

Korea Proposal for Candidate IMT-2020 Technology

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Background

- ❖ Korea has contributed to ITU for the development of IMT-2000 and IMT-Advanced since 1998 by proposing candidate technologies as well as participated in Independent Evaluation Group activities
- ❖ Korea, a member of ITU, would like to propose candidate IMT-2020 technology in accordance with relevant ITU process
- ❖ Taking into account 5G market demands around 2020, ITU-R and External Organizations should adhere to the timeline for IMT-2020, as planned

Mobile Traffic and Spectrum plan

Actual traffics

(Unit: TB/month)

Year	CDMA	WCDMA	LTE	WiBro	WiFi	Total
Jul. 2015	7	3 856	145 649	4 038	9 530	163 080
Jul. 2016	7	1 915	219 042	3 008	11 522	235 494
Jul. 2017	6	1 272	305 283	1 985	16 217	324 763

K-ICT Spectrum Plan (January 2017)

- ❖ Korea plans to provide 4 GHz bandwidth for 5G service in the band above 24.25 GHz as follows:
 - ✓ 3 GHz in the band 26.5-29.5 GHz by 2018 when 5G systems are available, at latest by 2021
 - ✓ Additional 1 GHz by 2026, taking into account WRC-19 results

5G Services Plan



5G Test Lab open 5G test (Seoul, PyeongChang, etc) Winter Olympic PyeongChang

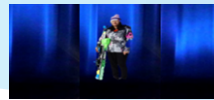
< 1st test event > < 2nd test event > < 5G trial service > < 5G Commercial >



• SYNC VIEW



• 360° VR



• Hologram live



• Time slice



• SYNC VIEW



• Omni point view



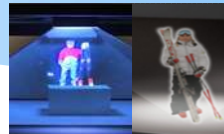
• Interactive multi view



• Drone show



• 5G autonomous bus



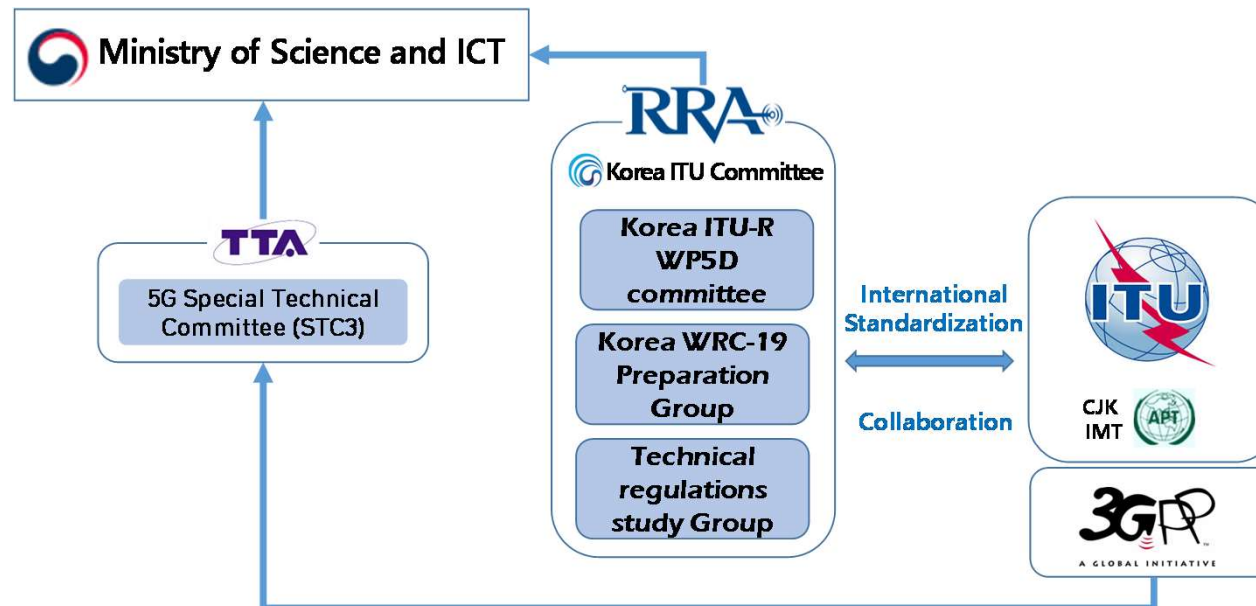
• Multi-site hologram live



[Source: MSIT]

5G Activities in Korea (1/2)

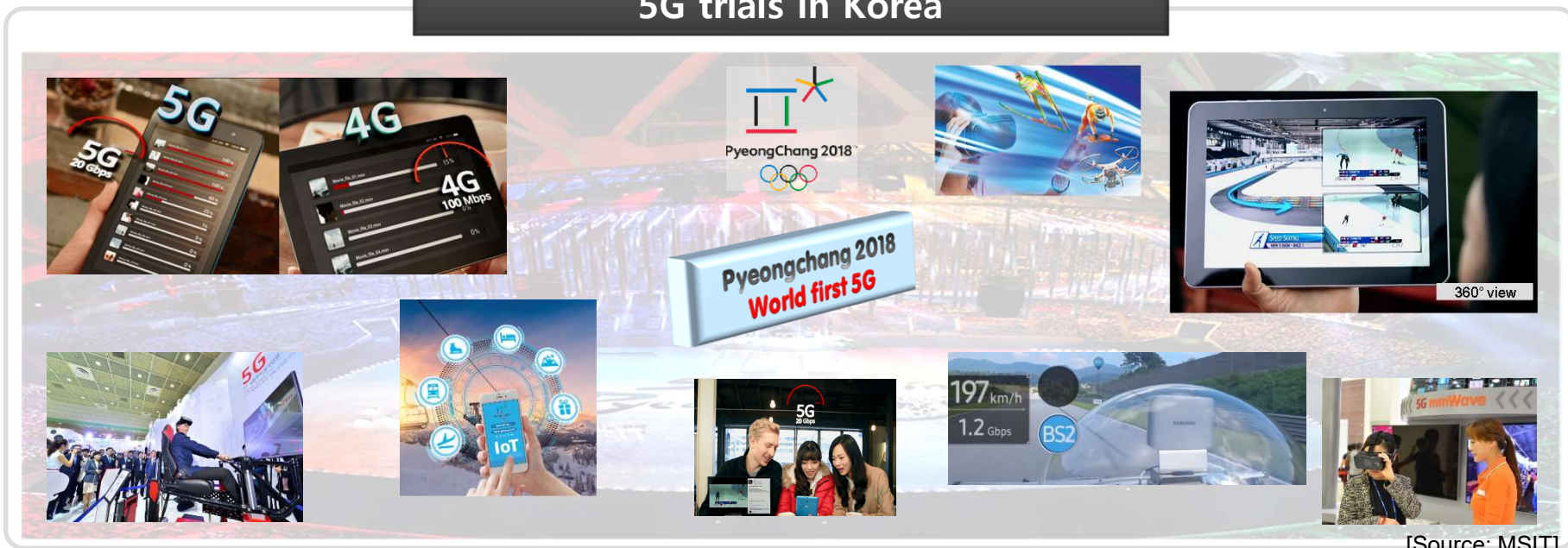
- ❖ Preparation for 5G commercialization
 - ✓ Studying technical regulations in the band 26.5 – 29.5 GHz
 - ✓ Collaboration for standardizations



5G Activities in Korea (2/2)

- ❖ 5G trials using 28 GHz band are being conducted at more than 100 sites in Seoul, PyeongChang and other cities
- ❖ A variety of 5G trials services to be introduced during 2018 Winter Olympic Games

5G trials in Korea



Korea proposal

❖ Principle for Korea Proposal

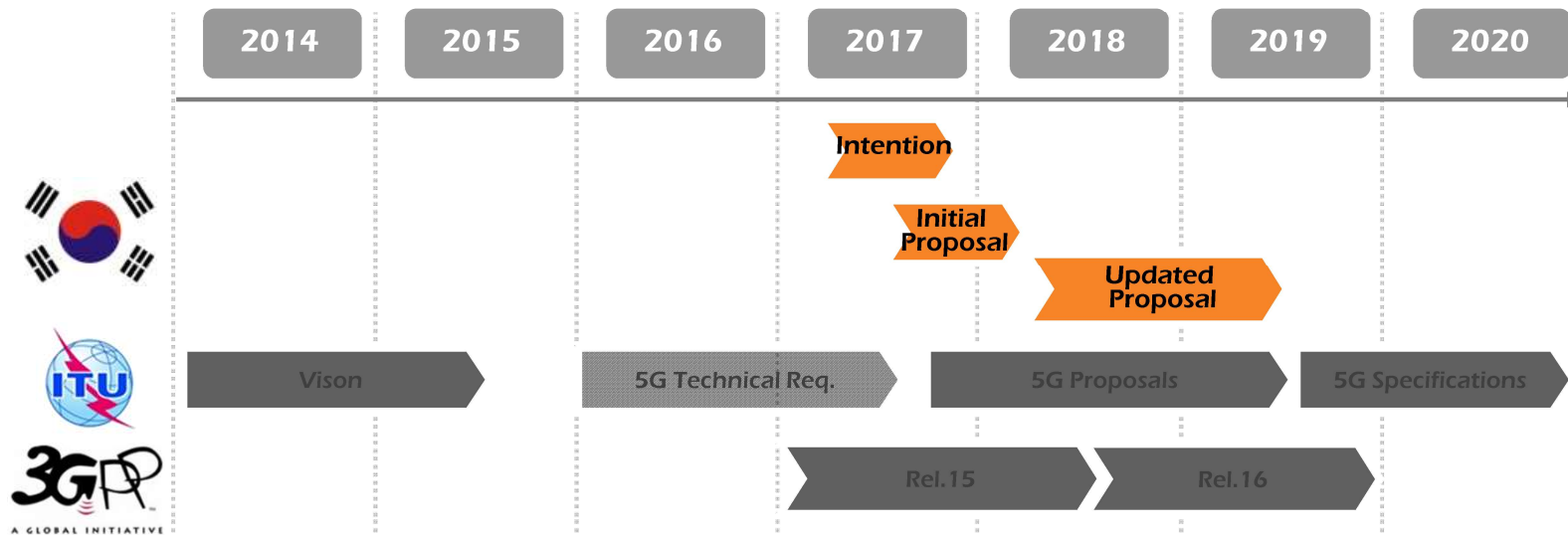
- ✓ Proposal would be compliant to 3GPP Release 15 onward
- ✓ Proposal would highlight the technology for the use of the band above 24.25 GHz
- ✓ Proposal would also include the technology for bands below 6 GHz

❖ Necessity of collaboration

- ✓ Korea is of the view that ITU Members, all industry sectors and external organizations should collaborate and endeavor to implement all capabilities in the first version of ITU-R Recommendation on IMT-2020 by October 2020

Schedule for Korea proposal

- ❖ In Oct. 2017, submit intention of candidate IMT-2020 technology proposal
- ❖ In Jan. 2018, submit initial proposal for candidate IMT-2020 technology
- ❖ By July 2019, update proposal(s) for candidate IMT-2020 technology



Thank you for your attention !

