

## TTA PG302 status report

Document Number:

IEEE L802.16-05/002

Date Submitted:

2005-01-25

Source:

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Voice: [Telephone Number]

Fax: [Fax Number]

Venue:

Session #35

Base Document:

Purpose:

Introduce the overview of recent TTA PG302 standard status.

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# TTA PG302 status report

Jan. 24, 2005

# 0. Wireless Internet Operators to Be Picked

Republic of Korea plans to select high-speed wireless Internet operators next February that will become licensed for faster Internet access via mobile devices using a locally developed wireless standard, the Ministry of Information and Communication said Thursday.

The ministry said the guidelines for awarding the high-speed wireless Internet licenses should be completed by the end of September and that commercialization of the new service may start in 2006.

The new service, which is billed as a ``WiBro'' wireless service and formerly known as 2.3GHz portable Internet, will allow speedy Internet connection to data and video with mobile gadgets such as cell phones and personal digital assistants.

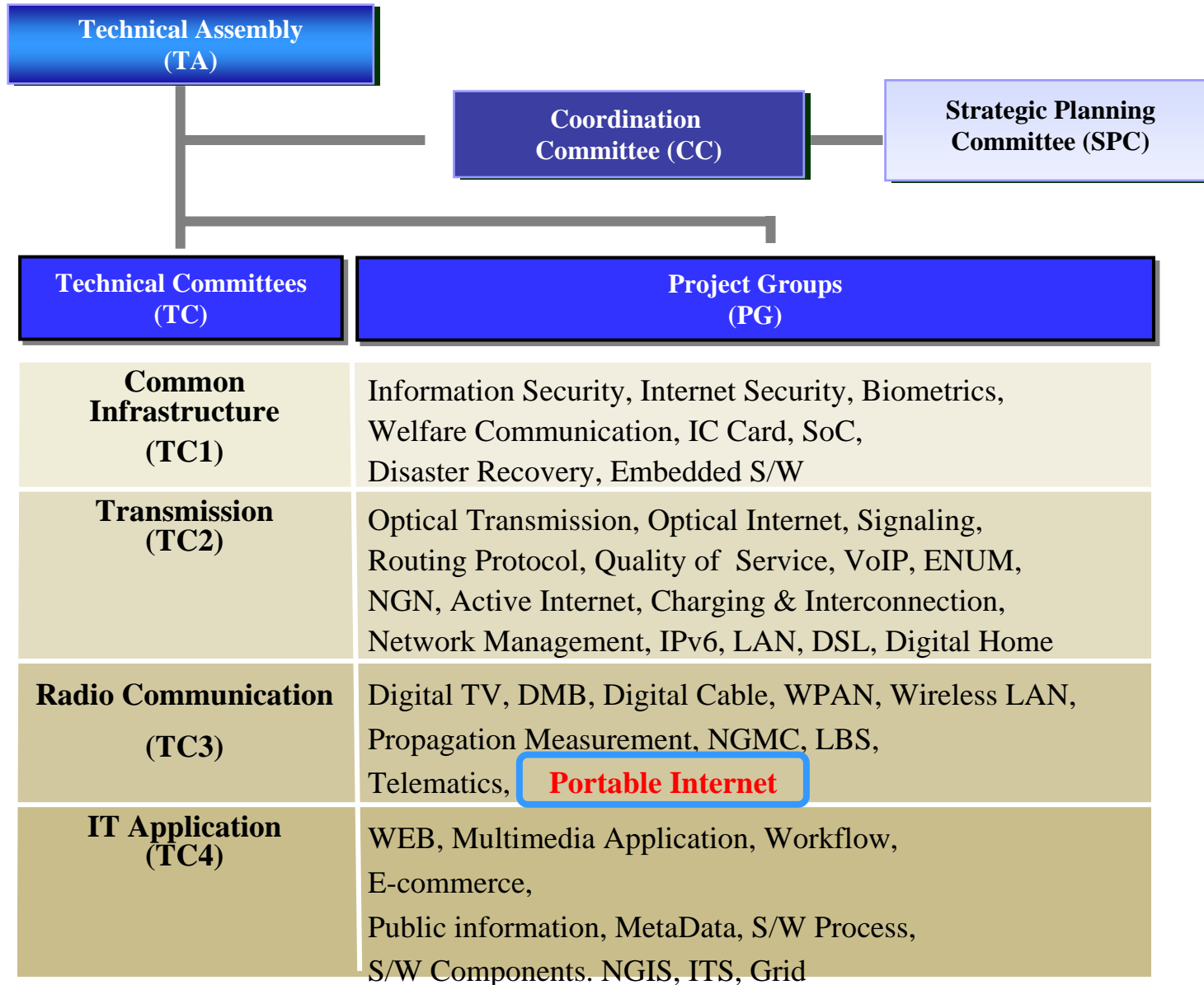
Currently, several telecom companies including KT, SK Telecom, Hanaro Telecom and Dacom\* are vying to get business licenses for the high-speed Internet service.

The ministry added it decided the IEEE 802.16, which includes Korea's home grown technologies, as the nation's WiBro standard.

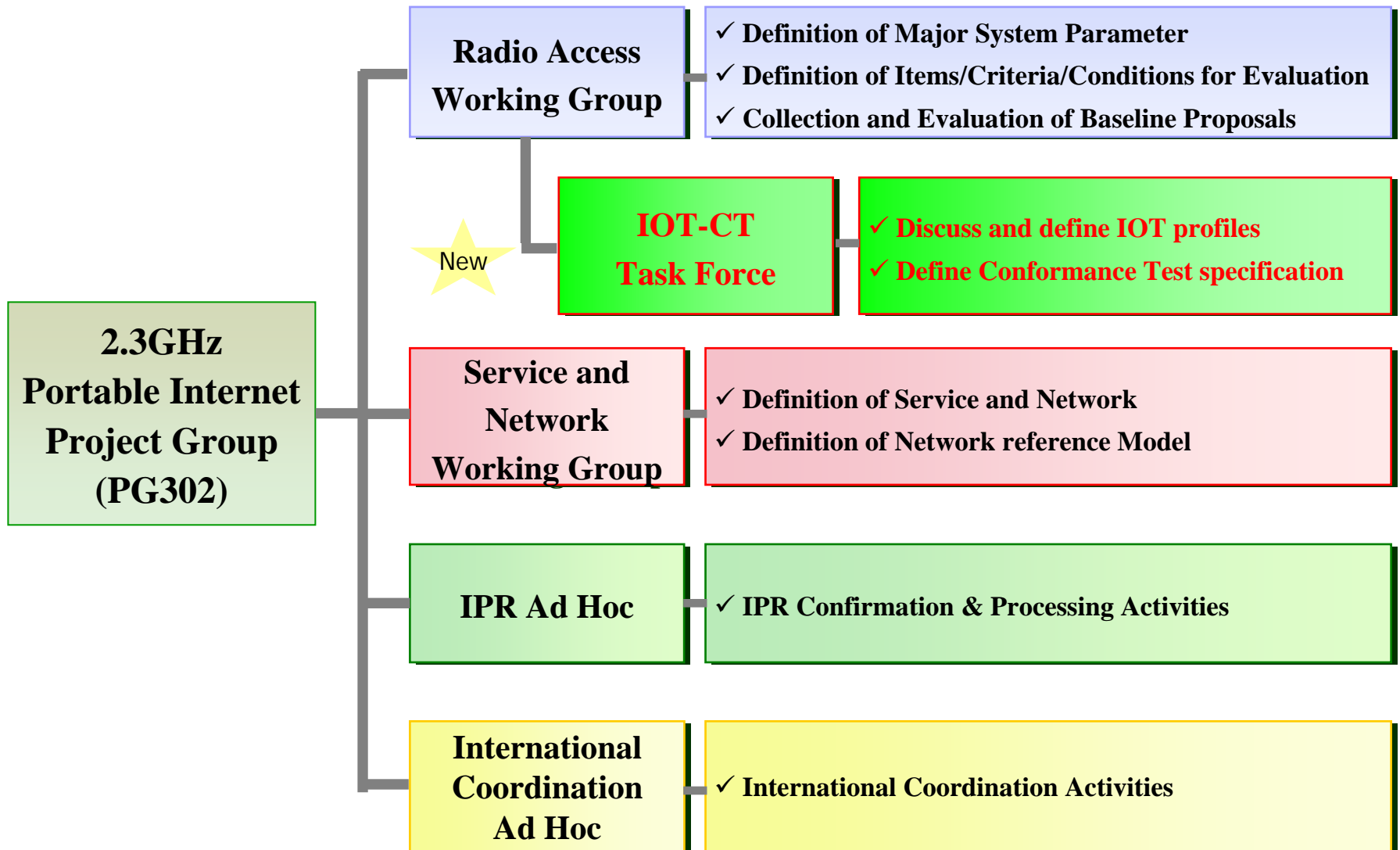
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\* Recently Dacom had withdrawn the plan

# I. Telecommunications Std Committee of TTA



## II. Committee Structure and ToR of PG302



# III. Establishment of PG302

## Establishment of PG302 for WiBro standardization

- Technical Assembly(TA) of TTA standardization committee approved the establishment of 2.3GHz Portable Internet Project Group(PG302, renamed from PG05) in June, 2003
- The first meeting was held on 30 July, 2003 and The Chairman was elected.
- The second meeting was held on 5 September, 2003 and approved the followings
  - The establishment of 2 Working Groups and 2 Ad Hoc
  - **New TF established recently(2005.01)**
  - The Goal of PG302 Activities & Timeline is as follows.

### Time

3Q 2003

4Q 2003

1Q 2004

2Q 2004

### Goal (Phase 1 Standardization)

#### ● Definition of Target Requirements

- Minimum Service Requirements
- Minimum System Requirements

#### ● Preparation of the Draft Standard

- Definition of major system parameters
- Definition of items/criteria/conditions for Evaluation
- Collection and Evaluation of Baseline Proposals
- Selection of Proposed Baselines

#### ● IPR Confirmation and Processing Activities

#### ● International Cooperation Activities

#### ● Completion of Draft Standard

#### ● Approval and Notification of Standard

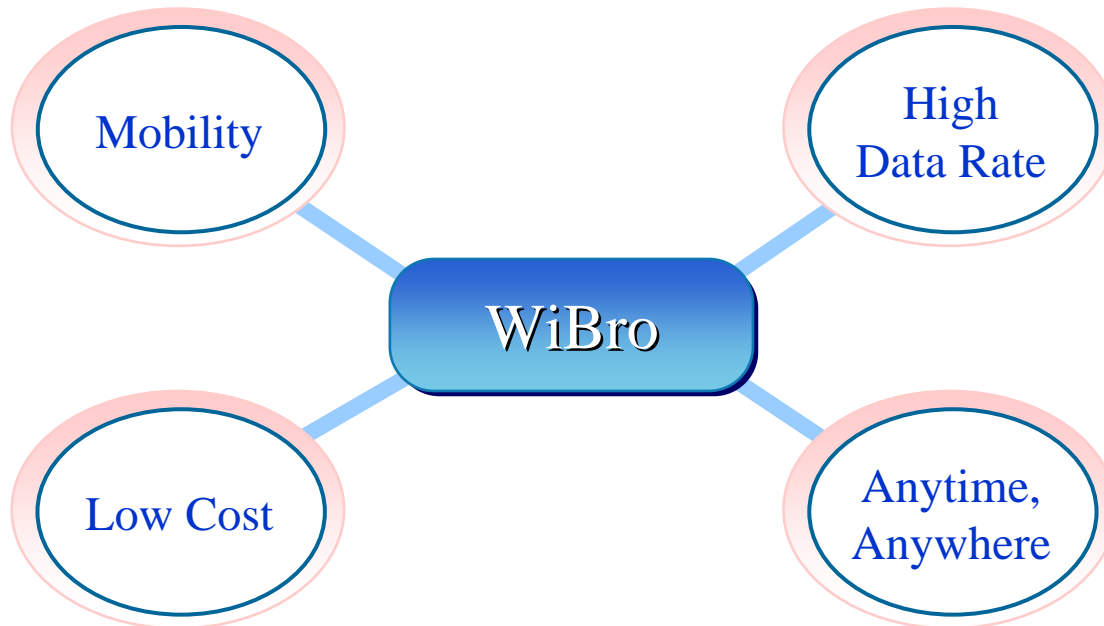
# IV. WiBro - Definition

## Definition

- Portable Internet Service(WiBro) is to provide high data rate wireless internet access with PSS(Personal Subscriber Station) under the stationary or mobile environment, anytime and anywhere.

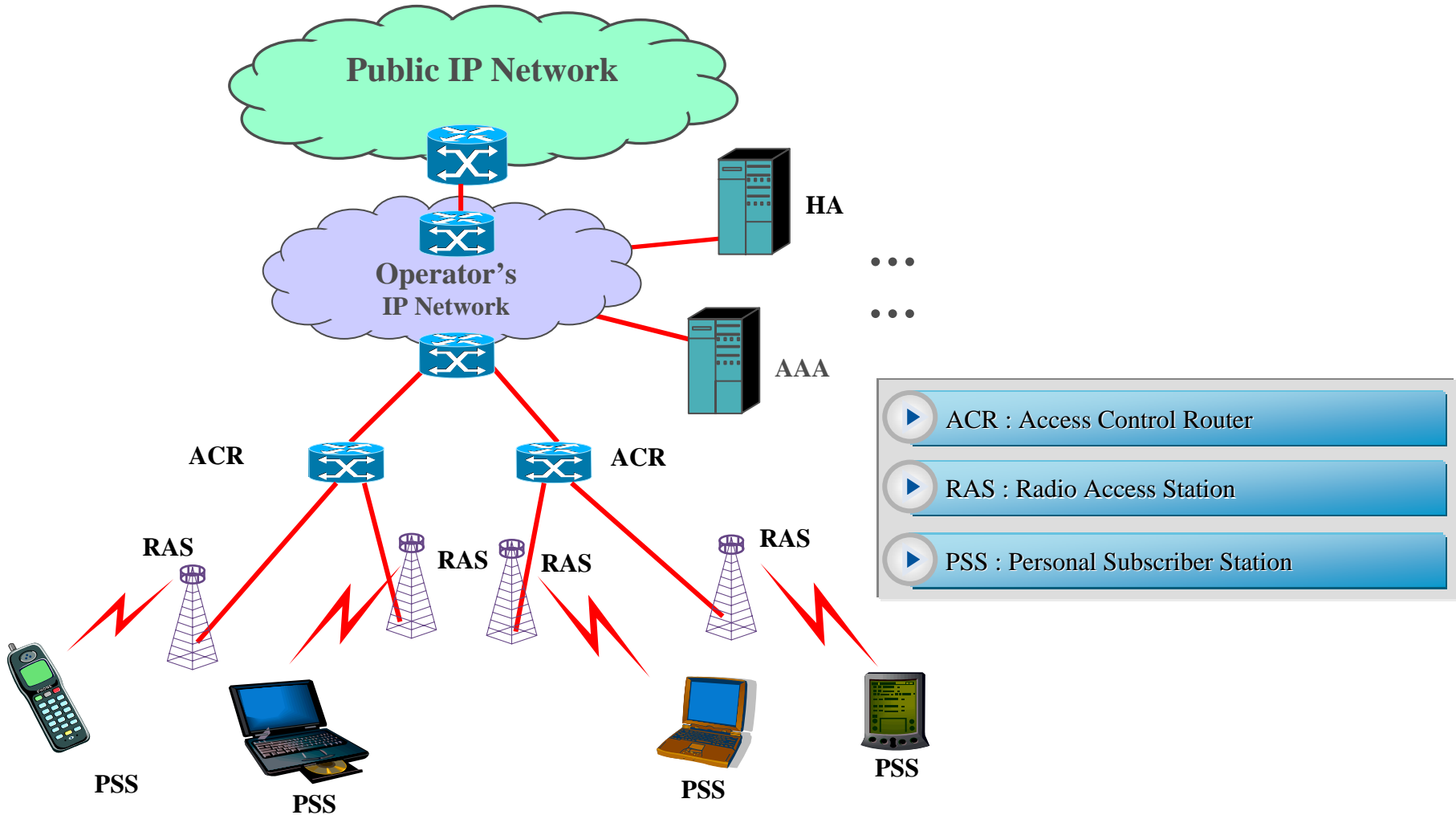
## Reference

- 『Portable Internet』 service was named as 『WiBro』 .  
End of April, 2004, WiBro : Wireless Broadband



# V. Decision of PG302

## Network Architecture of WiBro (Phase I)





# VI. Decision of PG302 (cont'd)

## Progress

### ● PG302

- selected two baselines for WiBro (March, 2004)
- approved one of baselines as Draft (April, 2004)

### ● **The Draft for WiBro in circulation to members of TTA.**

- May 3 ~ May 30, 2004 (during 4 weeks) / Done

### ● PG302 selected the Draft as a Draft Standard for WiBro

- June 7, 2004 / Done

### ● **Finally, The Draft Standard was approved as a Standard (phase I) for WiBro in Technical Assembly (TA) of TTA.**

- June 25, 2004 / Done

### ● **Reopen phase I spec for discuss harmonization with 802.16**

- Dec 26, 2004/ Done

### ● **You may request for the Spec written in Korean through**

**following email address : [ibm686@tta.or.kr](mailto:ibm686@tta.or.kr)**

- <http://www.tta.or.kr/English/new/Main/index.htm>

# VII. Future Plan of PG302 (Phase II Std)

Phase II Standardization for advanced WiBro will be started from 3Q 2004.

Time	Goal (Phase II Standardization)
3Q 2004	<ul style="list-style-type: none"><li>● Definition of Service and System Requirements</li><li>● Determination of scope of technologies for improvements of system capacity</li><li>● Harmonization and collaboration with IEEE 802.16</li><li>● Preparation of detailed guideline for IPR Processing</li></ul>
4Q 2004	<ul style="list-style-type: none"><li>● Design of Evaluation Criteria of technologies for improvement of System Capacity</li><li>● Proposal and Evaluation of technologies for improvement of System Capacity</li><li>● Preparation of Evaluation Methodology for functional improvement for System</li><li>● Harmonization and Collaboration with IEEE 802.16</li><li>● IPR activities (Patent issue of factor technology, Patent Forum etc.)</li></ul>
1Q 2005	<ul style="list-style-type: none"><li>● Proposal and Evaluation of technologies for improvement of System Capacity</li><li>● Proposal and Evaluation of technologies for improvement of System Function</li><li>● Preparation of the Draft Standard</li><li>● Harmonization and Collaboration with IEEE 802.16</li><li>● IPR activities (Patent issue of factor technology, Patent Forum etc.)</li></ul>
2Q 2005	<ul style="list-style-type: none"><li>● Completion of Draft Standard</li><li>● <b>Harmonization and Collaboration with IEEE 802.16</b></li><li>● IPR activities (Patent issue of factor technology, Patent Forum etc.)</li></ul>

# VIII. Requirement of WiBro

## Basic requirement of WiBro service

- The MIC announced the technical spec with 5 criterion

WiBro service should follow the following: IEEE 802.16-2004, 802.16eD5+a with 5 criterion

### 5 Criterion for WiBro service

Duplexing	TDD (with BS sync)
Channel Spacing	$\geq 9\text{MHz}$
Frequency Reuse Factor	1
Throughput (per user)	Min. DL / UL = 512 / 128 [Kbps] @60 [Km/h] (Cell Edge)
Roaming	should be provisioned between all service providers