

# Global Ict Standardization Forum For India (GISFI)

## NEWS LETTER

2nd February 2011 Volume-2 Issue-3



### Spot Light

**TCS,  
Nokia Siemens  
Networks  
join GISFI**

**GISFI meets at Pune and charts the development of Standards.**

**A report- The Multilayered process in Standardization.**

**Wireless Vitae 2011  
Chennai- February 28-  
March 3**

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### Heads of World standardization bodies were in attendance at GISFI meeting in Pune

The year 2010 was very much rewarding for the GISFI members. It has earned the recognition from the leaders of world Standardization bodies which was evident at Pune as it was attended by Dr. Malcolm Johnson, Director, ITU-T and Dr. Walter Weigel, Director General, ETSI. GISFI has so far organized three standardization meetings during 2010, one each at Delhi, Allahabad and Pune. The fourth one will be in Chennai during Mar 1st-3rd' 2011 coinciding with the Wireless Vitae 2011.

ITU-T Kaleidoscope 2010, was a grand success. Mr.Navale, Chairman, STES, Pune extended his unstinted support and help and organized both the meetings of GISFI / ITU. Prof. Ramjee Prasad Founding Chairman of GISFI highlighted the objectives of GISFI being the only standardization body having the twin goals of developing standards as well as by establishing an institution for R&D at Lonavala, India. Dr. Malcolm Johnson, Director, ITU-T, Geneva spoke about the

finer points of standardization and its importance in the Global scenario. He extolled the contributions of standardization bodies as a facilitator for economies of scale to help the new entrants to absorb advanced technology. He highlighted the creation of Broadband Commission as a welcome step specifically for the growth of developing economies and felt that the formation of GISFI in India is the right step in this direction. He wished that there is a need for closer relationship between ITU and GISFI.

Mr. Gary Fishman a long time associate of ITU and an authority on standardization explained the skills required to successfully participate I conduct the standardization meetings. The standardization Tutorials conducted by him was very much helpful to all GISFI Members. Dr. Walter Weigel, DG, ETSI leading a successful standardization body in Europe, in a thought provoking presentation listed the key challenges faced by modern standardization. He felt that



(L to R) Mr. Ajay Ranjan, Dr.Inamdar, Mr. T.R.Dua, Dr. Malcolm Johnson, Dr.Ramjee Prasad



Mr. Gary Fishman

India has specific requirement and our goal should be to close the gap between research and standardization. He was optimistic that the future standards will define Internet of Things and a Trillion devices will be based on these standards. Convergence will be for the amalgamation of ICT and web technology. The future standardization will also tackle the current internet problems and will ensure its security and Trust.



**Prof. Ramjee Prasad  
Chairman GISFI**

After the successful meetings of ITU-T Kaleidoscope and third GISFI standardization series at Pune, it is my great pleasure to welcome you to the upcoming Second Wireless VITAE conference, which is held this year under the patronage of the Global ICT

Standardization Forum for India (GISFI) in the beautiful historical city of Chennai, India during Feb 28-Mar 3 2011. More than 250 high quality papers are part of the Technical Programme and in addition to 5 Tutorials, the World Class Innovation business meeting, the workshops, and the Fourth GISFI Standardization Series meeting are all spread over four days of the conference. It will come out as a unique forum for topnotch networking and discussions on research, development and entrepreneurship aspects that can bring about the future Internet world.

### CHAIRMAN'S MESSAGE

New Technologies for 4G Wireless Systems - WiMAX & LTE, Microwave Applications of Metamaterials, and Internet of Things : Opportunities and Challenges are the few tutorials which will open the vistas of modern wireless systems presented by world class scientists and professors. The technical and special sessions are a virtual feast hosting a range of topics from Adhoc Networks; Human Aspects of Communication; Antenna Design ; Spectrum Usage and Management and Cognitive Radio; MIMO Antennas; Energy Efficient Wireless Communications in Wireless

Networks; Trends and Challenges in Hybrid Wireless Communications Systems etc. In all there will be 13 technical sessions and 12 special sessions organized in three days. Also 4 GISFI special sessions and 7 selected topic speakers in the panel discussion; a host of invited speakers will make the session as lively as possible. I am confident that Wireless VITAE 2011 will bring forth new ideas, positive experience and fruitful collaboration to all conference participants. I welcome all the delegates and guests to make the conference a grand success.

**Dr. Ramjee Prasad**

## From the Director General's Desk

Friends and Colleagues! I have been writing this page and sharing my views with you in every issue from the date of its launch. Also I am watching the progress of GISFI and the important events it held during the last one year. Nothing can be so refreshing and encouraging that the member industries and institutions have been supporting our programmes by way of sponsorship and participation.

To be specific, the institutional sponsors are more reassuring. The programmes held in Delhi, Allahabad and Pune during 2010 had

overwhelming response from the institutional community, who have been a source of synergy to make a successful year. In the New Year, I am proudly announcing the Wireless Vitae 2011 an International Conference on Global Communication through wireless, scheduled on February 28 - March 3, 2011 in Chennai.

This is going to be a historic event, as a large delegation of international participants will join the conference to make it a memorable occasion. More than 150 delegates from home and abroad have already confirmed their



participation in the event. I look forward to receive an overwhelming response from the Indian industry as well by way of active participation in the event.

I wish you a very happy, peaceful and progressive New Year 2011.

**K. Sridhara,**  
Hony. DG, GISFI

## STANDARDIZATION TOPICS

### Topic: Green ICT

**Chair: Dr. Anand Prasad, NEC Corporation, Japan**

Dr. Anand Prasad, NEC Corporation presented a document on Telecom Sector Green – Fuel pilferage and adulteration in the mobile service sector. The paper discussed the possible solutions such as a system based on GSM / GPRS network and to extend the same solution to UMTS, LTE. Dr. Mini Vasudevan, Ericsson, gave a presentation about LCA (Life Cycle Assessment) studies that can be used to estimate the potential of ICT based products, networks and services. The environmental impact of any ICT product can be better understood by its LCA. Dr. Basavaraj Hooli, Mphs, presented energy convergence by better management. The Indian requirement of power was discussed. The Gap analysis in Green ICT was discussed with the regulatory requirements and notes on what GISFI WG on Green ICT can do further on the development of standards in this area.

### Topic: Special Interest Group (SIG): Cyber Security for Children/ Network Security

**Chair : Sh. Krishna Sirohi, VNL, India**

**Co-Chair : Dr. Ashutosh Dutta**

Dr. Parag Pruthi, CEO, NIKSUN, USA while discussing on QoS a part of SIG on network security and service layer convergence had outlined the **QoE Measurements In A SeON Framework**.

QOE Metric in a SeON Framework Timescale of measurements shall be specifiable & negotiable. He suggested the SIG deliverables should define several use case scenarios for communication in rural India; focus QoS metrics.

for a specific set of applications; survey available techniques and framework being discussed in different SDOs; map the appropriate techniques and protocols to those use case scenarios and draft Best Current Practices for QoS requirement for Rural India. His presentation was a road map drawn for data security and privacy.

### Topic: Internet of Things

**Chair : Debasis Bandyopadhyay, TCS**

**Vice Chair : Arpan Pal, TCS**

Mr. Bala Muralidhar, TCS proposed a valuable concept on IoT application in agriculture. He suggested remote monitoring of water pumps. The efficient usage of water and electricity by the farmers can be ensured by introduction of "Smart metering". He talked about connected home. No deliverables were presented in this meeting.

Dr. Mini Vasudevan presented the M2M standardization in diverse applications and suggested investigation of the security threats; solutions; evaluation of candidate solutions. M2M can be used in applications such as security; tracking; payments; health etc.

Dr. Anand Prasad / Mr. Jagdeesan, NEC Corporation presented IoT Security Surveillance system and M-Health system use cases.

### Topic: Spectrum

**Chair: Sh. P.K.Garg, Former wireless Advisor**

**Co-Chair: Dr. Sanjay Kumar, BIT, Mesra**

While briefing on spectrum Sh. P.K.Garg, Chair wanted to address the basic issues. He was emphatic that development of appropriate standards will help the community and align with

the Global interests. Whatever GISFI takes should have a globally harmonized approach. Utilization of Spectrum efficiently is the criteria for agreement. Identification of optimum usable bandwidth for different services and applications is essential for successful management of spectrum. Such an approach will give stable standards for easier implementation.

He went on to review the work done in last meeting. The basic issues highlighted in the GISFI#2 meeting are efficient and optimum use of spectrum; re-farming of spectrum; strengthening national spectrum management policies; effect co-ordination among opera-tors/academia/industry; Priority area falls in the 700 MHz bandwidth; more reuse; create smaller cells and bring in cognitive radio networks for better utilization of spectrum.

Dr. Malcolm Johnson, Director, ITU-T indicated that in ITU the divisions T/R/D also coordinate on spectrum related issues and it is important to work-to-gether with National agencies. Also he spoke of spectrum mask being defined which helps any technology to be used.

Prof. Pandey, IIIT Allahabad referred to lack of standards or efforts to develop standards in the areas of eLearning / eHealth / eAgro and weather forecasting. He was invited to be the Chair on such studies.



Dr. Inamdar, Mr. T.R.Dua, Dr. Malcolm Johnson, Dr. Ramjee Prasad, Prof. Deshpande on the dias



## Service Oriented Network (SeON)

Chair : Dr. Parag Pruthi, CEO, NIKSUN Inc. USA,  
Co-Chair: Dr. Ashutosh Dutta, NIKSUN Inc. USA,

During GISFI#3 standardization meeting at Pune on Dec 14th SeON WG (Service Oriented Network Working Group) members gave presentations on five identified tasks and its deliverables. These tasks were assigned with a Rapporteur for each as a lead and some contributing members who would work as a team for the deliverable. It was also decided to include “**Security for cloud computing**” as part of SeON activities in view of addition of cloud computing efforts for ATIS SON and similar efforts underway within the IETF.

We are thankful for the efforts of Dr. Ashok Chatterjee who facilitated Dr. Ashutosh Dutta to get introduction to ATIS SON (Service Oriented Network) chair Mr. Andrew White and this gave an opportunity for the GISFI to attend the webinar and face-to-face SON meeting in Washington DC during the month of October, 2010. He obtained permission from ATIS BOG for sharing the gap analysis report prepared by ATIS SON WG with GISFI SeON WG chairs. During this meeting the feasibility of having GISFI's affiliate membership with ATIS for mutual knowledge exchange in the area of Service Oriented Networks and Cloud Computing was explored. This document is very useful while conducting future gap analysis for SeON. As of now GISFI SeON WG is in the process of setting up a Liaison Statement with ATIS SON. Also efforts were made to get the Network Operators to attend GISFI#3 in Pune to get feed-back on their business models, but could not workout due to time constraint. The effort will continue for GISFI#4 meeting in Chennai with a special session on business models for the operators.

The list of five tasks, associated deliverables and contributing members are shown below :

**Task 1 : SeON Framework document Rapporteur : NIKSUN Contributors : VNL, TCS**

**Expected deliverable** : To work out modifications in the existing frame work document to specify. 1. Overall objectives of SeON WG, 2. Specific areas of work that can be carried out by SeON, 3. Collaboration with the activities of other related WGs such as OMA, ATIS SON, IEEE NGSON and IETF. Deliverable format will be a word format document.

**Task 2 : Business Models and Architecture: Rapporteur: NEC, Contributors: VNL, TCS, NIKSUN, MPHASIS**

**Expected Deliverable** : Rapporteur will define the business models. Then the associated service oriented architecture that can fit in the business models will be studied. In particular, the team will define a few use case scenarios where both a third party service provider and existing service provider can make use of the standards developed by GISFI to create service creation environment for the end users. Deliverable format could be a word document or a set of annotated view graphs.

**Task 3 : Gap analysis with other SDO : Rapporteur : NIKSUN Contributor : Ericsson**

**Expected deliverable** : The Rapporteur will work with other contributors in conducting a gap analysis with other SDOs (e.g., ATIS SON, NGSON, 3GPP, OMA, IETF). In particular, December deliverable will include a thorough analysis of ATIS SON's WG documents and provide recommendations as to which specific work items can be carried out within GISFI and the work items that can complement the work items within SON. NIKSUN will act as liaison for GISFI in ATIS SON and will bring in GISFI related contribution to ATIS SON. Deliverable format could be a word document or a set of annotated view graphs.

**Task 4 : Security Models : Rapporteur: TCS Contributors: NEC, VNL, NIKSUN**

**Expected Deliverable** : While pursuing the line of discussion held during GISFI#2, TCS will act as Rapporteur and will work with other contributors to define the security models and produce threat analysis document. In particular, the security task group will look at the ongoing security work within 3GPP (e.g., security and identity aspect as single-sign-on) and will conduct a study on how security, identity and location thing will work together. As a start, the task group will clarify Indian needs and requirements (e.g., rural India) and do a gap analysis with other SDOs such as 3GPP. The deliverable format could be a word document and set of annotated view graphs.

**Task 5 : Information Management : Rapporteur : MPHASIS Contributor : NIKSUN**

**Expected Deliverable** : Information migration is beginning to play an important role as there is a gradual shift towards convergence of IT and Telco taking place. It is found that 67% of all data migration projects cause implementation delays, large overruns and fail outright. MPHASIS will study a few set of information models as defined in TM Forum and will take into account a specific application such as wireless number portability (WNP). MHASIS with the help from other contributing members will deliver a document detailing the best current practices for data migration. The deliverable format could be a word document and set of annotated view graphs.

## Fond memories of GISFI#3 meeting at Pune– Dec' 13-16 2010



(L to R ) Dr. Anand Prasad, Dr. Parag Pruthi,  
Dr. Ashutosh Dutta, Dr. Basavaraj Hooli



Dr. Ashutosh Dutta felicitated by  
Dr. Inamdar with bouquet



Dr. Walter Weigel, DG,ETSI address  
the GISFI Members.



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# Join GISFI

Feb 28-Mar 3, 2011 Chennai

# WIRELESS ViTAE 2011

## 2nd INTERNATIONAL CONFERENCE

28 FEBRUARY - 3 MARCH LE ROYAL MERIDIAN CHENNAI, INDIA



The gathering at Wireless VITAE 2011 at Le Royal Meridien, Chennai during Feb 28-Mar 3rd 2011 will bring forward the advances in both, basic telecommunication research and the applied ICT field to capture the rationale and significance for the basic science and the modern society of delving into the yet-to-be-discovered-in-full potential of the next generation Internet-based communication infrastructure. I am confident that, Wireless VITAE 2011 will bring forth new ideas, positive experience and fruitful collaboration to all conference participants.

Dr. Ramjee Prasad

## The Process of ICT Standardisation

Standards may be to develop technical specifications that are adhered by a majority of manufacturers either willingly or on contractual agreement, but the very process of standard creation has many facets and a multilayered theory that amalgamates the creation of a historically accepted set of principles, radical approach with innovative technology and mobilization of facts that help to make their acceptance by the parties as a more convincing and possible solution for a given set of proposal. This process involves two or more players come together to agree and adhere to a set of technical specifications of an ICT system, its parts or its functionality by a protocol agreement.

To get an agreement between parties to the development of standard, one must express willingness to develop such a standard; accept the principal concept and scope of the standard. They also agree on the content and form and to engage in a contractual agreement.

They should be aware of the pros and cons of the process and its final outcome. They should be willing to develop market products conforming to the standard.

However during this process some or all may fail to reach a consensus for multifarious reasons. As the standardization process spans several areas starting from Research labs to product development and marketing and finally envelopes the realm of intellectual property rights, trade rights and branding etc any weak link may prove fatal to the chain of events. Thus it may be understood that standardization with its intertwined activities although help bringing new ICT technologies successfully to markets but behind the curtain there are many coordinated moves that may interconnect a number of players, historical principles and settings in a given span of time and space. As the standardization process is set in a specific time and space it should be aware of its target community needs. Standardization studies must express the possible

interactions between various players who may or may not have common interest. But it should portray how the development of standards is based on needs of the community where its players are located. A case of context based standardization is the GSM cellular telephony system, because of the European PTTs' political interests in the standardization process. Many European PTTs shared an opinion prevalent during eighties that each European country could be in advantage by a pan European mobile system. The development of GSM standards by ETSI ended the fragmentation in the mobile telephony to become the universally acceptable wireless standard.

(Reference: "Theorizing about Standardization: Integrating Fragments of Process Theory in Light of Telecommunication Standardization Wars" by Vladislav Fomin, University of Michigan, USA; Thomas Keil, York University, Canada; Kalle Lyytinen, Case Western Reserve University, USA.)

Note : Global ICT Standardization forum for India (GISFI) assumes no responsibility for the statements made and expressed by speaker(s) and contributors. Printed and published by Prof.D.K.Singh on behalf of GISFI.