MUSICS

Team	**MUI**timedia - **S**ignal – **C**ommunication **S**ystems
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Vision	The MUSICS team's strategy hinge on six fundamental pillars: **I. Leadership and excellence in research.** 1. Promote and maintain quality research programs related to the missionsof the INPT and existing expertise, particularly in the areas of development and priority research niches. 2. Improve the rating of the INPT in terms of articles and patents both nationally and internationally. **II. Research resources, tools, facilities and infrastructure.** 1. Dispose of librarian resources as well as IT and technological tools thatmeet the needs of the research team. 2. Prioritize physical facilities that encourage synergies between the INPT research teams. 3. Continuously train the team's doctoral students in integrity considerations interms of research, ethics, responsible research conduct and intellectual property. **III. Links with teaching and student participation in research activities.** 1. Integrate research and research tools initiation into the training ofengineering students. 2. Encourage students to participate in research activities (participation in scientific events). **IV. Dissemination of research, transfer of knowledge and enhancement of achievements.** 1. Promote and disseminate research achievements of the MUSICS team's researchers (open days…). 2. Value the team's scientific output. **V. Interdisciplinary research, collaborations and partnerships.** 1. Promote and increase the number of interdisciplinary research collaborations andstrengthen and consolidate research collaborations with current partners. 2. Strengthen links with institutes, centers and research groups with similar themes.

	VI. Evaluation of research impact. 1. Put in place mechanisms to measure impact, productivity and research dissemination within the team. 2. Produce an annual report of research activities. 3. Set up a mechanism to review the pertinence of development axis' andpriority research nicheswith a view to maintaining or transforming them.
Research Topics	- Signal, Image and Video Processing and Analysis: compressive sensing, scattered signal processingscattered, biomedical signal, speech enhancement and recognition, computer vision,satellite image, multimedia signal security, indexing, visual quality, ... - Coding and Multimedia Transmission on fixed and wireless networks: coding standards,broadcasting, protection-detection and correction of transmission errors, transcoding, streaming,quality measurement, … - Telephony and IP voice: sizing, infrastructure, modeling, etc. - New generation Communication Systems: detection techniques, communication standards, modeling, optimization and performance evaluation,… - Cognitive radio communications: dynamic spectrum detection and access, cooperation,traffic modeling, QoS / QoE,… - Satellite Communication Systems: indoor and outdoor localization, spatial modeling,…