The objective of this presentation is to introduce the new paradigm that will be used from 2020: the “Plug & Network” concept. This concept allows to derive new network architectures ranging from a completely centralized architecture to a fully distributed solution. We will examine the pros and cons of these different architectures to try to imagine architectures that should be deployed in the 2020s.

Dr. Guy Pujolle

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Guy Pujolle is a computer science professor at Pierre et Marie Curie University - Paris 6 during 1981-1993 and from 2000 to the present day, a member of The Royal Physiographical Academy of Lund, Sweden, and a distinguished visiting professor at UFRJ (University Federal of Rio de Janeiro) from 2013. Before, he was a distinguished professor at the Division of IT Convergence Engineering of POSTECH, the Pohang University of Science and Technology, Korea, from 2011 to 2013. He was appointed by the Education Ministry to found the Department of Computer Science at the University of Versailles, where he spent the period 1994-2000 as Professor and Head. He was Head of the MASI Laboratory, University Pierre et Marie Curie, 1983-1993, Professor at ENST (Ecole Nationale Supérieure des Télécommunications), 1979-1981, and member of the scientific staff of INRIA (Institut National de la Recherche en Informatique et Automatique), 1974-1979. Guy Pujolle received different prizes for his work and publications, in particular the Grand Prix of French Academy of Sciences (40 000$) in 2013. He was also a member of the Scientific Advisory Board of Orange/France Telecom Group during 1990-1998 and 2002-2010, and member of several scientific advisory boards in the world. Dr. Pujolle is the French representative at the Technical Committee on Networking at IFIP. He is an editor for ACM International Journal of Network Management, Telecommunication Systems, and Editor in Chief of “Annals of Telecommunications”. He was an editor for Computer Networks, Operations Research, Editor-In-Chief of Networking and Information Systems Journal, WINET, Ad Hoc Journal and several other journals.

Guy Pujolle is a pioneer in high-speed networking having led the development of the first Gbps network to be tested in 1980. He is also the inventor of Virtual Access Points with the corresponding patent. He was chairman of the French Research Network REUNIR from 1987 to 1991, one out of the three members of the Wisdom Committee (Lars Backstrom, Brian Carpenter, Guy Pujolle) to decide on the future of TCP/IP in the European research network (decision January 22, 1990 to choose TCP/IP as the technology to be used for Europe instead of ATM). Chairman of the expert committee of the Ministry of Telecommunications for Telecommunication regulation (1992-1998). Guy Pujolle was Technical Chairman of the WLANSmartCard consortium for normalizing security and mobility in wireless LANs using a smartcard (2002-2006).