TSAG-C139

Original: English

Question(s): N/A Virtual, 21-25 September 2020

CONTRIBUTION

**Source:** Austria, the Czech Republic, Denmark, Estonia, the European Commission, Finland,

France, Germany, Greece, GSMA, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, RIPE NCC, Romania, Slovakia, Slovenia,

Tel: E-mail:

Spain, Sweden and the United Kingdom

Title: "New IP"
Purpose: Discussion

Contact: Dr.-Ing. Jörg Schneider

Bundesnetzagentur für Elektrizität,

Gas, Telekommunikation, Post und

Eisenbahnen Germany

**Keywords:** New IP; Focus Group Network 2030; Future Vertical Communication Networks;

**Abstract:** This contribution expresses concerns about the development in Study Groups 11

and 13 of draft new questions on "New IP" (or "future vertical communication networks") and proposes that the views of other relevant Standards Development

Organisations should be considered and fully taken into account.

## Introduction

During the recent study group meetings of ITU-T SG11 and ITU-T SG13 much discussion focused on the output of the Focus Group on Technologies for Network 2030 (FG Net2030), and proposals for new questions for the next study period. Some progress was made and some of the FG Net2030 work was adopted as non-normative texts. Very significant issues still remain, however, regarding the proposals for questions for the next study period.

## **Discussion**

At recent TSAG meetings there were presentations and discussions on the issue of New Internet Protocol ("New IP"). These were reflected in the text of proposed new questions for SG11 and SG13. At the meetings of these study groups in July this year, the proponents of the new questions sought to change the label of what was to be studied from "New IP" to "future vertical"

communication networks". Almost no other changes were proposed. In discussing the change of label, the proponents also stated that this was not about IP and not about the Internet.

The statement that the proposal for the new questions in SG11 and SG13 is not about IP or the Internet is difficult to understand. As the protocol explicitly claims the characteristics and ability to use IP based applications and therefore ability to send and receive IP packets it must by definition be about "IP or the Internet". In SG13, for example, there is reference to technologies such as deterministic network technologies and "manynets", as well as implied issues with the addressing scheme (referencing only network address translation) and interconnection methods. In SG11, the proposals include plans for ITU-T to develop a new transport layer (level) protocol system.

The justification underpinning such stated requirements is that the current IP network is not fit for such purposes. Changing the label from "New IP" to "future vertical communication networks" has not changed the fundamental issues with the proposed new questions. In our view, there is still not enough concrete information available to decide which telecommunication aspects of "New IP" might perhaps be dealt with by ITU-T. Furthermore, the project appears to have a research character and so it would appear to be inappropriate to start technical standardisation work.

There has been very significant investment in current IP networks and they are woven into the infrastructure, business, government and regulatory eco-systems of countries around the globe. We remain concerned that discussion of a new IP will create a factor of uncertainty that could affect investments in both internet capacity and access technologies such as 5G. We also believe that we should not take steps that might undermine essential interoperability. There is no evidence to show that current networks cannot continue to evolve to meet the requirements for future communication services. In our view, proposals for new study questions and work items should be based on a detailed gap analysis, problem statements and use cases. We are still waiting to see these with regards to "new IP". The terms used, and the statements made, in the proposals for the new questions lack evidence to support them.

We remain of the opinion that the evolution of the Internet's architecture should be led by the IETF. So far, efforts to liaise formally with IETF and other relevant Standards Development Organisations (SDOs) have not been completed. It is essential for formal liaison to be completed. A formal liaison to other relevant SDOs transmitted at the level of Director might have a better chance of success, so that a proper consideration of the text of the proposed questions by ITU Members can then take place.

## **Conclusion**

We will continue to engage in the planned discussions on the development of the text of potential new questions and try to understand what aspects, if any, may be relevant to the mandate of the ITU and be included in the work programme of ITU-T. We note the number of incoming liaisons to ITU-T that raise concerns over the work of New IP (or what is now labelled "future vertical communication networks") and we believe that TSAG should discuss this further. We would like to see full gap analysis, problem statements and use cases and agreement with other SDOs, including IETF, that this work is needed and useful. We believe that the liaisons that have been received should be shared with Study Groups 11 and 13, to be taken into account in the discussions that will

occur ahead of the next TSAG and we suggest that a formal liaison initiative should be transmitted at the level of Director.

## **Proposal**

We propose the next steps should be

- 1) To transmit the liaison from the IETF to Study Groups 11 and to 13 and ask them to include it and any other incoming liaisons in their consideration of the text of new questions and to report back to the next TSAG meeting
- 2) That discussions of the proposed study questions should clarify the exact meanings of the terms used in the proposed study questions
- 3) To intensify liaison with other relevant SDOs<sup>1</sup>, using the output of FGNet2030, to be transmitted at the level of Director, as to whether the issues asserted in the proposed new questions can be met by an evolution and development of current network technology, and if so, what work is already going on in these SDOs and what work ITU-T might usefully do.

<sup>&</sup>lt;sup>1</sup> Including the IETF, the World Wide Web Consortium (W3C), the Institute of Electrical and Electronics Engineers Standards Association (IEEE SA), and the Third Generation Partnership Project (3GPP)