



ITU-APT

Foundation of India

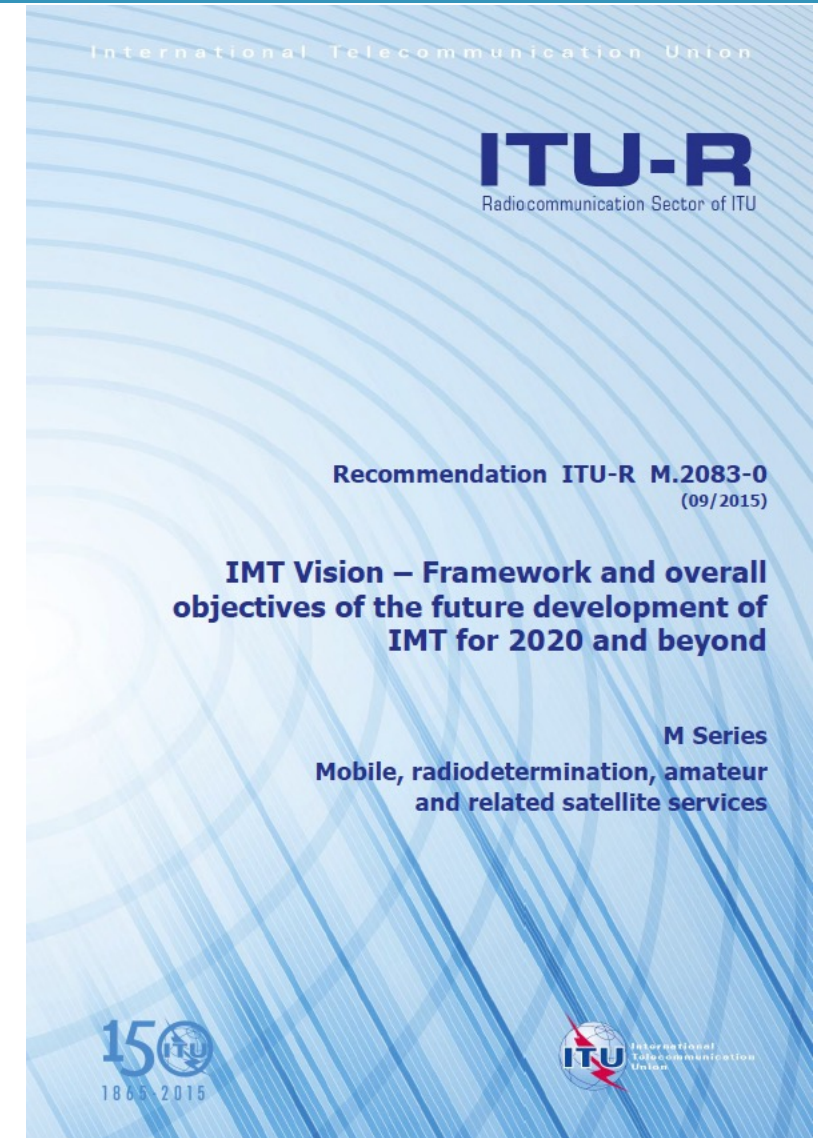
ITU's Association in India

Vision for 6G

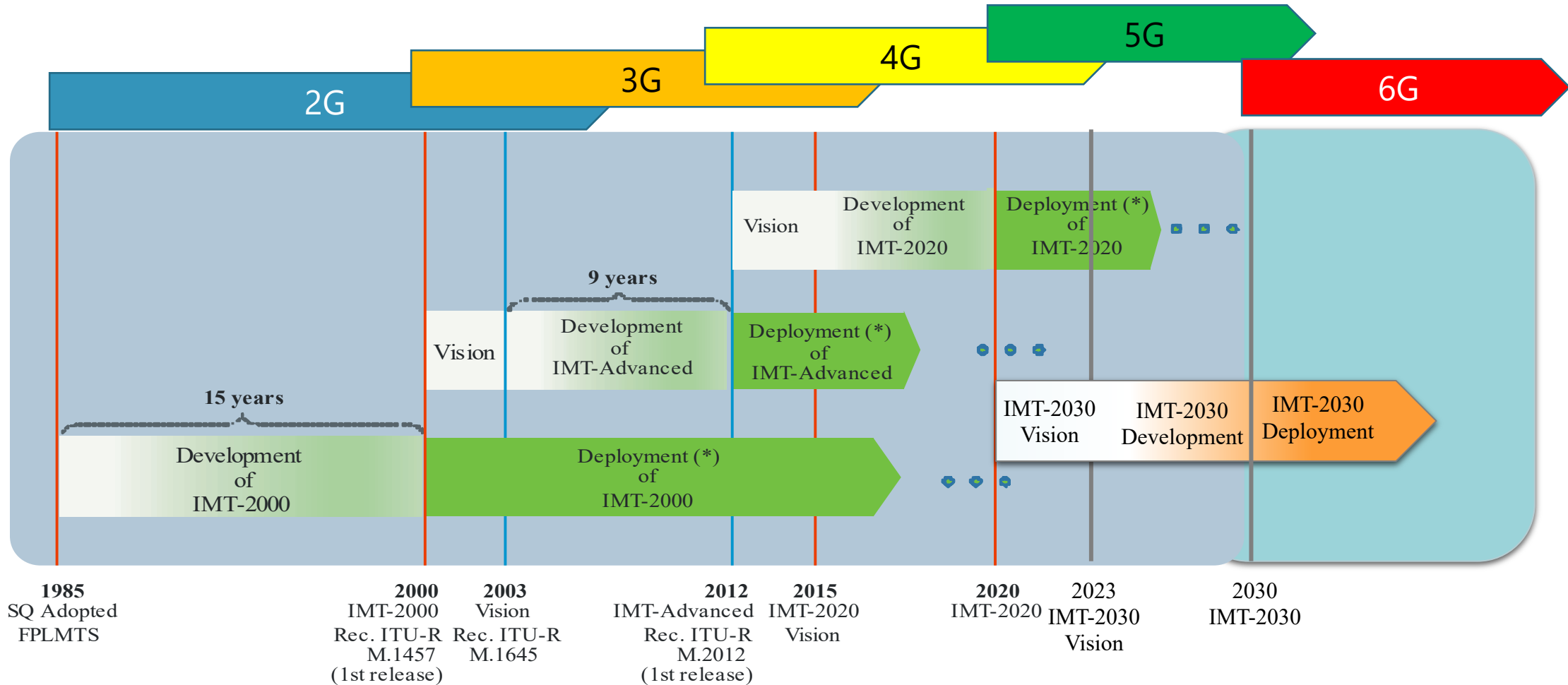
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President, ITU-APT Foundation of India
Vice Chairman - World Wireless Research Forum
Chairman, ITU SWG IMT Specific Applications
Chairman, APT Task Group on PPDR

ITU 5G Vision – Recommendation ITU-R M.2083

- ✓ While the Public understands the wireless mobile technologies as 2G, 3G, 4G, 5G, within the ITU, mobile cellular technologies are referred as IMT – International Mobile Telecommunications family of standards.
- ✓ ITU has a framework of standards for IMT :
 - ✓ IMT-2000 (3G),
 - ✓ IMT-Advanced (4G) and
 - ✓ IMT-2020 (5G)
- ✓ Development of IMT-2020 was started In early 2012, thus setting the stage for “5G” research activities around the world and finally lead to the 5G technology as we see it today.
- ✓ ITU-R finalized its “Vision” of the “5G” or IMT-2020 mobile broadband connected society in 2015 which is defined in Recommendation ITU-R M.2083



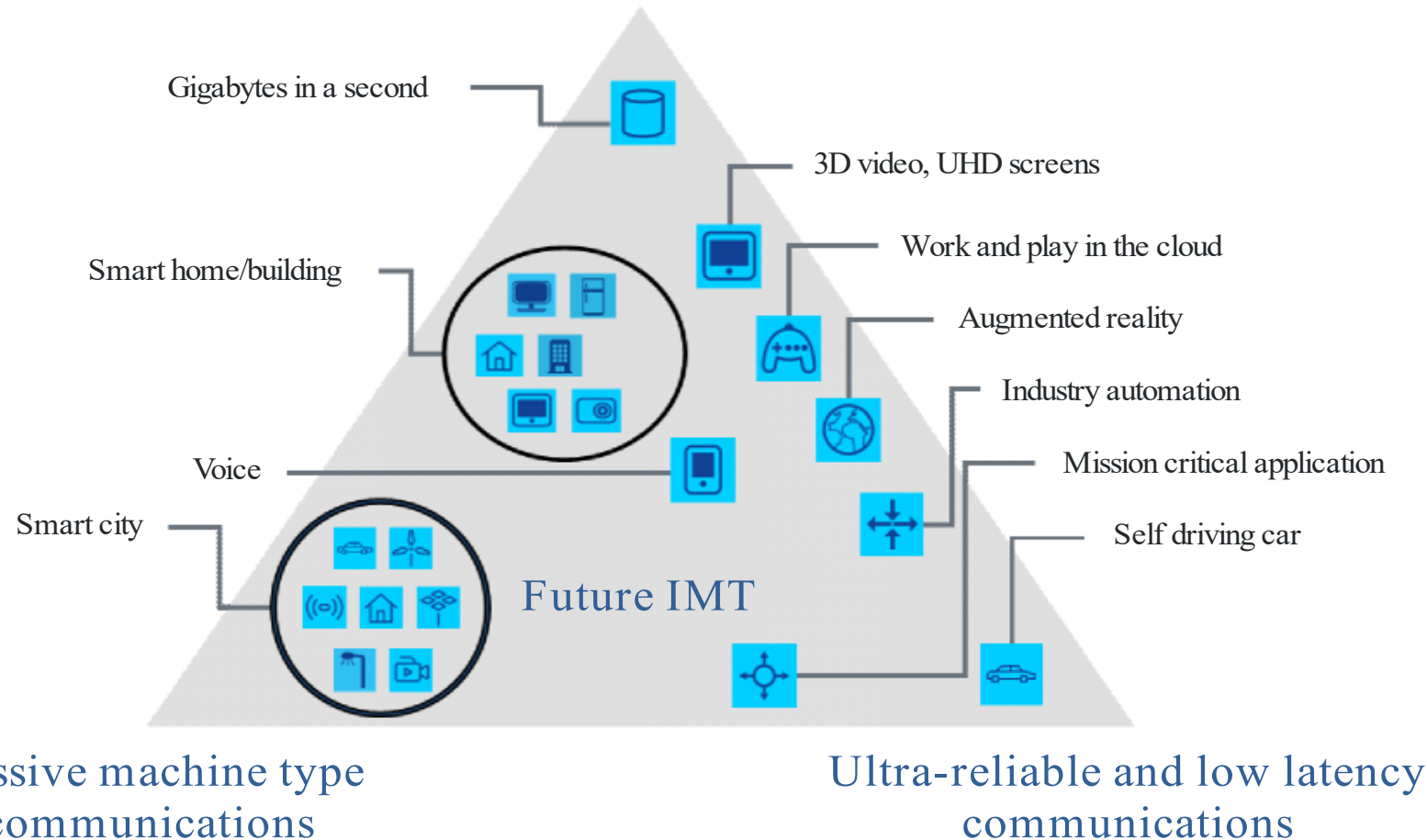
Mobile Technology Development Timelines



(*) Deployment timing may vary across countries.

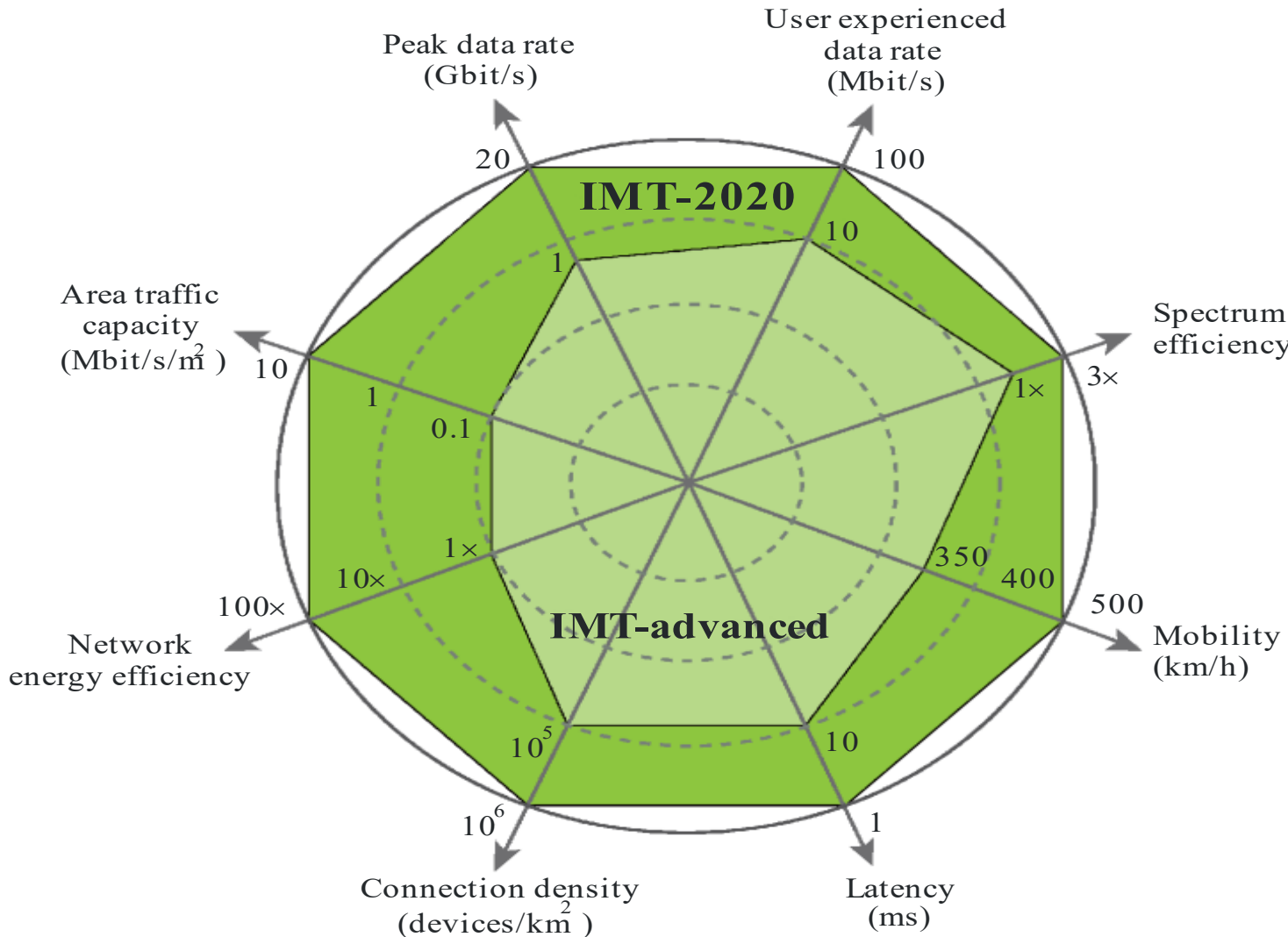
Usage Scenarios of 5G IMT-2020 (ITU-R M.2083)

Enhanced mobile broadband



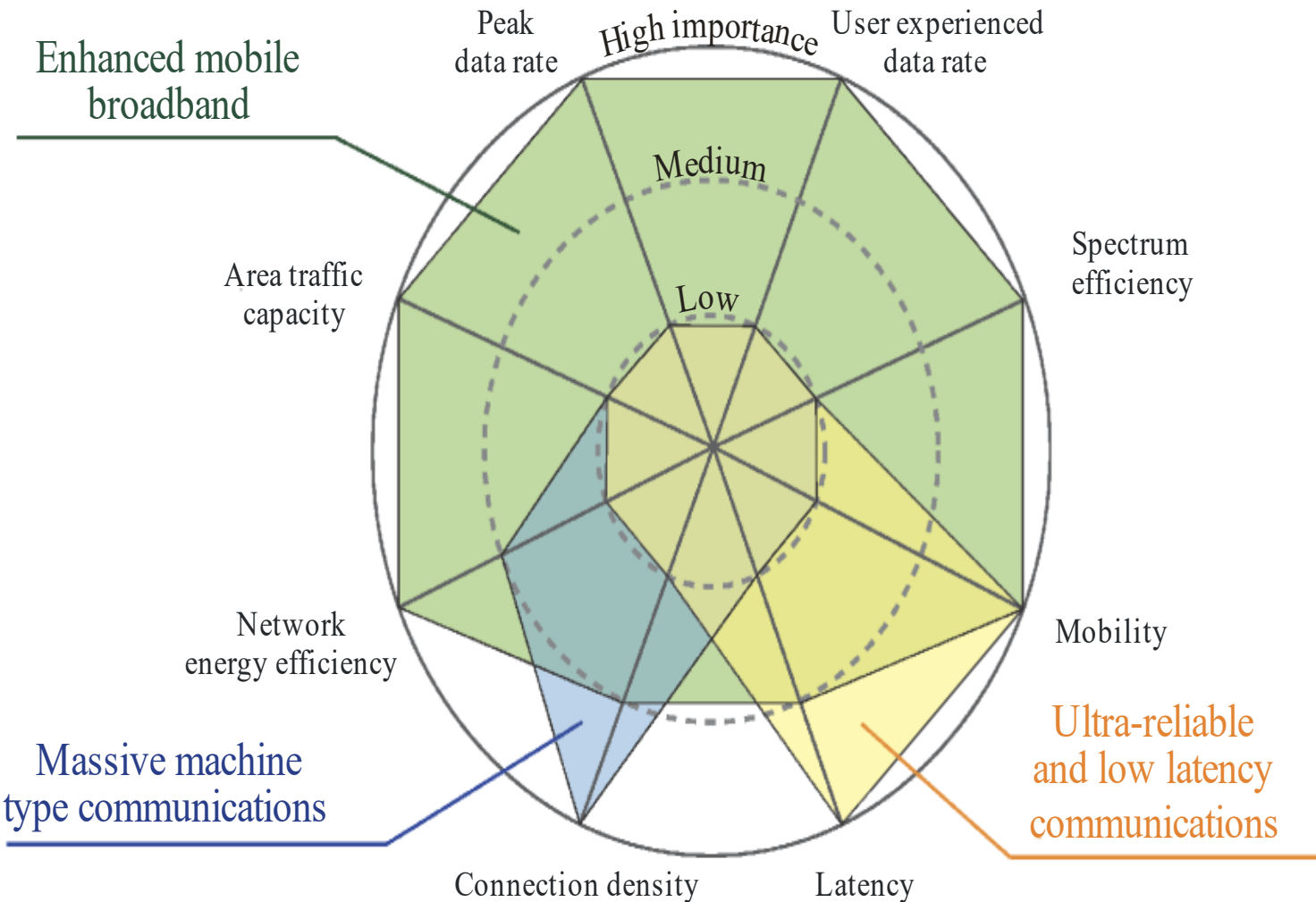
Q: What Should be the usage scenarios for 6G

Enhancement of Capabilities from 4G (IMT-Advanced) to 5G (IMT-2020)



Q: What Should be the enhancement of Capabilities from 5G to 6G

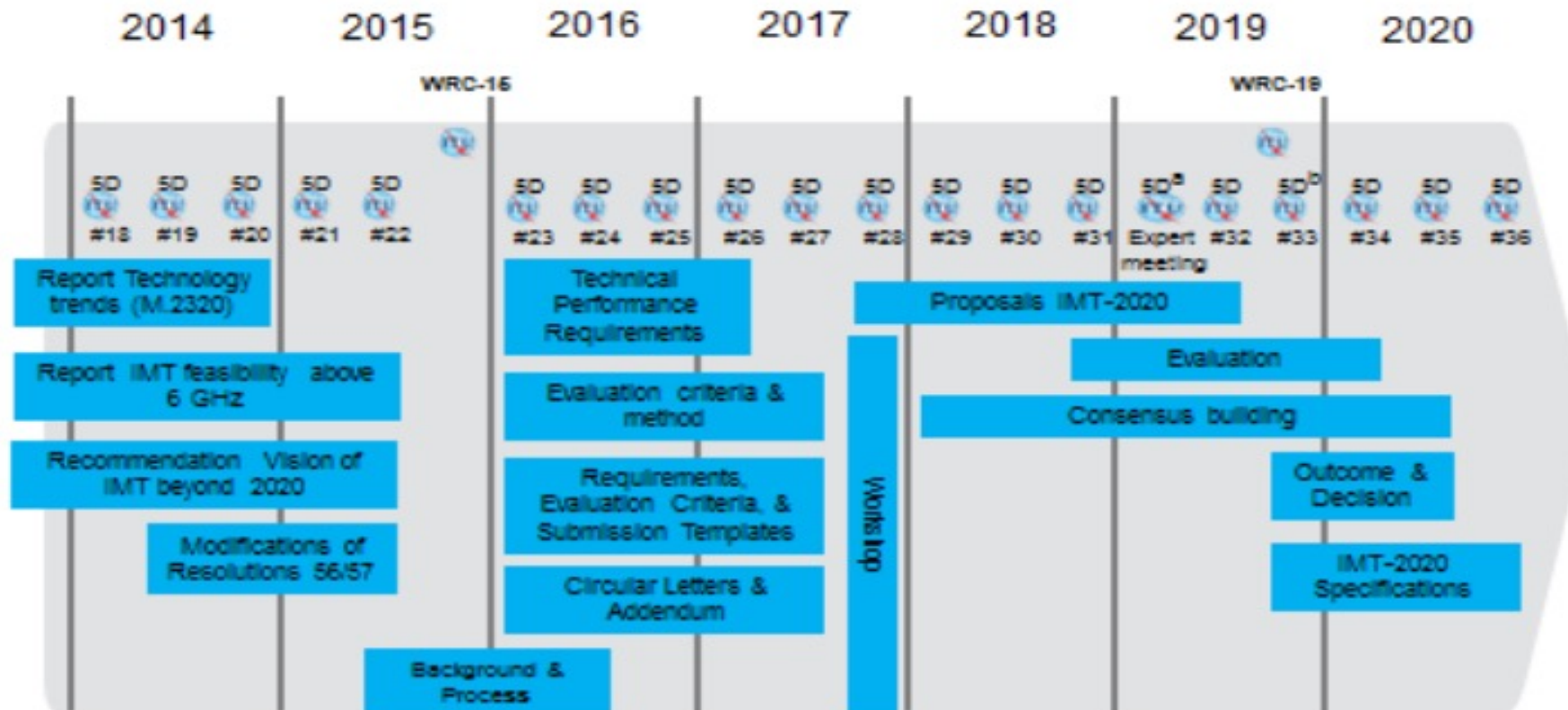
The importance of capabilities in different usage scenarios



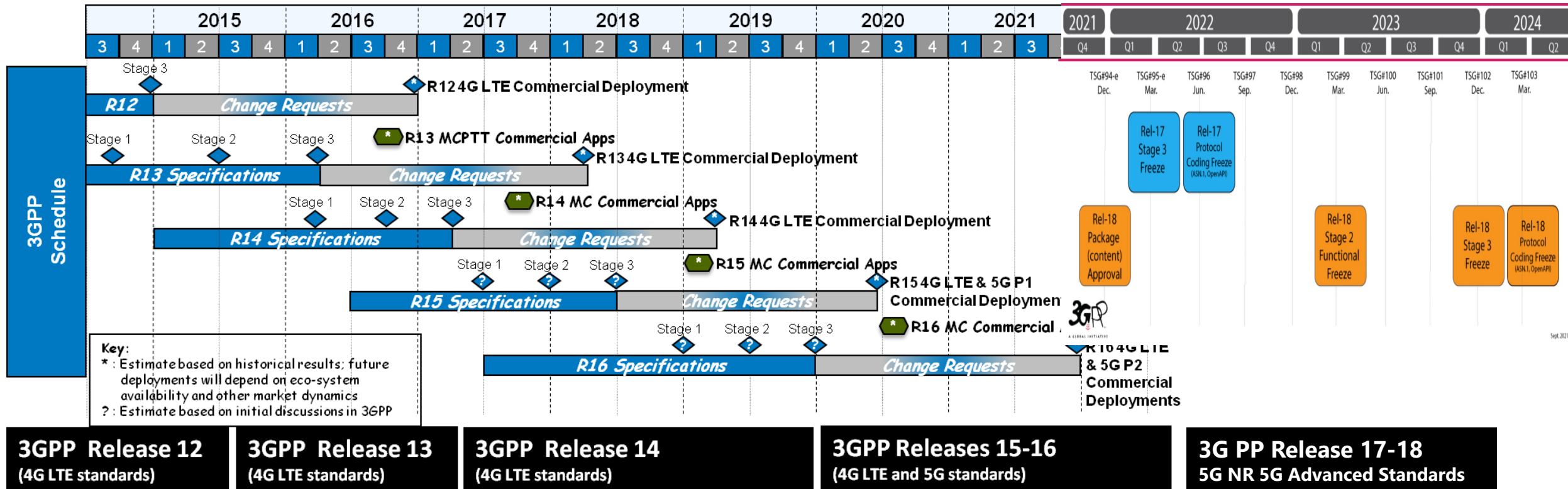
Q: What Should be the most important Capabilities of 6G

ITU: Timelines and Process for IMT-2020

DETAILED TIMELINE & PROCESS FOR IMT-2020 IN ITU-R



3GPP Standards Development Time frames and PPDR



Sept. 2021

ITU Plan (TBD) for development of 6G Vision

	2012		2013			2014		2015		
M.2083	5D#13	5D#14	5D#15	5D#16	5D#17	5D#18	5D#19	5D#20	5D#21	5D#22
	▲	●	●	●	●	● Vision Workshop	●	●	●	▲

10 meetings

	2021			2022			2023	
[Vision 2030] (placeholder)	5D#37	5D#38	5D#39	5D#40	5D#41	5D#42	5D#43	5D#44
	▲	●	●	● [Vision Workshop]	●	●	●	▲

8 meetings

IAFI submissions on 6G vision to ITU

- ✓ IMT-2030 Vision should include the challenges of coverage, capacity, latency, the user data rate and movement speed of mobile terminals.
- ✓ The vision of the next generation should also fully support the development of a Ubiquitous Intelligent Mobile Society.
- ✓ The focus of IMT-2030 should be on tackling societal challenges identified in the 17 UN Sustainable Development Goals (SDGs).
- ✓ Support future heterogenous mobile broadband networks
- ✓ digital inclusion and connecting the rural and remote communities. broadband for all.

Radiocommunication Study Groups



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GENERAL ASPECTS

ITU-APT Foundation of India (IAFI)

PROPOSED NEW ITU-R RECOMMENDATION ON FRAMEWORK AND
OVERALL OBJECTIVES OF THE FUTURE DEVELOPMENT OF
INTERNATIONAL MOBILE TELECOMMUNICATIONS (IMT) FOR 2030 AND
BEYOND

1 Introduction

At the 37th meeting of WP 5D, a new subgroup, SWG Vision was created, which developed a draft work plan and the initial structure of a working document towards a preliminary draft new Recommendation on a future vision of IMT. From very preliminary initial discussions, the proposed new ITU-R Recommendation is expected to define the framework and overall objectives of the future development of International Mobile Telecommunications (IMT) for 2030 and beyond in the light of the roles that IMT could play to better serve the needs of the networked society, for both

Big Question:
what is the Primary
6G Vision



Thank you

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