P1900.7: Radio Interface for White Space Dynamic Spectrum Access Radio Systems Supporting Fixed and Mobile Operation
http://www.dyspan-sc.org/
Minutes of teleconference Nov 6, 2013
1900. 7-13-0064-00
Nov. 06, 2013
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# IEEE 1900.7 WS Radio WG Nov 06, 2013 Teleconference meeting Chair: Stanislav Filin Vice Chair: Oliver Holland

Secretary: Muhammad Zeeshan Shakir

# Wed Nov 06, 2013, 08:00 AM

#### 1. Call to Order

The meeting was called to order by the Chair Stanislav Filin on Nov 6, 2013 at 08:00 AM UTC.

• The WG secretary performed roll call for attendance:

Attendance: Muhammad Aljuaid, Stanislav Filin, Oliver Holland, Adrian Kliks, Ignatius Lee, Sanjeev Manikkoth, Dominique Noguet, Vankatesha Prasad, Muhammad Zeeshan Shakir, Huaizhou Shi.

# **Summary:**

- 10 members are present.
- 07 voting members/09 attendance, the quorum is achieved

# 2. Approval of Agenda

The chair present agenda for the meeting and highlight that one technical contribution is going to be presented during today's meeting.

# **Motion**

To approve Nov 06, 2013 meeting agenda 7-13-0060-00

# Moved by Dominique Seconded by Oliver

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 Oct 2013 meeting 7-13-0061-00

The Secretary presented the minutes of October meeting. The highlight of the October meeting was approval of decisions made during August meeting. No technical contribution was presented in October meeting.

# **Motion**

To approve Oct 2013 meeting minutes 7-13-0061-00

Moved by Oliver Seconded by Lee

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 briefly presented the status report **7-31-0063-00** 

The Chair asked for any discussions. The WG has following discussions:

- Dominique asked about the topics of interest to be considered for MAC layer section. Stanislav said we need to consider procedures how to access TVWS for example some interfaces as we have in 1900.6 and PAWS. Dominique said he wants to have clear idea what we shall do and how can be different from others. Stanislav said we can get some idea about the mechanisms such as how to release channel among the available channels and should have some smooth mechanism, and self-coexistence. Dominique said switching from one to another is pretty similar to handover mechanism and just would like to have an idea how to split the topics in development. Stanislav said such mechanism should be there and could be separate section and could be in MAC section.
- Dominique said we will try propose something to the draft and see where fits appropriately. Stanislav said we have some general description of each sub section and in PHY layer section we have lot material comparatively. Once these parts are ready we will be close to finalize the project. Oliver said we might need to consider sensing only devices defined by FCC that can be part of the cognitive plane e.g., the silencing for

sensing or could be included in MAC. Stanislav said it would be good idea and we may consider this for this section.

#### 6. Technical Contributions

Adrian Kliks presented technical contribution **7-31-0062-00**. After the presentation, the working group has following discussions:

- Dominique said related to the fact about the one PHY layer we should not only have one PHY layer FBMC and he think that it all depends on the contributions we have. No one said we should have one and it is more up to the group how many PHY layers we could have. Also, we are not bound to have one solution. From the perspective of approaches of general structure and from conceptual point of view it probably does not makes sense in terms of notations and we have to make sure we have consistency in standard. He further said, he is wondering if we focus on something that we might not need at the end and it would be wastage of efforts. We should focus more on the gaps we already have and standard should be completed by completion of each of the profile. So this is just a caution maybe we should not put too much effort to do something that could not be added at the end to the draft. Adrian said his attention was to present generic structure so that we may have multiple profiles. He further said his preference would also be FBMC however we may not be able to judge which one is better. We may need to make more options. He also agreed that the gaps need to be filled first and for consistency he suggests that we can define each standard in terms of some parameters and create generic structure. If we agreed he can help to get the parameters, and we can define the parameters of modulation scheme and may be clearer to the reader if we define the generic parameters. If whole group does not decide now to have such structure then he could work on it and group can have more discussion about it He further said another point for example, if we have FBMC he think having generic structure we can easily adapt the modulation parameters and distances easily. Shi said it is possible we give general structure and then we just describe few of the modulation schemes according to the contribution of the group. First, we can say general and then, how to adapt FBMC and continue and can have couple of more contributions. Adrian said this is what he wants to said. Stanislay said options are not closed and we may have several profiles.
- Dominique said 1900.6 has four profiles, important is that we have to make sure that consistency is there. Someone who wants to implement one profile should be able to understand how it is implemented. In fact notations may not be consistent in different profiles and it may not be good. He further said the aim of writing a book is different than writing standard. Reading a standard is not easy with generic profiles. And should be consistent to ensure everybody who reads has same understanding. Stanislav said under the generic structure may be is it more efficient to use FPGAs and use the resources appropriately to implement FBMC and other options. Adrian said with one generic structure and with one chip we can have whatever we want to have for particular profile. Stanislav said has it has pros and cons. For example we may have two PHY layers in draft and several possible options to implement them. We may have costly

implementation for one of the PHY layer and simple and cheap implementation for other one. Stanislav further said we need to understand basically draft has two parts nominative part and informative part. If your proposal is for informative part then there is not an issue and if it is for normative part still we can have it and later if it is not possible to include it in normative part then we can include it in as informative part. Stanislav said it is up to the group to decide.

- Stanislav further said adding profile should not be a hard problem. He further said, we
  may do more discussion in December meeting. Shi said cognitive radio technology is not
  just only access the available spectrum but also need to be adaptive to the structure and
  adaptive to the system. This generic proposal could be the different and distinguish
  feature for the standard.
- Stanislav said we have to initiate more discussions on this during December meeting. We have one PHY layer draft and for the second one we have just presentation not contribution. In case if there will be more contributions and we agreed to have generic structure then they might need to address what Adrain and Oliver proposed.

Stanislav thanks the group for useful discussions on this contribution and said looking forward to have more discussions on this.

# 7. Next meeting

December 2-5, 2013, F2F, Tokyo, Japan, co-located with IEEE DySPAN-SC Plenary.

Stanislav presented the agenda for December 2013 meeting and asked for any input. Dominique asked can you please let us know the slots we have for the week. Stanislav said 5-6 sessions are fine and we may eliminate last day sessions.

#### **8. AOB**

None.

#### 9. Adjourn

#### Motion

To adjourn meeting

#### Moved by Dominique

# Seconded by Lee

Motion is approved by unanimous consent.

The meeting adjourned 09:45 UTC.