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Abstract	The document is a proposal for profiles based on the poll taken in November 2007 meeting, in relation with comment 092 in database IEEE 802.16/07-53r2		
Purpose	[Description of what <i>specific</i> action is requested of the 802.16 Working Group or subgroup.]		
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High-level proposal for 802.16h profiles

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Introduction

The comments 92,144,333 in data base IEEE 802.16/07-53r2 were addressed by the Profile Ad-Hoc, after the November meeting. However no clear agreement has been reached; this contribution tries to provide a better ground for the harmonization of different opinions.

The poll taken in the November meeting in relation with comment 92 had the following results:

6.4.4.2 CX with SSU when relevant	6
6.4.2.3.2 DCS (passive channel selection)	6
6.4.2.3.7 UCP	1
15.2 Provisionning (GPS sync)	4
15.3.1 CXCC (timming)	4
sub-chann1 (sync and SSU)	5
sub-chann 2 (CMI)	5
sub-chann 3 (secondary sync)	2
sub-chann4 (Radio sig)	1
sub-chann 5 (CSI)	1
15.3.2 (candidate channel and Master fr. Selection)	5
15.4.1 (CX Frame)	5
CX-CBP	4
15.4.2 Channel optimization	1
15.4.3 Master frame optimization	1
15.4.4 Interference control	0
15.4.5 Token Protocol	1
15.5 CXP	2
15.6 Intersystem communication	2
15.8 Network -based identification of SSU	1

The Profiles for chapt.12 will be produced based on 802.16 format, however for establishing the basic differentiation between profiles is proposed a high level approach. As discussed in the meeting, the features supported by more than 50% of people in the meeting will be considered as mandatory for compliance with 802.16h Amendment, having to be implemented by all the profiles.

Proposal

The first profile to be defined is the Basic profile, including those features which are considered mandatory.

The optional features can be added to the Basic profile in a single bunch (as in this proposal) or can be further split in more profiles. I propose to include all the additional features in a single extended profile. I've actually separated the features related to the regulatory identification of SSU by a networking approach, because these features need to be supported also by regulators.

In addition, and not included in this contribution, are needed PHY profiles specifying the channel sizes relevant for LE or shared bands; the basic and additional profiles will be mentioned under each PHY profile.

Additional features for the Basic Profile

Here is a list of additional features and the approach for the inclusion in the Basic LE CX Profile:

- Allow multiple approaches in relation with the coexistence protocols
- Include the inter-system communication between the single carrier systems and 802.16h systems, in countries in which the TD-SCDMA is imposed by regulations, as may be the case in 4.9GHz in China.
- Give support for radio signatures in CXCC
- Give full support for inter-systems communication during Master frames (15.6)

Proposal

See in the next Table the basic proposal for high-level features allocation to Profiles.

The following notation is used:

- m: mandatory
- o: optional
- am: alternative mandatory
- cm: conditional mandatory

Item	Description	Reference	Status	Profiles			Comment
				Profile Base	Profile Extended	Profile Extended + SSU_NET	
1	CX with SSU	6.4.4.2	cm	Y	Y	Y	To be requested only in frequency bands in which SSU have a defined regulatory status
2	DCS (passive channel selection)	6.4.2.3.2	m	Y	Y	Y	
3	UCP	6.4.2.3.7	am	Y	N	N	Either UCP or CX-CBP can be implemented for conformance with the Basic profile
4	Provisioning	15.2	m	Y	Y	Y	GPS Sync
5	CXCC Timing	15.3.1	m	Y	Y	Y	
6	CXCC Sub-channel 1	15.3.1	m	Y	Y	Y	
7	CXCC Sub-channel 2	15.3.1 15.3.3	m	Y	Y	Y	
8	CXCC Sub-channel 3	15.3.1	o	N	Y	Y	
9	CXCC Sub-channel 4	15.3.1	m	Y	Y	Y	
10	CXCC Sub-channel 5 (CSI)	15.3.1 15.3.4	cm	Y	Y	Y	To be mandatory only in the bands and countries in which TD-SCDMA is imposed by regulations
11	Candidate Channel and Master Frame Assessment (CCMFA)	15.3.2	o	N	Y	Y	
12	CX-Frame	15.4.1	m	Y	Y	Y	
13	CX-CBP	15.4.1.3	am	Y	Y	Y	Either UCP or CX-CBP can be implemented for conformance with the Basic profile
14	Channel optimization	15.4.2	o	N	Y	Y	
15	Master frame optimization	15.4.3	o	N	Y	Y	
16	Interference control	15.4.4	o	N	Y	Y	
17	Token Protocol	15.4.5	o	N	Y	Y	
18	CXP	15.5	o	N	Y	Y	
19	Inter-system communication	15.6	m	Y	Y	Y	
20	Network-based identification of SSU	15.8	o	N	N	Y	