TTA SPG33
Independent Evaluation Group

Seong-Jun Oh (seongjun@korea.ac.kr)
Chair of TTA SPG33

TTA Special Project Group 33

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                    │   5G Special Technical Committee     │
                    │              (STC3)                  │
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│    SPG31      │ │    SPG32     │ │    SPG33     │ │    SPG34     │
│ 5G Radio      │ │ 5G Network   │ │ 5G Technology│ │ 5G Global    │
│ Access        │ │              │ │ Evaluation   │ │ Coordination │
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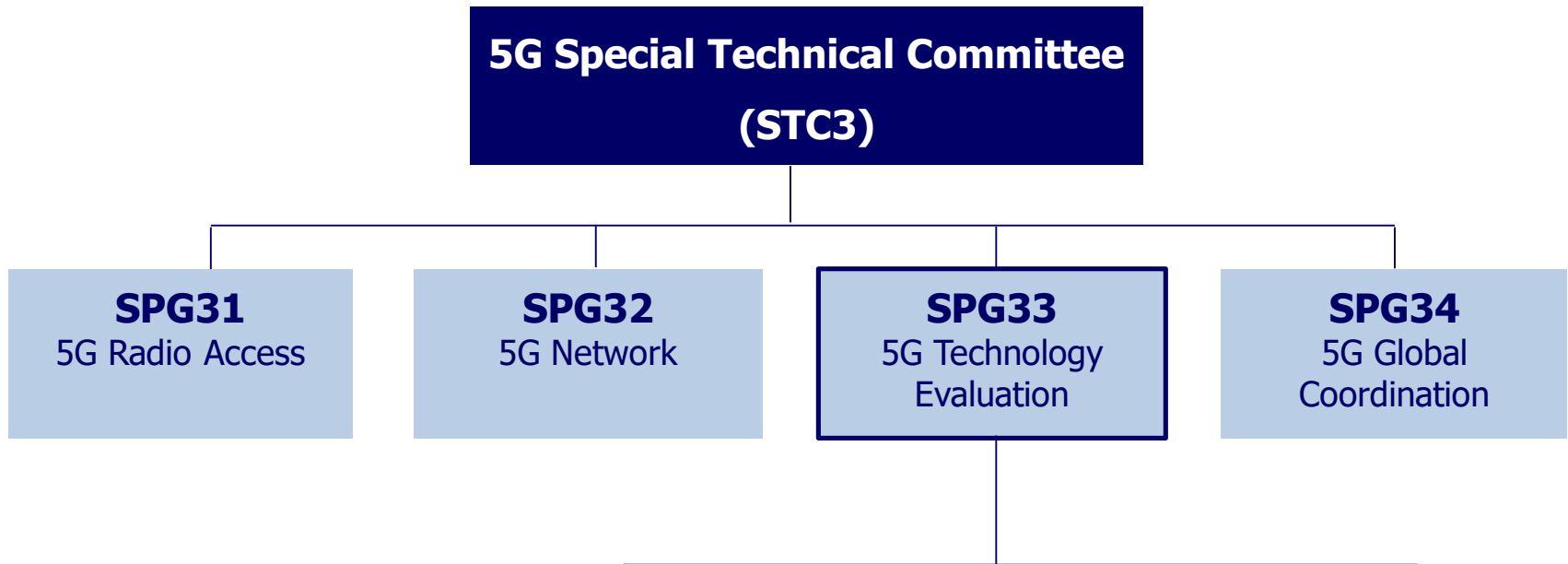
ToR (Terms of Reference)
- IEG activities for IMT-2020
- Develop/Submit evaluation report of IMT-2020 candidate technology(ies)

About TTA SPG33

- Established July 6, 2017
  - Registered as an IEG at the same month

- Members
  - About 30 members from Industry/Research Institutes/Academia

- Chairman
  - Prof. OH, Seong-Jun, Korea University
  - (email) seongjun@korea.ac.kr

IEG History for IMT-Advanced, TTA PG707

- Set up on July 31, 2008
  - Registered as an evaluation group on Dec. 2008
  - Submitted the evaluation reports on June 2010

- Activities
  - Regular member meetings to discuss the evaluation issues
  - Harmonization of PG707 members' evaluation works from
    - University, industries and research institute sectors
  - Shaping Drafting Group for Evaluation Reports
  - Cooperation : EVAL SIG (Special Interest Group) in CJK IMT meeting

- Contributions to ITU-R WP 5D
  - LLS results / Channel Model C-source codes
  - M.2135 corrections
  - Evaluation reports : IMT-ADV/18 and IMT-ADV/19

TTA SPG33 Work Scope

- Independent Evaluation Group registered in ITU-R
  - Terms of Reference includes
    - Evaluate proposals of IMT-2020 RIT/SRIT
    - Develop / Submit the report(s) to ITU-R
    - Cooperate and coordinate with other evaluation groups

- Complementary Works
  - Check if the proposal(s) satisfies the requirements according to the guidelines of ITU-R M.[IMT-2020.EVAL].
  - May provide complementary evaluation works in order to make sure of evaluation results against possible unclear issue, if any.

- Views on the other group's Evaluation Works
  - May provide SPG33 views on the evaluation works from other registered evaluation groups based on the consensus among TTA SPG33 members, if necessary.
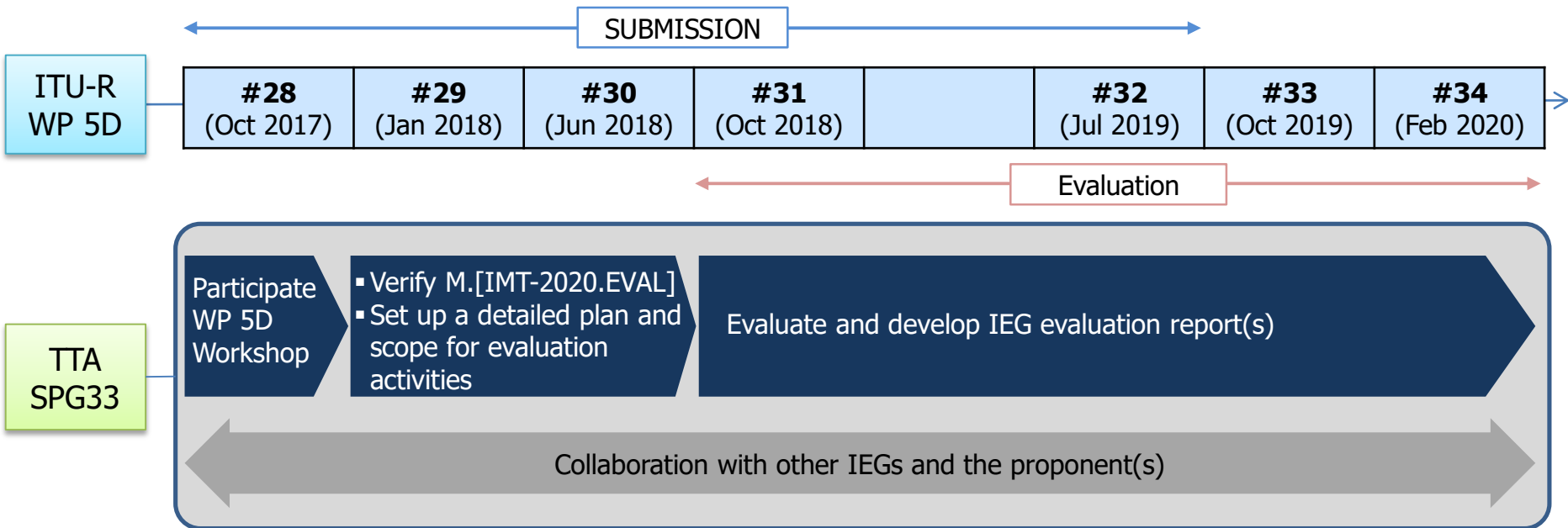
ITU-R M.[IMT-2020.EVAL]
Three Usage Scenarios and Thirteen Requirements

Technical requirement	Usage scenarios applicability		
	eMBB	mMTC	URLLC
4.1 Peak date rate	√		
4.2 Peak spectral efficiency	√		
4.3 User experience data rate	√		
4.4 5th percentile user spectral efficiency	√		
4.5 Average spectral efficiency	√		
4.6 Area traffic capacity	√		
4.7.1 User plane latency	√		√
4.7.2 Control plane latency	√		√
4.8 Connection density		√	
4.9 Energy efficiency	√		
4.10 Reliability			√
4.11 Mobility	√		
4.12 Mobility interruption time	√		√
4.13 Bandwidth			

Simulation Expected

- System-Level Simulation (SLS) for eMBB
  - Average spectral efficiency
  - Area traffic capacity
  - 5th percentile user spectral efficiency
  - User experienced data rate (Multi-Layer SLS)

- Link-Level Simulation (LLS) for eMBB/URLLC
  - Mobility (eMBB)
  - Reliability (URLLC)

- SLS or LLS for mMTC
  - Connection density

Provisional Workplan

SUBMISSION

	#28 (Oct 2017)	#29 (Jan 2018)	#30 (Jun 2018)	#31 (Oct 2018)		#32 (Jul 2019)	#33 (Oct 2019)	#34 (Feb 2020)
ITU-R WP 5D								

Evaluation

TTA SPG33

Participate WP 5D Workshop

- Verify M.[IMT-2020.EVAL]
- Set up a detailed plan and scope for evaluation activities

Evaluate and develop IEG evaluation report(s)

Collaboration with other IEGs and the proponent(s)

Thank you