

Working procedure for 3G Evolution

Telecom Italia Mobile

How to handle 3G evolution?

Given the variety of technology components and architecture alternatives for both radio and network evolution, it is desirable that 3GPP setup a *Feasibility Study on long term evolution* before starting any specification activity.

Such idea is already taking place in 3GPP, and it should finally lead to the approval of the following activities:

- **Proposed Study Item on Evolved UTRA and UTRAN → agreed at RAN#26**
- **Proposed Feasibility Study on 3GPP System Architecture Evolution → to be agreed at this SA #26**

Standardization activity should be started only after completion of above mentioned works.

The well known phased approach (complete feasibility study before starting any specification activity) provides the safest path to address such a wide-spread 3GPP system change

How to handle 3G evolution?

Main target of a *study phase* is to identify viable alternatives for 3G system evolution.

In this phase, work streams at RAN and SA level should basically:

- get coordinated to develop studies on consistent scenarios and get aware of each other progressive results
- refer at least (but not be limited) to the same service scenarios addressed by SA1 in the All-IP Network Feasibility Study in TR 22.978

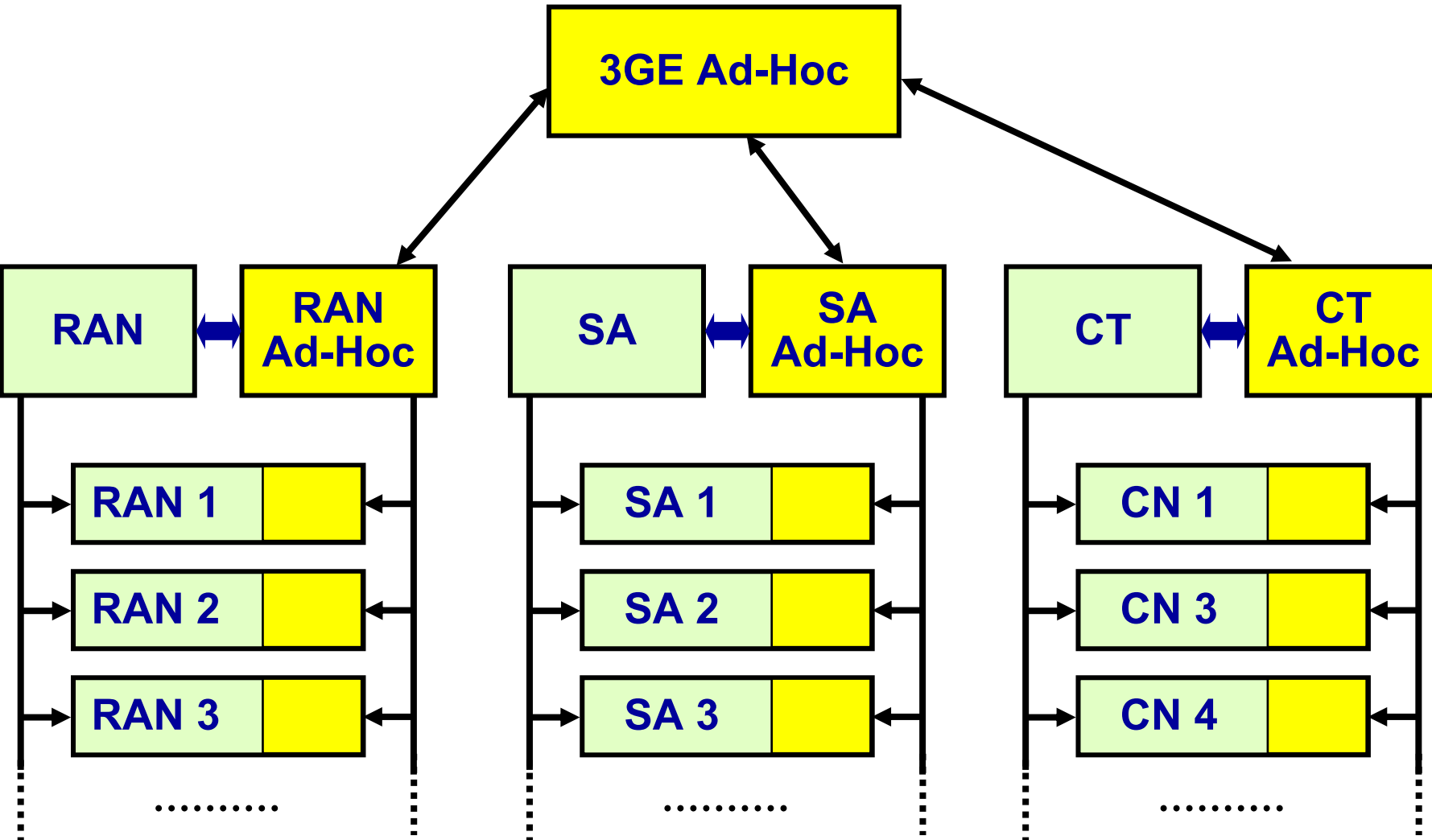
Cross-cooperation could be ensured from the beginning by traditional 3GPP procedures (e.g. liaisons statement, joint meetings or workshops, ...)

A minimum level of coordination between the two identified work streams (i.e. @ RAN and SA level) is necessary to ensure scenarios consistency and minimize divergences. This is viable with 3GPP existing procedures.

How to handle 3G evolution?

- When doing the specification work, a proper guidance to 3GPP WGs will be essential to
 - avoid adoption of technical solutions that are not justified by service requirements
 - avoid unnecessary options and complexity
- TIM suggests that 3GPP adopts a structure ad-hoc for 3G evolution to:
 - enforce a top-down standardization process
 - ensure existence of an overall governance and steering
- Why current 3GPP structure is not enough?
 - currently, stage 1 → stage 2 → stage 3 correct work flow is not always guaranteed
 - technology solutions are often not justified by proper service requirements
 - There is no forum in 3GPP able to discuss and clearly decide the scope and the content of a feature and/or a Release.
- The new ad-hoc structure shall get operative as soon as any specification activity on 3G evolution is started. Note: specification activity should start once both feasibility studies are completed (or earlier if so agreed by 3GPP SA).

Groups structure for the 3G Evolution



Proposal for 3G evolution

Study phase

- *Keep current 3GPP structure to proceed RAN and SA feasibility studies on 3G evolution*

Specification phase

- *Create*
 - *an “Ad-hoc group on 3G Evolution” to steer overall 3GPP specification work on 3G evolution → 3GE Ad-Hoc*
 - *an “Ad-hoc group on 3G Evolution” for each TSG (and possibly each TSG WGs)*

3GE Ad-Hoc Group on 3G Evolution

- The SA, RAN and CT Ad-Hoc groups, with their chairpersons, report directly to the 3GE Ad-Hoc plenary in order to coordinate the work, solve inter TSGs issues.
- In particular, the 3GE Ad-Hoc group, based on the results of the feasibility phase, will kick-off 3G Evolution standardization activity. It will
 - define the general requirements to be fulfilled by the 3G evolution
 - translate them in technical requirements that can be passed to the TSG Ad-Hoc
 - define a general reference architecture with the relevant interfaces
 - ensure consistency of the TSG Ad-Hocs developments
 - convenes and chairs joint TSG Ad-Hocs meetings on evolution
 - verifies that the proposed solutions meet the requirements
 - liaise with other TSGs Ad-Hocs(and or WGs) to ensure the consistency of the overall solution
- The organization of Ad-Hocs at WGs level is left as a matter of decision under the responsibility of each Ad-Hoc TSG