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| ITU logo | INTERNATIONAL TELECOMMUNICATION UNION  **TELECOMMUNICATION STANDARDIZATION SECTOR**  STUDY PERIOD 2017-2020 | | | TD 055 | |
| **TSAG** | |
| **Original: English** | |
| **Question(s):** | | N/A | | Geneva, 1-4 May 2017 | |
| **TD (Ref:** [**SG13 - LS 5**](http://ifa.itu.int/t/2017/ls/sg13/sp16-sg13-oLS-00005.docx)**)** | | | | | |
| **Source:** | | ITU-T Study Group 13 | | | |
| **Title:** | | LS on Collaboration with Open Source Projects | | | |
| **Purpose:** | |  | | | |
| **LIAISON STATEMENT** | | | | | |
| **For action to:** | | | - | | |
| **For comment to:** | | | - | | |
| **For information to:** | | | TSAG | | |
| **Approval:** | | | ITU-T Study Group 13 meeting (Geneva, 17 February 2017) | | |
| **Deadline:** | | | N/A | | |
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| **Keywords:** | Open source, SDN, 5G/IMT-2020 |

New Resolution 90 requests all applicable ITU-T study groups to continue fulfilling the outcomes of TSAG Report 8 concerning open source and to provide inputs to TSAG enquiries on open source. This liaison reports to TSAG first experiences made by former Question Q14/13 regarding contacts to the Open Source Community related to the SDN standardization and by former Focus Group IMT-2020, which was established by SG13, regarding involvement of Open Source for the IMT-2020/5G standardization.

Q14/13 sent Liaison to OpenDaylight, ONOS, and Ryu to request “As your activity is a leading open source SDN platform solution, we would like to form a cooperative relationship with your community to take benefit of your experience in the SDN blueprint and functional architecture”. However, none of them has sent back any reply stating interest in cooperation with Q14/13. Communication methods other than Liaisons may be needed.

In fact, Q14/13 Rapporteur also invited in his role of JCA-SDN convener several open source projects to the JCA-SDN meeting, in particular OpenDaylight, OpenStack, OPNFV and ONF Atrium. The addressed projects replied with information and presentations on their activities. Their activities were added to the SDN roadmap.

Focus Group IMT-2020 used a number of open source projects for proofs of concepts and experiments/demos to motivate new ideas. The most used open source code was openAirInterface (OAI):

OAI provides a complete end-to-end LTE network from UE to EPC. A fully virtualized LTE with multiple slice creation including transport network was demonstrated to show the idea promoted that 4G/NB-IOT and other 4.\*G technologies should be run within a slice.

Furthermore, a new packet based front haul with frequency split and high compression was shown based on OAI. This implies that combined FH/BH may be possible.

During this work LINUX/ANDROID/LXD/Containers/OpenStack and other well-known open source projects were used too.

Experiences made so far show that Opens Source projects are interested to contributing to SG13 in form of demonstrations and roadshows with the goal to creating awareness on their achievements. Furthermore, Open Source projects contributed to SG13 activities by presentations at workshops organized by SG13 and at JCA meetings. However, interest in cooperation with SG13 directly towards the standard development could not be identified so far.

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