



GSM Association
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www.gsmworld.com

October 11, 2001

Fred Gaechter
IFAST Chairman
1200 G Street, NW, Suite 500
Washington, DC 20005

Dear Mr. Gaechter:

I would like to thank you for your letter dated September 04, 2001 in which IFAST expressed their interest in the work that the GSM Global Roaming Forum (GGRF) is doing on interstandard roaming.

GGRF is an open forum for wireless operators, manufacturers, software and SIM Cards providers, terminal developers, trade organizations (UWCC, CDG, etc), and other qualified observers that have interest in developing standards and commercial guidelines for the implementation of interstandard roaming.

At the moment we have three technology teams: GAIT (GSM-TDMA), G95 (GSM-CDMA), and Gi (GSM-iDEN) that work on the network side of interstandard roaming, and cross-technology groups that work on other essential parts of interstandard roaming such as Commercial, Billing, SIM Cards, End-to-End Testing. The work of GGRF is based on contributions made by members and based on the wide experience of the GSM Association regarding international roaming.

In behalf of GGRF, I will be happy to invite you or a representative from IFAST to our next meeting, which is taking place November 28-30 in Toronto, Canada (attached you will find the meeting details). I think there is a lot of potential for IFAST to contribute to the work being addressed by GGRF and vice versa. I would also like to suggest a prior conference call between our respective key people, including on our side, myself and the GGRF Director, Eric Hill. We will follow up to schedule this.

Meanwhile, I attached a small presentation of GGRF, our main structure, objectives and key work items on 2G and 3G.

I am hoping we can also designate a formal liason between our two groups.

Best Regards,

Juan Carlos Jil
Chairman, GGRF
Email: jjil@americatel.net

cc: Eric Hill, Director for Interstandard Roaming, GSM Association
Megan Hayes, IFAST Secretariat



August 31st, 2001

Dear GSM Global Roaming Forum Colleague:

I am pleased to announce that the next meeting of the GSM Global Roaming Forum (GGRF) will be held as follows:

- November 30th, 2001 (subgroups are meeting November 28th & 29th)
- Toronto, Ontario, Canada

My sincerest thanks to Rogers AT&T Wireless for hosting our meetings.

Please confirm your participation by completing and returning the meeting registration form below by October 29th, 2001 to the specified contact. Hotel reservations should be made directly with the hotel by October 29th, 2001 via the phone number below.

Please refer to the information below for agenda summaries and further details.

Yours sincerely,

Juan Carlos Jil
Entel PCS & Chairman, GSM Global Roaming Forum



Details for the November 28-30, 2001 GGRF Meetings

Meeting Venue

The meetings will be held at:

Toronto Marriott, Bloor Yorkville
90 Bloor Street East, Toronto, Ontario
CANADA M4W 1A7

Tel: +1 416 961 8000 or Toll Free U.S./Canada: 1 800 859 7180

<http://marriotthotels.com/dpp/PropertyPage.asp?MarshaCode=YYZMC>

Meeting Registration Form

Delegates – members and Observers wishing to attend – should complete the GGRF meeting registration form below and return it **no later than October 29, 2001** to Rogers Wireless Inc, Jacqueline Roca at jroca@rci.rogers.com (or via fax at +1 416 935 7502)

Hotel Accommodation

A limited number of rooms have been reserved at the Toronto Marriott Hotel under the name "GGRF- Rogers" at the special rate of \$145.00CDN (approx. €104 Euro). Delegates are advised to make early reservations directly with the hotel **no later than October 29, 2001**. Hotel reservations with the Toronto Marriott Hotel made after this date may not be accommodated at the special rate or be available.

Airport and Transportation Information

The closest international airport is the Lester B. Pearson International Airport (YYZ). The hotel is approximately twenty minutes from the airport. Transportation options include: Airline Limousines
Taxi, or Rental Car.

AirLine Limousines +1 905 676 3210 or EMC +1 416 410 8312, approx \$45.00 flat rate

Sorry, there is no Shuttle Bus available to and from the hotel.

Driving Directions: To get from the airport to 90 Bloor Street, take Highway 427 south to the Gardiner Expressway East and exit Jarvis Street. Go north on Jarvis Street for about 4 km. and you will come to a split in the road, stay on the left-hand side to continue on Jarvis Street. The end of the street is Bloor Street. Make a left-hand turn on to Bloor Street and continue for about 2 blocks. The Marriot, Bloor Yorkville will be on your right-hand side.

Entry Visa

Please verify with your travel authorities as to visa requirements for your particular country.

Time Difference

Toronto, Ontario, is in the Eastern Time Zone of Canada, at GMT -5 (GMT minus five hours during Eastern Standard Time, which begins October 28, 2001).

Meeting Agendas

The first draft GGRF Plenary agenda will be available by October 15 for download from the Infocentre. Subgroup agendas for Technology Team and Issues Group meetings will be sent in advance by either the subgroup Chair or the GSM Association Headquarters.

Items of interest that each group will be working on include the following. Meeting dates and times are indicated below on the registration form.

GAIT (GSM/ANSI-136 Interoperability Team)

- GAIT Testing Network group (GAIT-T-N)
- Finalize test specification development work

Commercial Issues Group

- BARG-GGRF Task Force on Interstandard Roaming Agreements
- Payment of Disputed Amounts language
- SMS and GPRS language for InterStandard Roaming

Billing Issues Group

- Updating the TAP-CIBER Conversion Guidelines
- Introduction to the new CIBER 3
- Standardising CIBER – TAP testing

G95 (GSM/ANSI-95 Technology Team)

- Terminals and SIMs progress report
- Network Stream progress report
- G95 actions and planning for 2002

G95-N (G95 Network Subgroup)

- Update of CDMA-GSM Standards Activities in TIA
- Update of Voice Mail Issue for CDMA-GSM roaming
- Ericsson's IIF Service Capabilities and support for CDMA

BARG/GGRF Task Force on Roaming Agreements

- Compliance with InterOperator Tariff principles
- Fraud Management obligations
- CIBER and TAP Record exchange

Gi (GSM/iDEN Technology Team): not meeting in November

GGRF Plenary

- Results of GGRF Member Survey
- 2002 work plans and budget
- Reports from Technology Teams and Issues Groups

Observer Status

Persons from companies that are not members of the GGRF but interested in attending the GGRF meetings should submit an email request to ehill@gsm.org stating the purpose of their participation. Observer status requests will be responded to as quickly as possible.



Meeting Documentation

Contributions/input papers (Microsoft Office format) which need to be distributed prior to the GGRF Plenary meeting and/or agenda items should be submitted to ehill@gsm.org by October 29, 2001 at the latest. Documents will be uploaded to the Infocentre shortly thereafter, and a confirmation email will be sent as soon as the material is available for download. Individuals without Infocentre access should contact ehill@gsm.org for alternate arrangements.

There will be no photocopying facilities at this meeting. Delegates are encouraged to bring electronic copies of documents, which will be distributed two weeks in advance of the meeting. Documents developed onsite will be distributed via floppy disk.

Contact Information

If you have any questions about the meeting venue, please contact

- Jacqueline Roca, Rogers Wireless Inc. at jroca@rci.rogers.com

If you have any questions or require any additional information about the GGRF and program content, please contact one of the following:

- Juan Carlos Jil, GGRF Chairman, +56 2 420 8839, jjil@entel.cl
- Cameron Coursey, GGRF Deputy Chairman, +1 636 519 6341, cameron.coursey@cingular.com
- Eric Hill, GSM Association, +1 703 796 0886, ehill@gsm.org

We look forward to working with you and seeing you in Toronto!

GGRF Meeting #5 · November 28-30, 2001 · Toronto, ON CANADA

Registration Form

Please return this form by **October 29, 2001** to Jacqueline Roca, Rogers Wireless Inc. at jroca@rci.rogers.com or fax +1 416 935 7502.

First Name: _____ Last Name: _____

Job Title: _____

Company: _____

City: _____ Country: _____

Telephone: _____

Email: _____

Sub-Group Meetings

I would like to attend the following meeting(s) *(please check all that apply)*

Wednesday November 28, 2001

- ☐ GAIT-T-N, 08:00 – 18:00
- ☐ Commercial Issues Group, 14:00 – 18:00

Thursday November 29, 2001

- ☐ GAIT-T-N (08:00 – 17:00) and Closing GAIT Plenary (17:00 - 18:00)
 - ☐ Billing Issues Group, 09:00 – 12:30
 - ☐ G95 Network Stream, 08:00 – 12:30
 - ☐ G95 Technology Team (all streams), 14:00 – 18:00
 - ☐ BARG/GGRF Task Force on Roaming Agreements, 14:00 - 18:00
- (the GSM/iDEN Technology Team will not be meeting in November)

Friday, November 30, 2001

- ☐ GSM Global Roaming Forum Plenary, 8:30 – 16:00

GGRF Membership

- ☐ My company is a member of the GSM Global Roaming Forum.
- ☐ My company is not or I am uncertain if we are a member of the GSM Global Roaming Forum.
Questions? Please contact Niamh Clancy, nclancy@gsm.org, +353 1 209 1817, or to obtain information about joining the GGRF, please visit <http://www.roamingforum.com/>.



GSM Global
Roaming Forum

Background of the GSM Global Roaming Forum

October 2001





GSM Global
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GSM Global Roaming Forum

- Responsible for the development and evolution of technical and commercial blueprints to facilitate Interstandard roaming throughout the world based on the GSMA experience.
- The GGRF develops *technical requirements* for submission to Standards Development Organizations and develops *commercial standards* for incompatible technologies (iDEN, TDMA, CDMA, GSM)
- GGRF must ensure a good transition from 2G to 3G
 - must interact with all 3G related organizations or groups.



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GGRF Objectives

- **Develop technical requirements for GSM interworking with non-GSM technologies**
 - Submit requirements to Standards Development Organizations, e.g., ETSI, 3GPP, TTA
- **Develop commercial standards (practices, principles, and guidelines) for Inter-Standard roaming agreements and services**
 - Submit requirements to internal and external groups working on commercial issues, e.g., GSM Association Working Groups (BARG, TADIG, IREG), CIBERNET Corp.



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Key Components For Interstandard Roaming

- **Networks** : to ensure the ground-based infrastructure (which carries signaling, voice, and data messages) can communicate with each other
- **Billing**: to ensure different systems for exchanging call detail records can interoperate in a timely manner.
- **Authentication**: to ensure different standards for fraud monitoring and user validation can be bridged
- **Handsets**: so that the customer's phone can recognize various different technologies

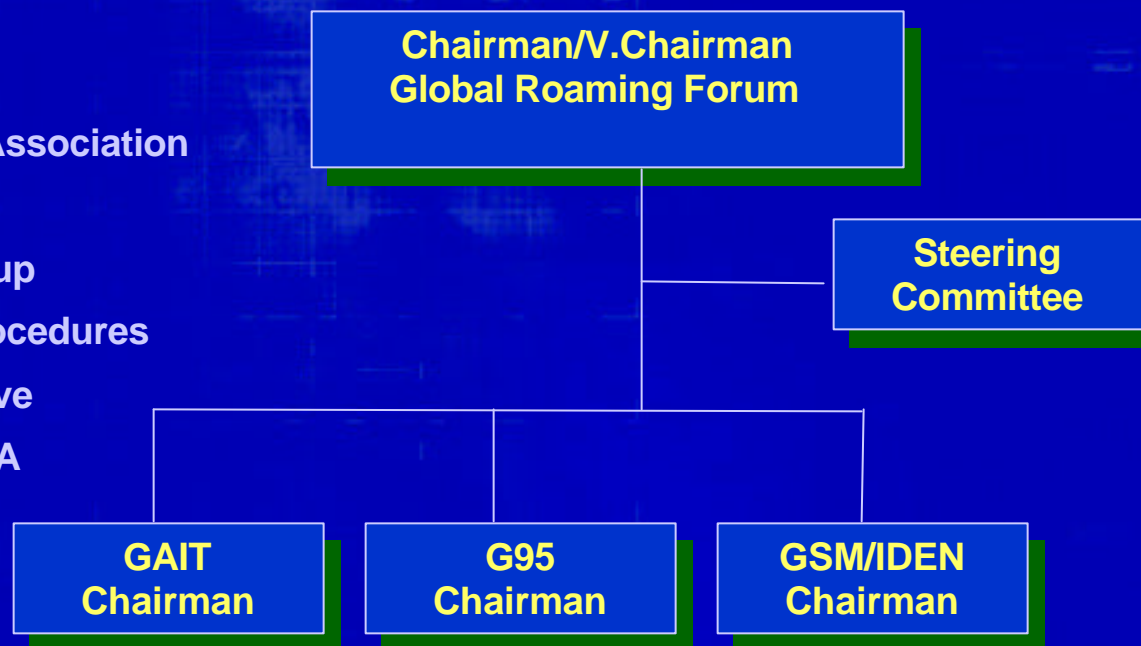




GSM Global
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GGRF Structure Overview

- Operates within GSM Association structure
- Semi-autonomous group
- Sets own rules and procedures
- Reports to the Executive Committee of the GSMA



	GAIT	G95	Gi
Billing			
Commercial			
Network			
Smart Cards			
Terminals			
Testing: End-to-End			



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GGRF Current 2G Technology Initiatives

- **GAIT: GSM-TDMA interoperability**
 - Expect GAIT roaming by December 2001
 - Commercial deployments may be with Phase 1 or 1+ services
 - **Phase 1**
 - Voice
 - Circuit-Switched Data
 - Two-Way SMS
 - Basic WAP
 - Basic Supplementary Services
 - **Phase 1+**
 - GPRS
 - TTY
 - Enhanced WAP
 - Enhanced Network Selection



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GGRF Current 2G Initiatives (continued)

- **Gi: GSM-iDEN interoperability**
 - Gi roaming has been in commercial deployment since April 2000
 - Services available
 - Phase 1: Voice and basic supplementary services (call forwarding, SMS, and call barring)
 - Phase 2: Supplementary services (CLIP, call waiting and call hold)
 - Future work: improving services interoperability, e.g., data, Intelligent Network/CAMEL services
- **G95: GSM-CDMA interoperability**
 - Working presently with SDOs, namely Telecom. Industry Asso'n on terminal and network specifications
 - Goal: end of 2002 commercial services
 - Initial services:
 - Basic voice (MO+MT)
 - SMS (MT)
 - Voice mail access
 - Future work: WAP, prepaid, packet data, location services

GGRF Work on Commercial Standards

- **Completed and ongoing work on standards**
- **Billing Issues Group**
 - Developed standard Roaming Agreement
 - Using GSM Association AA.27, AA.28, AA.29
 - Based on GSMA standard Permanent Reference Documents
- **Commercial Issues Group**
 - Developed Billing Conversion Guidelines
 - Developed CIBER-TAP Mapping Principles
 - Developed PMN-BID Conversion Tables
 - Monthly updates via GSMA InfoCentre and CIBERNET
 - Working on billing testing standardization



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GGRF Plans for 3G Interoperability

- Work plans to be developed Nov. 2001 through Feb. 2002
- Objectives
 - 2G bridges to 3G
 - TDMA to 3GSM
 - CDMA to 3GSM
 - 3G
 - 3GSM to CDMA2000
- Technical work: GGRF will review interstandard roaming efforts already made by 3GPP and 3GPP2 and liaise accordingly.
- Commercial work: GGRF will continue to liaise with internal GSMA working groups on 3G commercial efforts already underway and develop interstandard plans.



GSM Global
Roaming Forum

Main Contacts at GGRF



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Chairman
GSM Global Roaming Forum

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jjil@nt.entel.cl

ENTELPCS



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