages sent to wrong / not available telex, fax, PSTN, PSDN (X.25) and Inmarsat mailbox destinations. It also provides a free-of-charge NDN for messages sent to a wrong SAC code / not available SAC code.

For Inmarsat C-email service, such an NDN could be provided to the mobile if, for instance, the mobile has selected the wrong SAC code (e.g., 29 instead of 28 or EMAIL as it should be for Inmarsat LES id's), or if the Inmarsat Internet Gateway is unavailable. When you receive such an NDN, Inmarsat is telling you that your message cannot be delivered to the Internet.

Such an NDN does not provide insight on whether or not the message has been finally delivered to the correct email address. The notification providing this information is called UDI (Unsuccessful Delivery to Internet). See more details in the next section.

An NDN created by the Inmarsat -C platform will change the status of the message from '**delivered**' to '**failed**' at the log book of the Inmarsat-C mobile. A UDI is not an Inmarsat -C NDN, but a normal message. A UDI does not change the status of a message at the logbook of the mobile.

3.5.4 Unsuccessful Delivery to the Internet (UDI)

In most cases, you will be notified automatically if your message could not be forwarded to the Internet by the C-email service. However, a message successfully forwarded to the Internet does not mean that the Internet has managed to delivery it successfully to the final destination. Again, in most cases Internet providers notify the sender when they have not been able to reach the destination address.

For those cases when Inmarsat receives such a notification, a UDI (Unsuccessful Delivery to Internet) notification will be sent to the originating Inmarsat-C mobile indicating the following:

> LES header and date
> Message ref number xxxx to email address: aaaa@bbbb.ccc failed.
> Address incorrect or unreachable.

The status of the message at the mobile will not change from '**Delivered**' to '**Failed**' as a result of a UDI. Please note that a UDI is not an Inmarsat-C NDN (Inmarsat-C NDNs have the property of updating the message status on the mobile).

There are many reasons for a non-successful delivery. Unfortunately, each Internet provider has a different description and/or lay out to announce the reasons behind the unsuccessful delivery. This makes it difficult for Inmarsat to provide a consistent Negative Delivery Notification other than the one shown above.

The most common reasons for unsuccessful deliveries are:

- Undeliverable message or delivery failed after xx attempts
- Warnings message not delivered within xx hours or days
- Message could not be delivered within xx days, so it will be deleted
- Address non-existing; address incorrect; address not existing in public Name and Address book
- Message did not reach the following recipient: aaa@bbb.ccc

3.6 Receiving Attachments on the Inmarsat-C Terminal

When a message sent from the Internet contains attachments, each attachment will be sent as an individual message in 8-bits presentation to the mobile terminal. The original message will be sent as a normal message announcing the attachment(s) plus as many messages as attachments.

The arriving message with the lower message reference number will have the headers, the text accompanying the attachment(s), and a line indicating the number of attachments following. The messages with higher reference numbers will contain the attachments.

Example:

> Inmarsat LES 01-MAR-2015 00:26:48 717548
> From: Customer Support (support@inmarsat.com)
> Subject: Test
> 1 attachment 9216 bytes, test.doc <<test.doc>>
> Hello John, this is the test document
> Regards, Bill

No announcement before attachment: no announcement will be sent to the mobile when the originator sends the message without body text and without subject (subject fields empty and body part empty).

4.0 Messages from Internet to Inmarsat-C

Internet users wishing to send email from the Internet to Inmarsat-C mobiles should register at Inmarsat's C-email service. Registration forms can be obtained from the Customer.Service@universatitalia.it . Sending messages without being registered will result in a report indicating the sender is not authorized to use the service.

Existing customers may also use the electronic form online to add email addresses to their account.

4.1 Address Information

In the address box of a message, you should enter the address of an Inmarsat-C terminal in the way shown below. The domain you use depends on the Inmarsat LES to which you have registered your email address.

Inmarsat-C-ID@c12.stratosmobile.net for LES 12
Or
Inmarsat-C-ID@stratosmobile.net for LES 02

The Inmarsat-C ID must consist of nine digits and always begins with **4**.

Example of an email address to an Inmarsat-C terminal:

412345678@c12.stratosmobile.net
Or
412345678@stratosmobile.net

After preparing your message, send it in the usual way, via the Internet. After the message is received at the gateway of Inmarsat, the C-terminal will be located (i.e., correct ocean region) and the message will be delivered.

4.2 Authentication of Originator

Normally, Inmarsat authenticates the email sender based on their email address. However, you can also choose to send emails from any email address, using a registered username and password. Your emails will then be authenticated based on these two parameters placed on the first two lines of the message text. There is no extra cost, as these two extra lines will not be transmitted to the mobile.

Example 1: email sent using email address authentication method:

To: *412345678*@c12.stratosmobile.net
From: mary.smith@yahoo.com this address should be registered at Inmarsat cc:
Subject: happy birthday

Your text

Example 2: email using userid and password authentication:

To: *412345678*@c12.stratosmobile.net
From: any email address
cc:
Subject: happy birthday

Userid: <your username>
Password: <your password>
Your text

Note: If you are using the userid and password authentication method, send the message from an email address that has not been registered for C-email before. If you cannot do this, contact Universat customer service to configure your email registration most effectively.

4.3 Send a Message in 5-bits or 8-bits

Normally, a message will be sent in 7 -bit format unless your email server is always configured to send messages in 8-bits. You can force a message to be sent in 5-bits, 7-bits, or 8-bits. To do so, you need to add a special parameter immediately at the beginning of the message before your text and also before username and password if you use that method.

- 5-bits parameter al:telex
- 7-bits parameter al:text
- 8-bits parameter al:data

(al=alphabet)

Note: This special parameter will be removed at the Land Earth Station (LES) and will not be sent to the mobile(s).

Example 1: email in **5-bits**:

To: *412345678*@c12.stratosmobile.net
From: mary.smith@yahoo.com this address should be registered at Inmarsat cc:
Subject: happy birthday

---

al:telex
Your text
OR

To: *412345678*@c12.stratosmobile.net
From: any email address
cc:
Subject: happy birthday

---

al:telex
userid: <your username>
password: <your password>
Your text

Example 2: email in **8-bits**:

To: *412345678*@c12.stratosmobile.net
From: mary.smith@yahoo.com this address should be registered at Inmarsat Cc:
Subject: happy birthday

---

al:data
Your text

4.4 Using Customer Reference Numbers in the 'Subject'

Users sending many emails can use the subject box to enter a reference number or name with each message. The number or text in the subject box will be bounced back in the standard delivery notification. In this way, the delivery notification will not only tell you when, and to which C-terminal ID the message was delivery, but also which message, particularly if you have sent more than one message to the same C-terminal.

4.5 Delivery Reports for Messages from Internet

4.5.1 Positive Delivery Notifications

The C-email gateway will always return a Delivery Notification indicating when and to which terminal ID the message was delivered. The text, which was entered in the 'subject' box, will also be returned.

Positive Delivery Notification as received by sender:

Your message to <*412345678*@stratosmobile.net
Subject: test 1
Arrived at the Inmarsat C-email service Mon, Mar 26, 2015 12:28:42 UTC and was successfully delivered. The Inmarsat reference number for your message is: 802058

Negative Delivery Notifications:

In the following situations, the Inmarsat gateway will automatically generate a Negative Delivery Notification:

- **Mobile terminal is logged in**

  If the addressed C-terminal is logged in properly, the LES of Inmarsat accepts the message and will transmit it to the terminal. However, in some cases the message cannot be delivered. This happens if the mobile terminal is switched off or if the mobile terminal has no clear sight to the satellite. The LES will try to deliver the message. If the first attempt is not successful, it will retry six (6) times. If the last delivery attempt has failed, the message will eventually be discarded and you will receive a ***negative delivery notification***.

- **Mobile terminal is logged out**

  In this case, the LES knows the terminal cannot be reached and will not accept the message. A ***non-delivery notification*** will be sent to the originator.

This illustrates the importance of logging out mobile Inmarsat-C terminals before they are switched off!

A **Negative Delivery Notification** might look like the following:

> Your message to <*412345678*@c12.stratosmobile.net
> Subject: test 1
> Arrived at the Inmarsat C-email service at Mon, Mar 26, 2015 12:28:42 UTC and could not be delivered for the following reason:
> Failed due to *MES not available
> *MES = Mobile Earth Station (Inmarsat-C terminal)

Note: If a message has not been delivered to the C-terminal, the message will not be charged.

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APPENDIX A: Tips to Send an Email to a Mobile in Plain Text

All Inmarsat-C mobiles can receive and read directly on the screen, messages originally sent in IA5-ASCII alphabet (7-bits).

A mobile will be able to receive messages sent in data mode (8-bits) depending on the model and whether it has previously received a message in 8-bits. Messages received on a mobile in data mode (8-bits) will be stored in the received log of the Inmarsat-C terminal but the message will not be printed automatically as it happens for messages in 7- or 5-bits.

In order to ensure you send a message as Plain text in IA5-ASCII (7-bits) alphabet (and therefore that the message can be automatically printed when it arrives at the mobile), you may use one of the following two methods:

Method 1: Ensure you select the format "Plain text" and Encoding "Unicode (UTF-7)" in your email program.

Method 2: Add "al:text" on the first line of the body-text of your email.

Example:

To: *412345678*@c12.stratosmobile.net

From: mary.smith@yahoo.com (this address should be registered at Inmarsat)

cc:

Subject: happy birthday

Al:text Happy birthday John

Love, Mary

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About Universat:

Universat Italia Services is an Inmarsat certified partner and independent Service Providers for Inmarsat, Iridium, Thuraya, and Eutelsat services.
Universat Italia Services have quickly become a leader in the field of mobile satellite communication.

Our Company provide their services to corporations, governments, NGOs, the media industry, the armed forces, and to individuals, for the support of their economic, help or leisure activities, wherever they are operated on land or at sea, and whatever their life or operation conditions.
Universat Italia Services bring supplementary telecom services, where fixed or mobile telecom infrastructure is not available, obsolete, or impossible to use.
Universat Italia Services also provide content services supplied by satellite data, such as information used to optimise of the catch of industrial fisheries and weather analysis reports.
Universat Italia Services have also developed and are commercialising a solution for the transmission by satellite of audio-video clips; this solution is already used by major European TV networks.

For more information, contact Universat:

+ 39 06 5814292
customer.service@universatitalia.it

About Inmarsat:

Inmarsat is the leader in global mobile satellite communications. Thousands of vessels rely on its unrivalled end-to-end service availability and coverage for operational communications and safety services.

Inmarsat offer the broadest portfolio of mobile voice and data solutions on the market. So it can meet the needs of all types and size of vessel – and every budget.

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