Project	**P1900.7: Radio Interface for White Space Dynamic Spectrum Access Radio Systems Supporting Fixed and Mobile Operation** http://www.dyspan-sc.org/
Title	**Minutes of teleconference Mar 13, 2013**
DCN	**1900. 7-13-0019-01**
Date Submitted	**Mar 27, 2013**
Source(s)	Muhammad Zeeshan Shakir Muhammad.shakir@qatar.tamu.edu
Re:	
Abstract	
Purpose	
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IEEE 1900.7 WS Radio WG
Mar 13, 2013
Teleconference meeting
Chair: Stanislav Filin
Vice Chair: Oliver Holland
Secretary: Muhammad Zeeshan Shakir

Wed Mar 13, 2013, 8:00 AM

1. Call to Order

The meeting was called to order by the Chair Stanislav Filin on Wed Mar 13, 2013 at 08:10 AM UTC.

- The WG secretary explained the attendance process for the meeting. First secretary will roll call the names of the WG voting members. Then other present individuals can raise their voice to record their attendance may be by just mentioning the number on excel sheet against their names. If someone is attending the meeting for the first time then it is highly encouraging to email the name and affiliation to the officers of WG to record the attendance.
- The WG secretary performed roll call for attendance:

Attendance: Muhammad Aljuaid, Stanislav Filin, Oliver Holland, Ignatius Lee, Dongming Li, Dominique Noguet, Vankatesha Prasad, Vinh Dien Hoang, Muhammad Zeeshan Shakir, Huaizhou Shi, Dariusz Wiecek, Xin Zhang, Nicolas Cassiau, Jean-Baptiste Doré, Guoru Ding.

Summary:

- 15 members are present.
- 9 voting members/10 attendance, the quorum is achieved.

2. Approval of Agenda

The chair present agenda for the meeting and highlight that there are three contributions to be presented during the technical contribution session.

Motion

To approve Mar 13 meeting agenda 7-13-0014-00

Moved by Lee

Seconded by Shi

The Chair asked for any discussions. None. The question was called.
The Chair made a call for any objections. No objections.

The motion was approved with unanimous consensus.

3. Call for Essential Patent Claims

The Chair showed patent policy to the group.

The Chair made a call for essential patent claims. No new essential patent claims were indicated.

4. Approval of minutes of Feb 20 meeting minutes 7-13-0013-00

The Secretary presented minutes of Feb 20 meeting briefly. Following are the summary of the Feb 20 meeting:

1. Contribution 1: We have to find out possibility of the including internet of things under current consolidated use case. May be by the next London meeting we will discuss this by WG voting and with the concern of Chair and Editor of the WG.
2. Contribution 2: We will be expecting a presentation based on study to learn the complexity and cost estimations for receiver side of FBMC and may be a detailed comparison based on FBMC and OFDM.
3. Contribution 3: We will be looking forward to have technical contribution may be in London meeting.

Motion

To approve Fen 20 meeting minutes 7-13-0013-00

Moved by Dominique

Seconded by Hoang

The Chair asked for any discussions. None. The question was called.
The Chair made a call for any objections. No objections.

The motion was approved with unanimous consensus.

5. Status report

The WG Chair presented the status report **7-13-0018-00**

The Chair asked for any discussions. None. The question was called.

The Chair made a call for any objections. No objections.

6. Technical Contributions

6.1 Analysis of scenarios from an access scheme perspective

The WG chair requested the contributors of contribution no. **7-13-0015-00** to present their contribution to the WG members. Mawlawi presented the contribution.

- Shi asked about the deterministic case and said further what is the deterministic solution that would be most suitable for access. May be OFDM or OFDMA or just TDMA is suitable. Dominique said this is depending on physical layer. He further said like in Heterogeneous networks femtocells are supposed to employ LTE access techniques. He assured may be in April meeting a follow up on deterministic case be discussed.

6.2 Overview of FBMC PHY

The WG chair asked the contributors of contributors of contribution no **7-13-0016-00** to present their contribution. Cassiau presented the contribution.

- Stanislav asked how FBMC behave in typical fading channels. He continued further especially when we have mobility. What are the implications? Dominique and team said FBMC is one of the best candidates to be employed in such scenarios. The ACLR of the FBMC can be decided accordingly to the type/constraints on the shape of the signal. Therefore, is considered as more vulnerable to Doppler shift in comparison with others such as OFDM.
- Zhang said on slide no 5: He said how FBMC transmit prototype filter depends on applications? What are such applications? Dominique and team said it depends on the required ACLR. If we need good ACLR the choice would not be the same and therefore adapt time and frequency localization according to ACLR. Under low ACLR we may choose less localized in frequency and better localized in time. Zhang said further how receiver can inform about the location? Does it have some kind of sensors? Dominique and team said yes it is possible the application feature could be fixed or adaptive.
- Stanislav said how it is depending on application. As an example how this can be employed in different countries. Dominique said in different countries for different regulatory bodies FBMC can adapt according to the spectrum usage requirement. He said further it can also be adapted to the scenario of high mobile speed or high Doppler.
- Stanislav said so far we have only one PHY layer scheme and there is not any negative comment on the scheme to be included in standard. He asked Dominique whether they plan to merge all the contributions on FBMC and prepare a single document for WG members to review and understand the contribution in full. Dominique said he can think over it and pay be possible prepare something for next meeting.
- Zhang asked on slide no 8: about the expressions on orthogonality of filters. Dominique and team explained the equations accordingly.

- Stanislav and Zeeshan summarized the discussions by encouraging the contributors to prepare a merge document on FBMC for 1900.7.

6.3. TVWS Access with Polarization Adaption

The Chair asked the contributors of contribution no 7-13-0017-00 to present their contribution. Dongming presented the contribution.

- Dariusz said it was interesting presentation however; the proposed solution may be applicable to some countries not all. He said further there are countries where they have indoor reception and there are lots of receptions inside the building where portable antennas are present inside. (Dongming reply was not audible due to poor connection)
- Stanislav asked what we need to know at the input output of the terminal. Dongming said for the transmission we need to have path loss and precession of reception.
- Stanislav said would it be possible for antenna on top of the building to adapt for hundreds of antennas down. Dongming said it would be possible since we need only the information about the interference channels. He said further polarization adapts its technique with some users first but if the number increases the systems needs to combine other possible techniques as well.
- Dariusz said consider that there are two receiving antennas one with vertical and one with horizontal polarization. How polarization adaptation will then take place. May be it is not possible to distinguish between the polarization patterns. He further asked about the polarization taken place at the transmitter side. How can we relate the different polarization of indoor antennas with the polarization on receiving side? (Dongming reply was not audible due to poor connection)
- Due to poor internet connection it was decided that answers to the Dariusz question and concerns be discussed through WG mailing. Dongming agreed to the decision.

7. Next meeting

- April 23- 26, 2013, co-located with IEEE DySPAN plenary session
- September 2013, East Coast, USA (precise dates and location on the East Coast TBD): The Chair said that during last leadership meeting it was decided this meeting will be moved earlier in August in order to maintain the equal gap in between all the plenary meetings.
- December 2-5, 2013, Tokyo, Japan

8. AOB

The chair made a call for any other business. None.

The secretary requests all the contributors to adhere the style and format for the contribution documents.

9. Adjourn

Motion

To adjourn meeting

Moved by Zeeshan

Seconded by Hoang

Motion is approved by unanimous consent.

The meeting adjourned 09:45 UTC.