5 simple questions about 5G standards

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5 simple questions about 5G standards

- Is 5G phase 1 already complete?
- Is 5G phase 2 on target for 2020?
- Is 5G ready for deployment?
- Is 5G a global standard?
- Is 5G secure?

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Is 5G phase 1 already complete?

- 5G NR (new radio interface) completed ahead of schedule
  - The specification of 5G NR completed in December 2017, ***6 months ahead of schedule***, at the request of those players that wished to deploy 5G early (enabling deployment in non-standalone mode)
  - The remainder of **5G Phase 1** (including Next Generation Core Network) first completed on schedule in June 2018 but stabilized in September 2018 (enabling deployment in standalone mode)
  - Additional deployment scenarios will be completed during H1 2019

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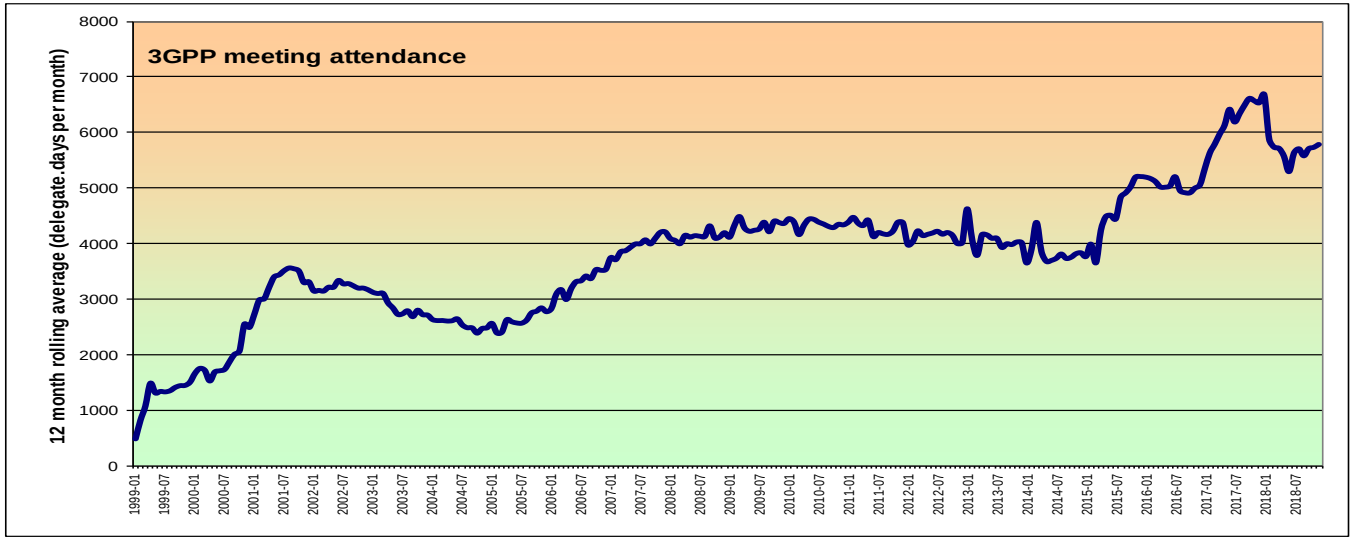
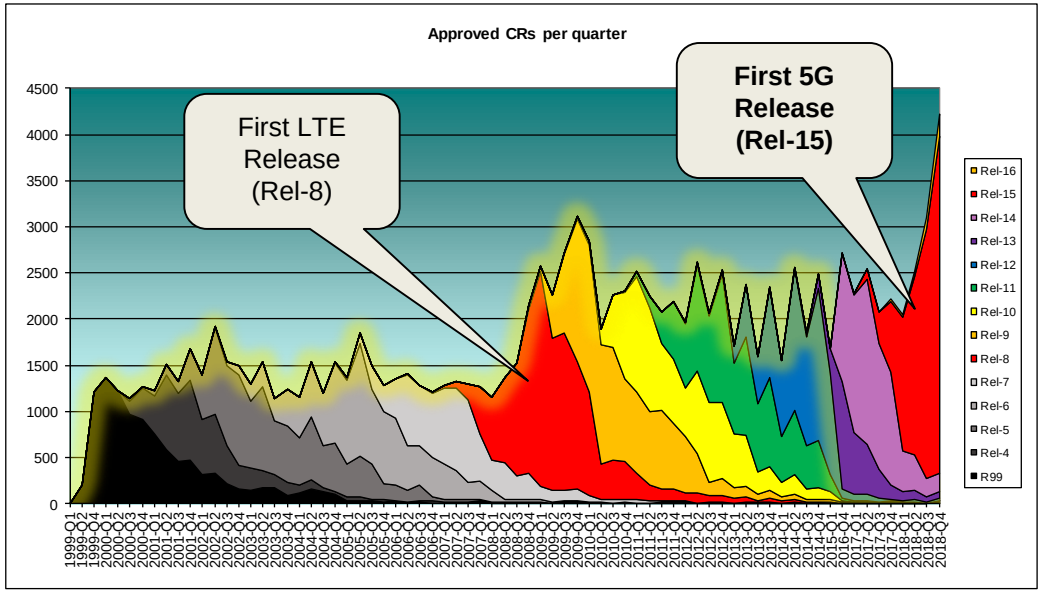
Is 5G phase 1 already complete?

- But how was that possible?
  - 3GPP Working Groups saw a large increase in experts participation (more than 600 experts present in some working group meetings)
  - During 2017, 3GPP processed 100 000 input contributions during 75 000 delegate/days of meetings
  - This represents an ***unprecedented*** effort from the whole industry…





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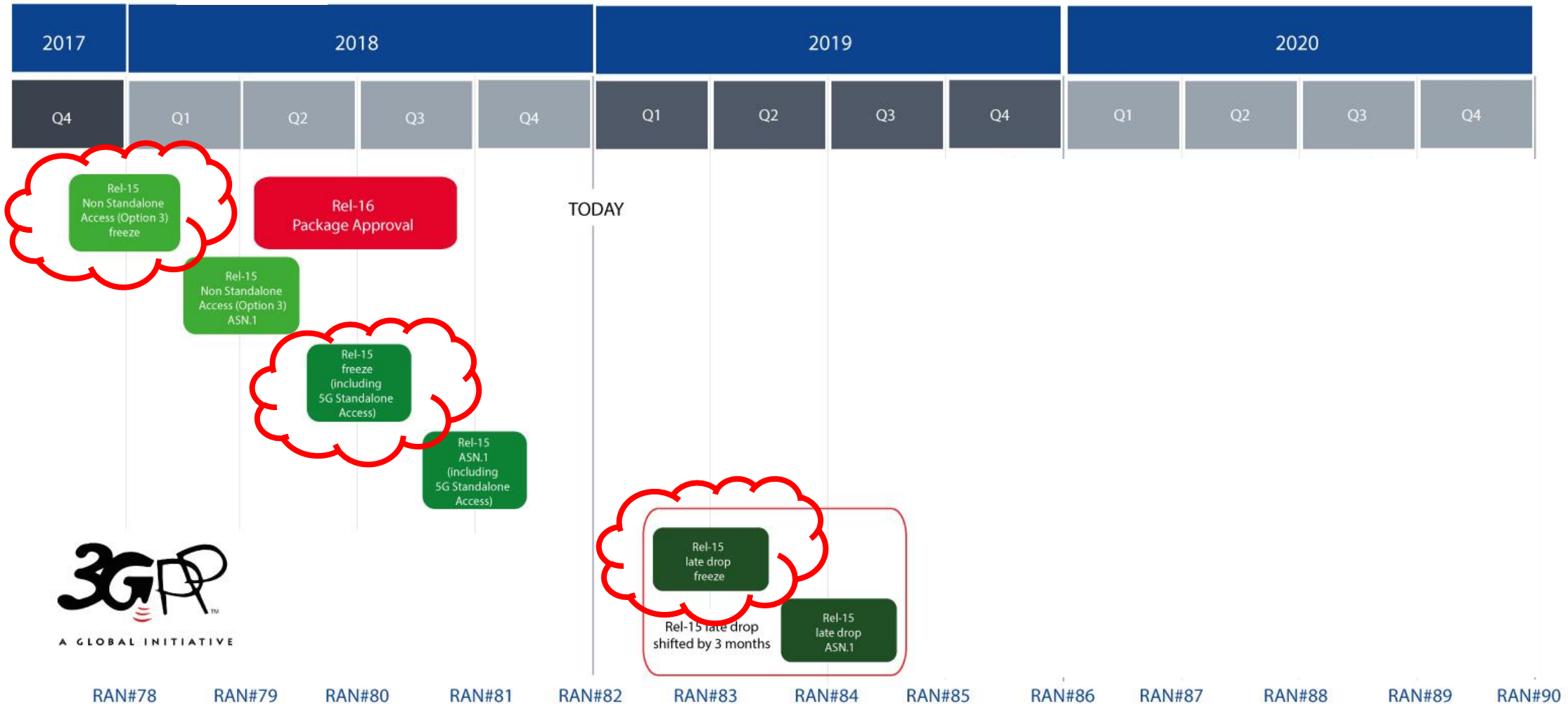
Is 5G phase 1 already complete?



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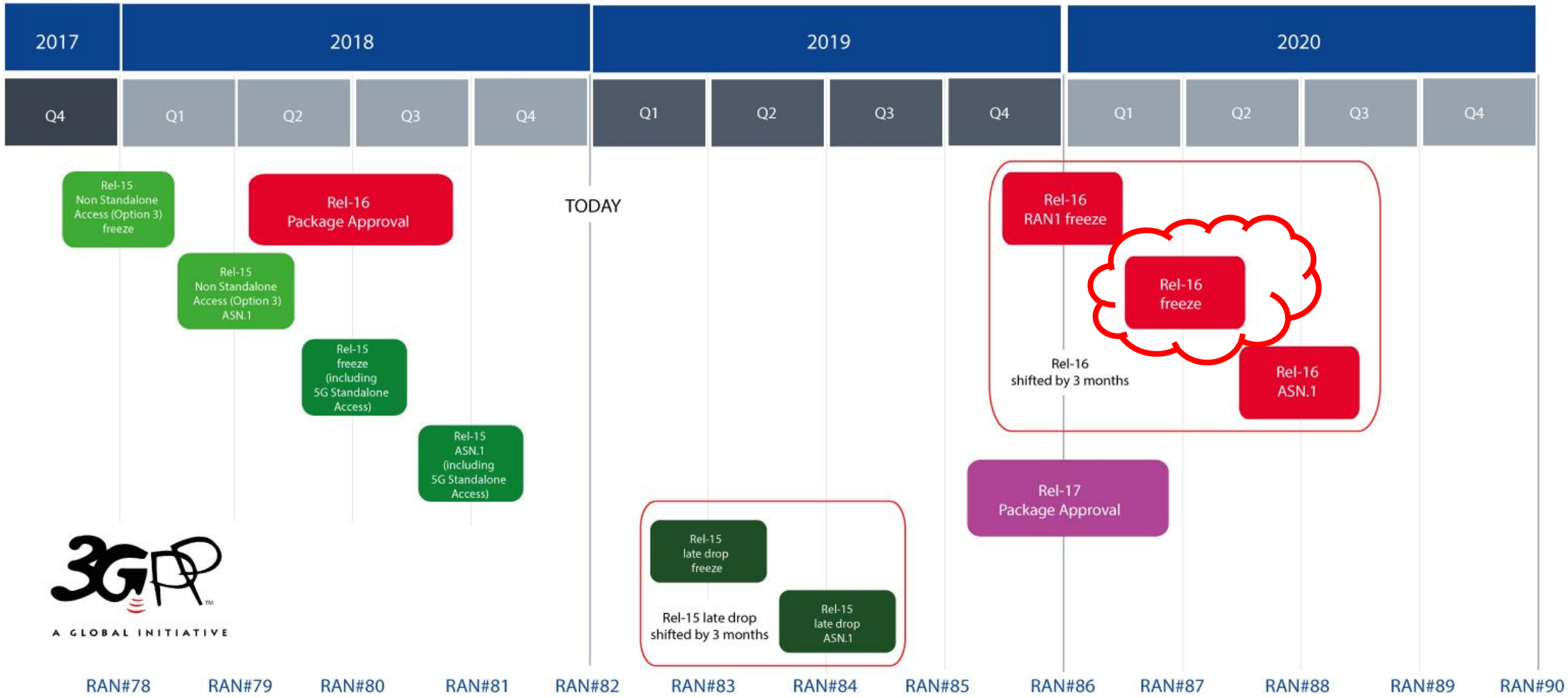
Is 5G phase 2 on target for 2020?



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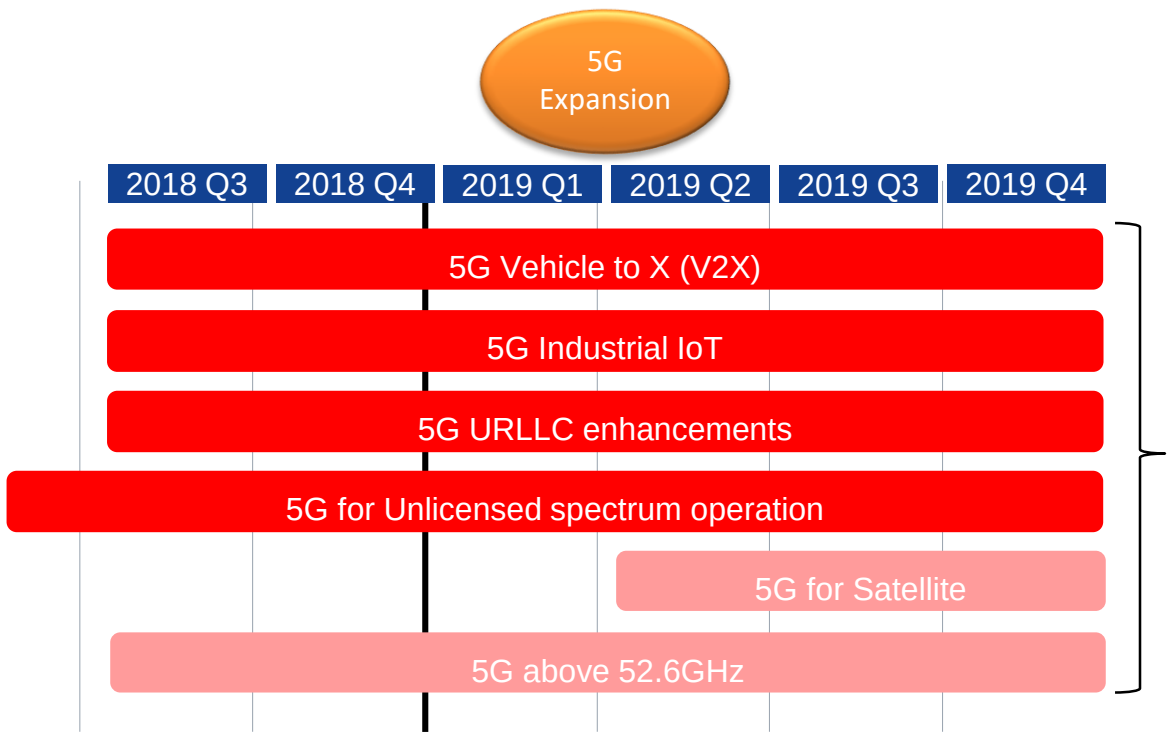
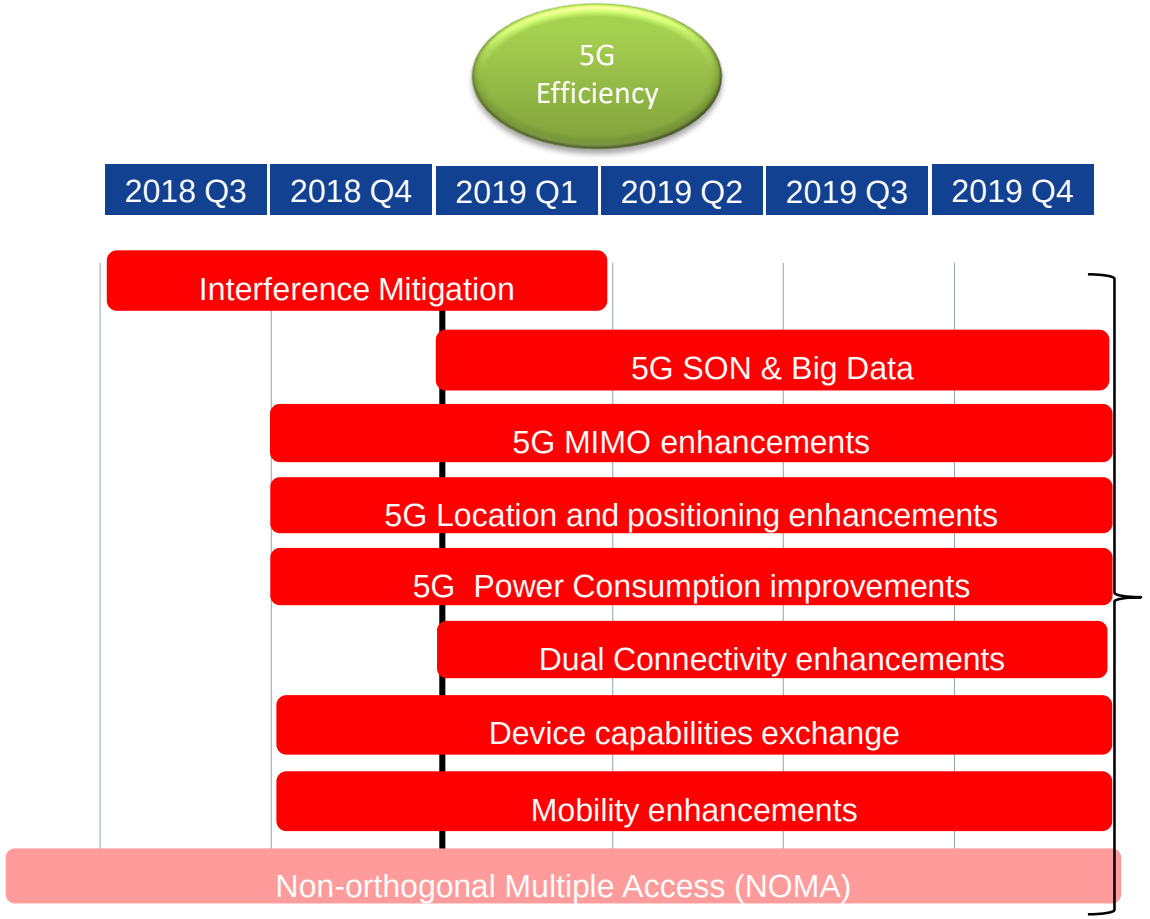
Is 5G phase 2 on target for 2020?

- 5G Phase 2 expected H1 2020 (3 months behind schedule) and will bring





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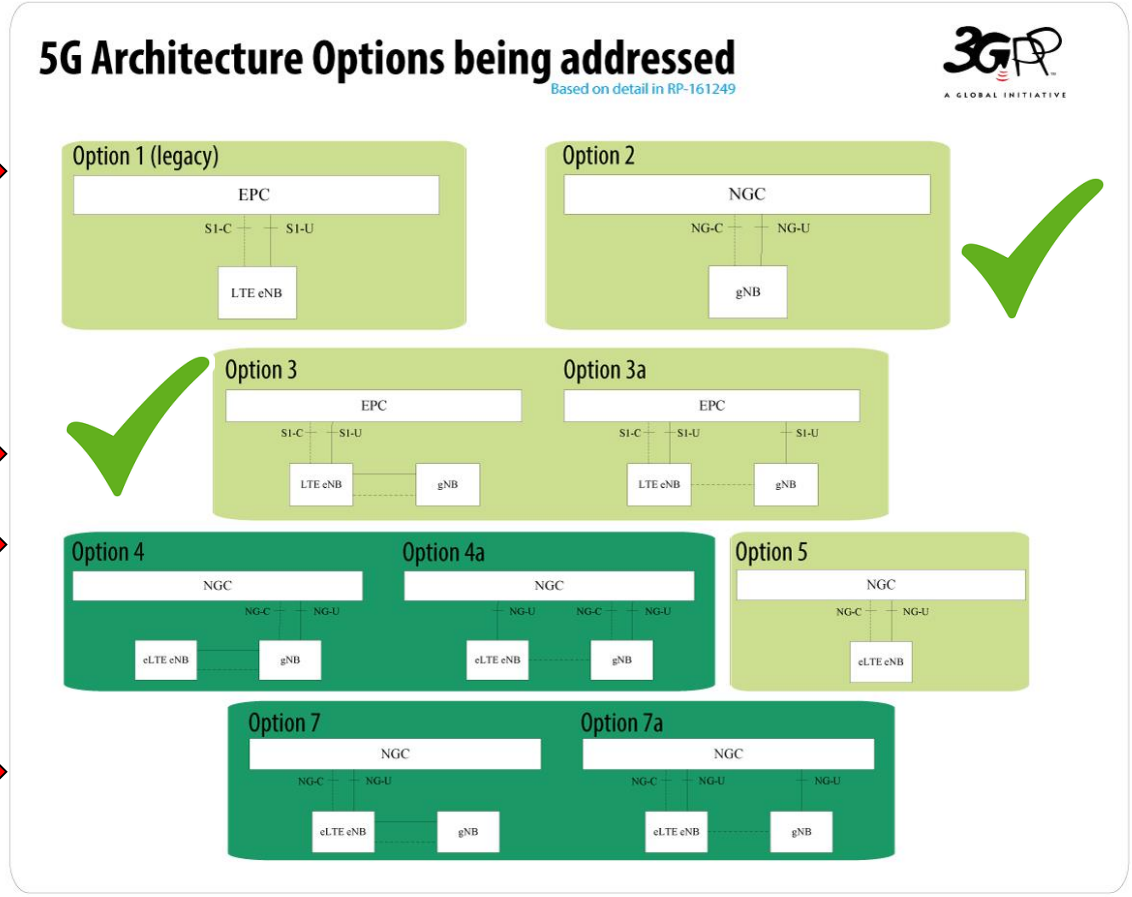
Is 5G ready for deployment?

YES

- Options 2 (standalone) and ….
- Option 3 (non-standalone) are complete and are the basis for the first deployments
- Option 4 and ….
- Option 7 will be complete by H1 2020
- 5G ***is*** being deployed now



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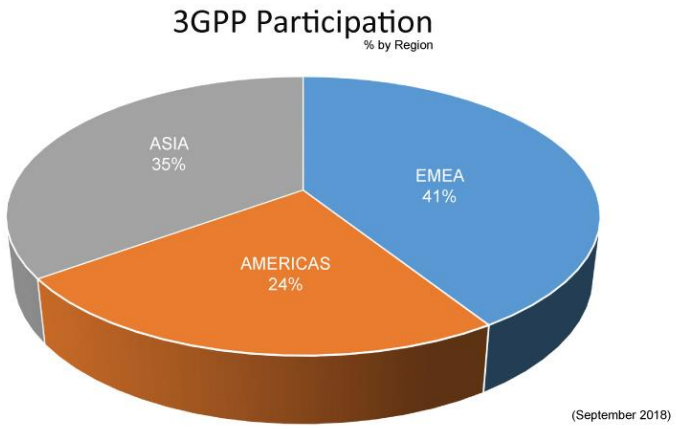
Is 5G a global standard?

- Participation in 3GPP, 646 member organizations in 45 territories from:
  - Africa
  - Asia
  - Australia
  - Greater Europe
  - North America
  - Central America



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Is 5G a global standard?

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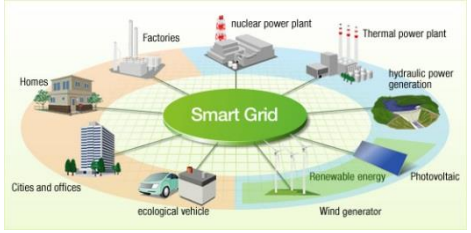

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Is 5G secure?

- 5G is, by design, more secure than 4G
- 5G Security and Privacy, support includes
  - Secure virtualized and exposed Network Functions
  - Secure service-based interfaces between network functions
  - Single security anchor for all access networks
  - Unified authentication framework
- But Security is not just about standards
  - Careful, security conscious deployment is essential
  - Beyond network security, application security needs careful consideration too….

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Conclusions

Is 5G phase 1 already complete?	**YES**, more or less
Is 5G phase 2 on target for 2020?	**YES**, with 3 months delay
Is 5G ready for deployment?	**YES**, evidence shows that
Is 5G a global standard?	**YES**, evidence shows that too
Is 5G secure?	**YES**, from a standards point of view but that is not the end of the story…

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