

**MINUTES OF MEETING (Draft)**

<b>Name of the Meeting</b>	Fourth TSDSI General Body (GBM) Meeting
<b>Date</b>	17 <sup>th</sup> August, 2016
<b>Time</b>	11:30 am to 17:30 pm
<b>Venue</b>	Lecture Room #2, India International Centre Annexe, K K Birla Lane, near IIC Main Building, 40 Max Mueller Marg, New Delhi 110003
<b>Meeting Type</b>	Discussion and Decision Meeting
<b>Participants List</b>	Refer Document No. TSDSI-2-GBM-4-2016-08-17 (attached)
<b>Approved Agenda</b>	Refer Document No. TSDSI-1-GBM-4-2016-08-17 (attached)
<b>Recorder</b>	Mr B S Chauhan, Ms Bindoo Srivastava & Ms Jayeeta Saha, TSDSI Secretariat
<b>Reviewed by</b>	Prof Abhay Karandikar, Vice Chairman and Director General
<b>Status</b>	Draft (to be approved by the General Body in its fifth meeting)

**Major areas of Discussion**

i. Approval of Audited Financial Report for FY 2015-16
ii. Budget for FY 2016-17
iii. Announcement of GC Elections
iv. Approval of Changes recommended in RnR
v. Cooperation with IF3 for conducting 3GPP meetings in India.
vi. Discussion on Standardization Roadmap

**DISCUSSIONS:**

**1. Opening Remarks by Chairman :**

Dr Kumar Sivarajan, Chairman, TSDSI extended a warm welcome to all the members attending the meeting. He then invited Dr Asok Chatterjee, Vice President—Ericsson India Pvt. Ltd. and founding Director General of TSDSI, who wished to make few remarks. In his remarks, Dr Chatterjee informed that he would be relocating to US by August end. He thanked all TSDSI members for extending their cooperation while his stay in India. The Chairman recounted the

significant role played by Dr Chatterjee in founding and building TSDSI. Prof. Karandikar, Vice Chairman, TSDSI acknowledged on behalf of the TSDSI members, the contributions of Dr Chatterjee and expressed hope that Dr Chatterjee would continue to support TSDSI in future too in the standardization arena.

The General Body then took up matters on the Agenda as described below:

**2. Confirmation of the Minutes of 3<sup>rd</sup> General Body meeting held on 8<sup>th</sup> December 2016:**

The Draft Minutes of the third General Body meeting had been mailed to all TSDSI members after the meeting. The same were tabled before the General Body. There being no suggestions for any change, the Minutes were approved.

**3. Action Taken Report (ATR):**

Action Taken Report was presented to the members (Please refer to the attached document No. TSDSI-4-GBM-4-2016-08-17) and members were apprised of all the actions that were taken. Some members suggested that for membership engagement, key chambers of commerce like FICCI, ASSOCHAM, CII etc. could be contacted to publicize TSDSI amongst their members. Some members suggested that prospective member organizations could be invited to attend appropriate TSDSI meetings as observers to appreciate the value proposition before becoming TSDSI member. Some members also pointed out that TSDSI technical groups should publish a workplan.

**4. Approval of Audited Financial Report for FY 2015-16**

Audited Financial Report for FY 2015-16, adopted by the Governing Council in its 12<sup>th</sup> meeting, was presented to the General Body. In response to queries from members on the corpus fund, it was clarified that the Governing Council, in its 9<sup>th</sup> meeting, had approved creation of a corpus fund out of the funds received from members under admission fees, with the objective of eventually becoming independent of grants from the Govt. It was further clarified that the IT Act does not prohibit creation of such a fund. As the clarification on corpus fund does not necessitate any change in the Audited Financial Report, it need not be referred to GC (per GBM's directive) and can be taken as approved by the GBM.

**5. Budget for FY 2016-17**

[Budget](#) for FY 2016-17 was presented to the General Body. The same was approved by the members. The Chairman urged members who have not yet paid their membership dues and/or 3GPP IM fees to expedite these payments.

**6. Announcement of GC Elections**

The Chairman informed the General Body that the two year term of the present Governing Council will end on 14th October, 2016. Therefore, elections for a new GC, Chairman and Vice Chairman are required to be held before this date. Chairman informed that it had been decided to conduct these elections in October 2016. He proposed that Mr RK Pathak, DDG (IC), DoT be appointed as the Election Officer. The General Body unanimously approved the same. The Chairman also informed that elections to the GC will be conducted by electronic voting during a window of October 6, 2016 9 am to October 7, 2016 5 pm IST.

It was also decided that elections to the posts of Chairman and Vice Chairman should be held from October 25, 2016 9 am to October 26, 2016, 5 pm (IST). Newly elected GC members can file nominations for Chairman and Vice Chairman by October 17, 2016. The complete election schedule will be announced by the Election Officer

Some members asked about eligibility for voting. After some discussion, it was resolved that members who have paid their membership dues by September 30, 2016 will be eligible to vote. Further, members who wish to contest for GC membership should have paid their membership dues before filing their nominations.

**7. Approval of changes recommended in RnR**

Changes in TSDSI's Rules & Regulations approved by GC were presented to the GB. After a brief discussion, all the changes were approved by the General Body. Further, it was resolved that the RnR document, updated with the approved changes, would be circulated amongst the members. It was also resolved that the graphical representation of society structure suggested by SC on RnR is confusing. Since the structure is well outlined in the text, it was decided to retain the original representation with Director General being made part of GC in the figure. The changes approved for incorporation in the RnR are provided at Annexure I.

**8. Cooperation between TSDSI and IF3**

Vice Chairman emphasized the need of bringing 3GPP meetings to India to enable participation by TSDSI members. He informed that Indian Friends of 3GPP (IF3), an informal group of few companies, namely, Intel, Qualcomm, Ericsson and CEWiT have made efforts in bringing 3GPP meetings to India. IF3 has approached TSDSI for cooperation. Vice Chairman informed the General Body that TSDSI Secretariat has agreed to work with IF3 for hosting 3GPP meetings in India. In this regard, while TSDSI will provide all help; funds required for hosting the meetings will not be borne by TSDSI. A short [presentation](#) on the modalities of this cooperation was made to the GB. Members were informed that the 91<sup>st</sup> meeting of 3GPP's SA4 group is being organised jointly by TSDSI and IF3 from Oct 24-28, 2016 in Bengaluru as part of this cooperation agreement. The General Body appreciated the efforts and wholeheartedly supported this move. It was also agreed that apart from IF3, other TSDSI members interested in 3GPP meetings can also cooperate in terms of funding and other support.

## **9. Discussion on Standardization Roadmap**

Vice Chairman set the context of discussion on this topic by giving a brief background. TSDSI is in its 3<sup>rd</sup> year of existence and the standardization requirements of the members are being addressed through five SGs. We have forged strong alliances with marquee global SDO forums. TSDSI has also completed the pilot phase of Partnership Instrument between India and EU in the area of ICT cooperation. Both sides will collaborate further in the areas of ITS, 5G, NFV/SDN and security over a 3 years period, beginning September 2016. There is a need to streamline TSDSI's standardization activities by creating a roadmap with clearly identified deliverables and timelines.

The discussion began with a brief presentation on the [Director General's base document](#) on the topic and [status of current technical activities](#) prepared by the Secretariat. An [approach methodology](#) for creating Standardization Roadmap, proposed by Intel was then presented to the members.

Inputs submitted by members organizations- [Intel](#), [Huawei](#), [Qualcomm](#) and [COAI](#) were presented to the GB.

Members agreed that TSDSI should balance technical activities between addressing immediate national requirements and emerging technology innovations. Deeper involvement of Operators, Regulatory and Govt. bodies is required to identify requirements.

Members discussed many areas of importance and relevance to India such as:

- Rural connectivity and operating with low power consumption
- Indian urban connectivity gap
- Public safety and emergency communication
- IMT 2020
- Smart cities and M2M/IoT
- Non LOS terrain, long distances, lack of reliable energy, High infrastructure costs
- Radiation norms
- Call drops and spectral efficiency

Vice Chairman also informed that TSDSI also need to undertake the task of transposition of 3GPP standards as TSDSI standards.

It was resolved that workshop will be organized to discuss TSDSI Standardization Roadmap. It was also agreed to invite participation from Government, Regulator such as TRAI etc. for this. It was also agreed that a small group would work out the details of the workshop including agenda and format. Mr Sundararajan from Intel, Mr Suresh from Samsung and Dr Vinosh from Qualcomm volunteered to undertake this task.

A presentation on IMT2020's Roadmap was then given by [Qualcomm on behalf of COAI, Ericsson India, Huawei India, Intel India, NEC India, Nokia India, Qualcomm India, Samsung R&D Institute India.](#)

It was highlighted that TSDSI has missed some important deadlines for submitting its contributions to ITU-R.

However, there are still some opportunities in terms of submitting Technical Performance Requirements and Evaluation Methodology. Some members pointed out that given the ToR of SG1 WG3 to be focused on 5G requirements, SG1 WG3 should first discuss IMT 2020 requirements. It was pointed out in the presentation that given the tight deadline and time constraints, it would be advisable to conduct a one day workshop/all members F2F to finalize TSDSI inputs on Technical Performance Requirements for IMT 2020

Some members pointed out that given the ToR of SG1 WG3 to be focused on 5G requirements, SG1 WG3 should first discuss IMT 2020 requirements. SG1 WG3 Chair pointed out to the tight deadlines and the proposed all member workshop to finalize TSDSI inputs on Technical Performance Requirements for IMT 2020 After some discussion, it was resolved that WG3 should focus on IMT 2020 requirements. Further it was resolved that a formal one day workshop cum all members F2F meeting will be conducted on IMT 2020 Technical Performance Requirements . The workshop could be chaired by DG.

The SG1WG3 chairs were further directed by Chairman to spearhead preparation of TSDSI contribution to the upcoming ITU-R WP5D meeting #25 by September 15, 2016. This would then be taken up by DG with DoT for formal submission as India's contribution to the meeting before the deadline of September 28, 2016.

#### **10. Any other matter**

Chairman directed Secretariat to organize a GBM in Oct-Nov 2016.

With the permission of the Chairman, Commodore Jena, COAI announced that COAI is hosting India Mobile Congress from 12-15 October 2017 and sought active participation of TSDSI and its members in the event.

#### **11. Concluding Remarks:**

There being no other item to discuss, Chairman adjourned the meeting.

**TSDSI-1-GBM-4-2016-08-17****Agenda for 4<sup>th</sup> General Body Meeting****Date and Time: 17<sup>th</sup> August, 2016, 11:00 to 17:30,****Venue: Lecture Room#2, India International Centre Annexe, Near IIC Main Building, K K Birla Lane, 40, Max Mueller Marg, New Delhi 110003****11:00-12:30 General Body Meeting (Session #1)**

1. Opening Remarks by the Chairman
2. Confirmation of Minutes of the third GBM Meeting held on 8<sup>th</sup> December, 2015
3. Action Taken Report
4. Approval of Audited Financial Report for FY 2015-16
5. Budget for FY 2016-17
6. Announcement of GC Elections
7. Approval of Changes recommended in RnR
8. Technical Activities Status Updates
9. Cooperation with IF3 for conducting 3GPP meetings in India.

**12:30-13:30 Lunch****13:30-15:30 General Body Meeting (Session #2)**

10. Discussion on Standardization Roadmap

**15:30-16:00 Tea/Coffee Break****16:00-17:30 General Body Meeting (Session #2)**

11. Discussion on Standardization Roadmap (cont'd)
12. Any other matter/s with permission of the Chair
13. Concluding Remarks

**List of Members Present**

S. No.	Name	Member Organization
1	Dr Kumar Sivarajan	Chairman, TSDSI, Tejas Networks Ltd.
2	Prof. Abhay Karandikar	Vice-Chairman, TSDSI, Indian Institute of Technology Bombay
3	Mr. R K Pathak	Department of Telecommunications (DoT)
4	Mr G Narendra Nath	Government Nominated Member, TSDSI and DDG (Security), DoT
5	Mr Madhur Bhardwaj	Bharti Airtel Ltd.
6	Mr Vijay Madan	Tata Teleservices
7	Mr Hardeep Saini and Dr Vinosh James	Qualcomm India Private Limited
8	Mr Sundar Srinivasan, Mr Madhu Raghupatruni, Mr Kannan Babu Ramia & Dr Punit Rathod	Intel Mobile Communication (IMC) India Pvt. Ltd
9	Mr Rahul Kumar Joshi	Railtel Corporation of India Ltd.
10	Dr. Asok Chatterjee, Mr. Ashwani Kumar & Mr Sendil Kumar	Ericsson India Pvt. Ltd.
11	Dr. Sivabalan Arumugam	NEC India Pvt. Ltd.
12	Mr Babu Narayanan	CEWiT
13	Mr Amit Gupta & Mr Sandeep Agrawal	Tata Consultancy Service Ltd.
14	Mr Vipin Tyagi & Mr Gupteswar Majhi	C-DoT
15	Mr Rajeev Bansal	DoT - TEC
16	Mr. Niranth Amogh	Huawei Telecommunication (India) Co. Pvt. Ltd
17	Mr Rahul Kumar	TCIL
18	Mr Suresh Chitturi	Samsung RnD Institute, India
19	Mr Srinivas Velamuri	Vodafone
20	Mr Anurag Vibhuti	TCOE
21	Commodore J Jena & Ms Vertika Mathur	COAI
22	Mr Dinesh Chand Sharma & Ms Priya Sawhney	Guest Observer, ETSI

23	Mr B S Chauhan, Ms. Bindoo Srivastava, Ms Jayeeta Saha, Mr Aaditya Shukla, Mr Harsh Arora and Mr Lalit Bhandari	TSDSI Secretariat
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### List of Members Absent

	Member Organization
1	Apple India Pvt. Ltd.
2	AUSPI
3	Bharat Sanchar Nigam Ltd.(BSNL)
4	Broadcom Semiconductor India Pvt. Ltd.
5	CISCO
6	Comviva Technologies Ltd.
7	IIMA Idea Telecom Centre of Excellence
8	IIT Hyderabad
9	IIT Madras
10	IIT Mandi
11	Indian Institute of Science Bangalore
12	Ministry of Electronics and IT
13	Microsoft Corporation India Pvt. Ltd.
14	Mymo Wireless
15	Nokia Solutions & Networks
16	Reliance JIO Infocomm Ltd.
17	Sterlite Technologies Ltd.
18	Symbiosis Institute of Technology Management (SITM)
19	Saankhya Labs
20	Rohde & Schwarz India Pvt. Ltd.



### TSDSI GBM Action Item Tracker– status as on 2<sup>nd</sup> August, 2016

Basis: 3<sup>rd</sup> General Body Meeting of TSDSI held on 8<sup>th</sup> December, 2016 at Lecture Room #1, India International Centre Annexe, 40 Max Mueller Marg, New Delhi 110003.

Topic	Action Item Source Meeting	Action	Action by	Status as on 19th November, 2015
Annual Report	3rd GBM Item -4	Revise the Annual Report as per remarks of members and release	Secretariat	● completed
Technical activities	3rd GBM-Item 5	Conduct a joint meeting of all Technical groups to address cross-cutting issues and accelerate pace of work	Director General	● A joint meeting of all technical groups was held on 10th February, 2016
TSDSI-EU cooperation project on ICT standardization	3rd GBM Item -6	Seek inputs from Technical Leaders on candidate topics for discussion in the 3rd India-EU Workshop proposed in Feb 2016	Director General	● Topics identified were discussed in the workshop held on Feb 11, 2016. Intensified cooperation on these will be taken up in the 3 year project, beginning Sep 2016 under this Partnership Instrument.
Hosting of international SDO meetings in Apr 2016	3rd GBM-Item 7	Members to support hosting of the international meetings by way of providing volunteers and financial sponsorship	Members	● The events were conducted with support from members.
Financial matters	3rd GBM – Item 8	Introduce 2 new categories of membership.  Revise membership fee structure.	Secretariat	● Completed  ● DeitY, IISc Bengaluru, Samsung RnD Institute India, MTS, Mymo Wireless and Sterlite have taken up TSDSI membership
Membership Engagement	3rd GBM – Item 9	Website improvement	Secretariat	● Website and user interfaces being updated with support from members.

**Annexure I – Approved Changes in the RnR document**

- i. Purely operational matters relating to the functioning of technical groups are to be shifted from RnR to the WP document.
- ii. Chairman and Vice Chairman may be reworded to Chairperson and Vice Chairperson across the document.
- iii. Commencement of membership for new members should be from the date of payment of fees (admission and membership fees). Membership fees payable shall be for a full financial year. If membership is sought to be effective from 2<sup>nd</sup> half of the financial year, half the membership fee shall be charged.
- iv. Elections for the Chairperson and Vice-Chairperson of TSDSI shall be held after election of GC members. In case a Chairperson/Vice-Chairperson has to demit office for any reason, fresh elections shall be held for the vacant post by calling candidates from amongst the GC membership. Tenure of the newly elected Chairperson/VC shall however coincide with that of the incumbent GC.
- v. It shall be mandatory to hold one General Body meeting annually. It shall be called Annual General Body meeting (AGM). One more GBM shall be required to be convened. Any additional GBMs, to be called Extra-ordinary or Emergency GBM, can be convened as needed.
- vi. Status of membership: A written 'undertaking to pay' within 3 months of issue of invoice by TSDSI and actual payment within 4 months shall maintain the membership. If not paid by due date, the membership shall be deemed as suspended. Notwithstanding the undertaking, the member should have cleared all their dues by the dates stipulated by EO for being eligible to vote or contest elections for technical leadership or GC positions.
- vii. Introduce Joint Working Group for inter-group liaison. This recommendation is subject to approval from the Govt. as it pertains to Clause 5\* of the RnR.

It may be noted that any changes in Clause 5 (Structure of Society) and 19 (Standards formulation) of the RnR will have to be approved by the Govt. following which it will be sent to the Registrar of Societies.

The GC members are grateful to Mr A K Mittal and the members who contributed in reviewing and drafting recommendations for changes in the RnR, notably - Dr. Vinosh James, Qualcomm, Dr Punit Rathod, Intel, Mr. Niranth Amogh, Huawei, Mr. Gupteshwar Majhi, C-DoT, Mr. Ashwani Kumar, Ericsson and Mr. Babu Narayanan, CEWiT.