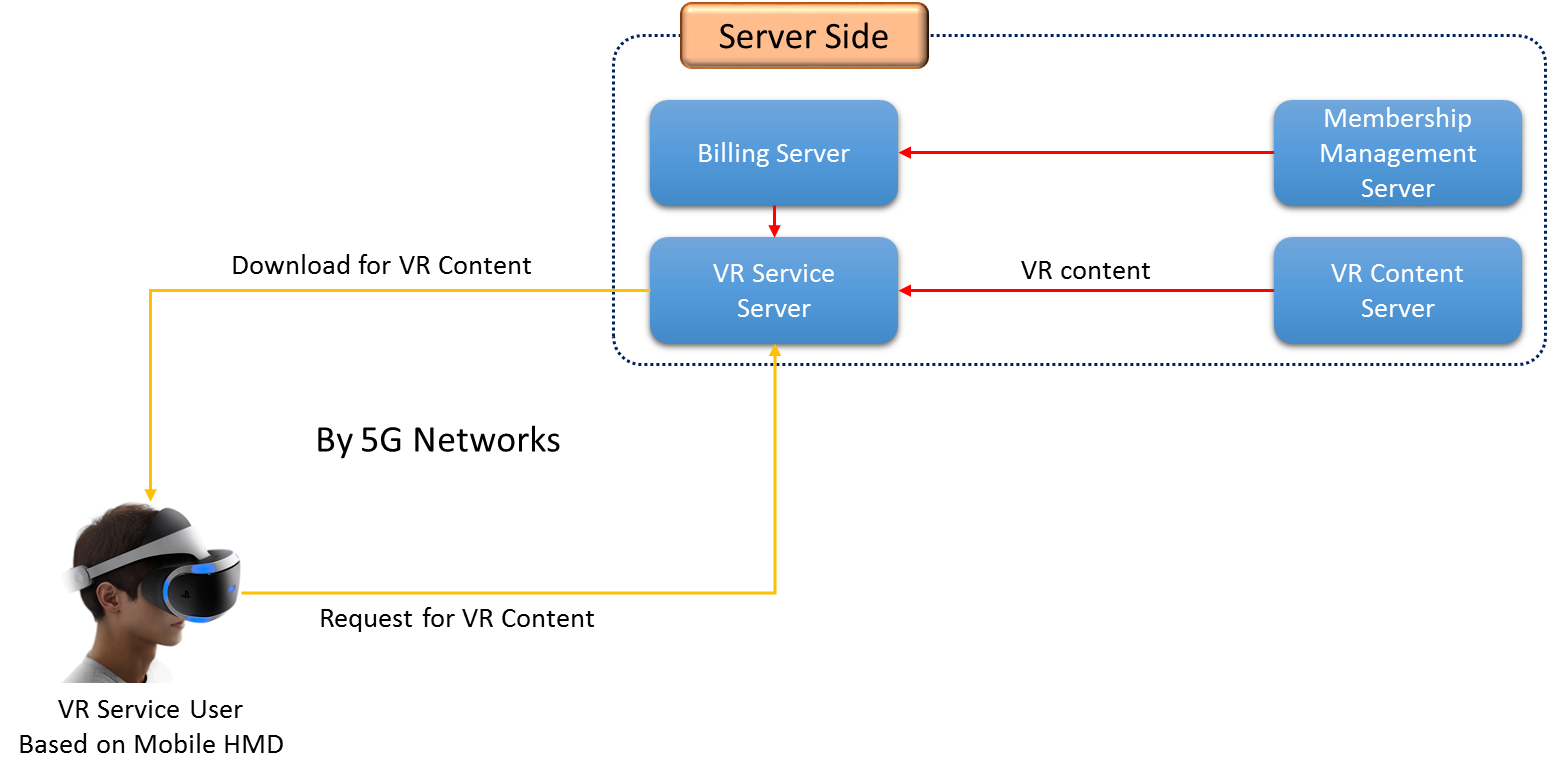
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| --- | --- |
| Project | **IEEE 802.21.1 Media Independent Services**  **<**[**http://www.ieee802.org/21/**](http://www.ieee802.org/21/)**>** |
| Title | **IMT-2020 Specification Report for New Proposal** |
| DCN | **21-16-0090-00-SAUC** |
| Date Submitted | **July 25, 2016** |
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| Re: | Session #75, san Diego, USA |
| Abstract | MIH requirements specification for data transportation between IMT-2020 and other networks |
| Purpose | Propose to new use case |
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<Last Proposal>

VR content streaming service in IMT-2020



1. —VR Content streaming service in IMT-2020

Recently, IMT-2020 network has attracted attention.

In specially, the need for IMT-2020 network has been further emphasized while receiving a lot of attention HMD-based VR services.

According to this trend, it is believed that would not require that the response in IEEE802.21.

For example, simulate a composed process HMD-based VR services, and what's what things in this process, and, IMT-2020 and vertical handover is if there are any advantages to be used by MIH and MIS in network environments where occur discussion let's do this.

I think that the proposal to require new standards for the handover to the service from IMT-2020 environment.

IMT-2020 Specification

1. IMT-2020 Parameters
   1. User experienced data rate: 100 Mbps (urban/suburban), 1Gbps (hotspots)
   2. Peak data rate: 20 Gbps
   3. Mobility: 500 Km/h
   4. Latency: 1 ms (radio interface)
   5. Connection density: 106/Km2
   6. Energy efficiency: 100 times vs 4G
   7. Spectrum efficiency: 3 times vs 4G
   8. Area traffic capacity: 10 Mbps/ m2
2. IMT-2020 Service scenarios
   1. Enhanced Mobile Broadband
   2. Massive machine type communications
   3. Ultra-reliable and low latency communications
3. Compare with IMT-Advanced(4G)

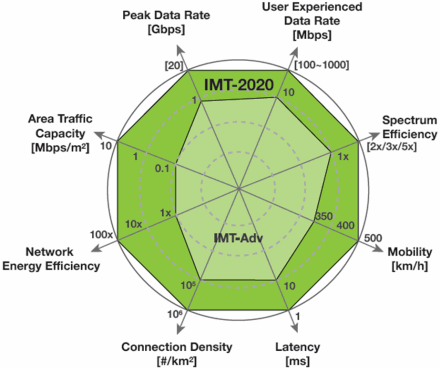


Figure 2 Enhancement of key capabilities from IMT-Adv (4G) to IMT-2020 (5G)

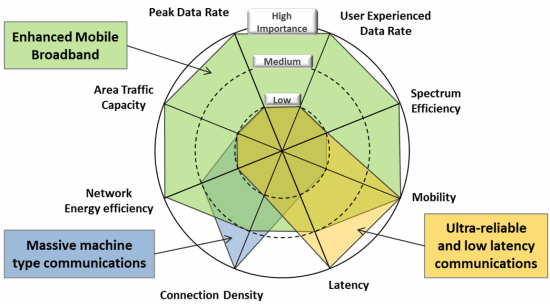


Figure 3 The importance of key capabilities in different usage scenarios

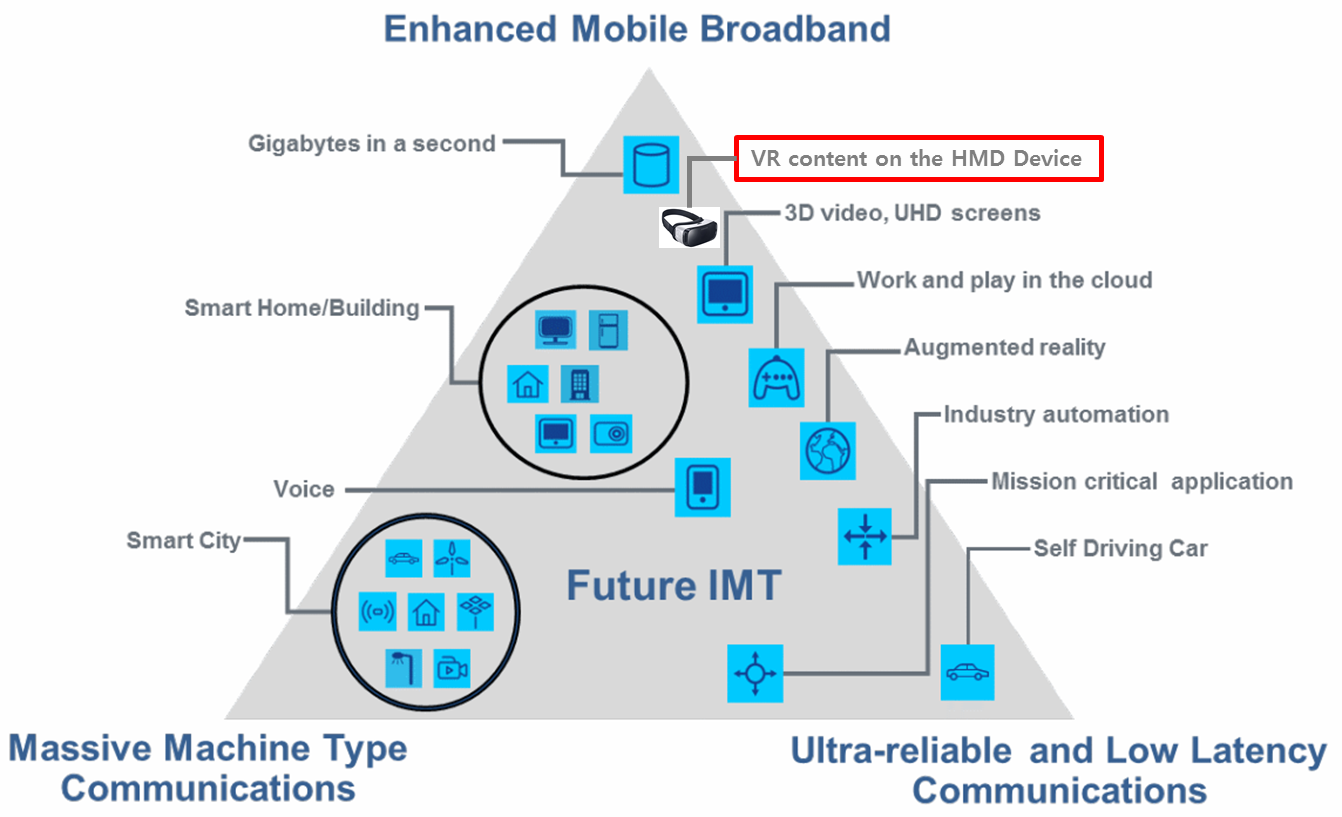


Figure 4 usage Scenarios of IMT for 2020 and beyond.[[1]](#footnote-1)

VR content based HMD don’t available under IMT-Advance(4G) speed.

Because, VR content need a 4K graphics resource.

Therefore, we don’t have consider to other cases.

We should consider to just 3 cases scenario.

1. Between IMT-2020 and Wi-Fi.
2. Between IMT-2020 and IMT-Advance.
3. Between Wi-Fi and IMT-Advance.

These case are very simple.

1. Recommendation ITU-R M.[IMT.Vision], document 5/199, “Framework and overall objectives of the future development of IMT for 2020 and beyond” [adopted in July 2015] [↑](#footnote-ref-1)