



**Institut Mines-Télécom and France Brevets extend their initial agreement
into three new fields of activity
and reassert their commitment to 5G**



Paris, 13 October 2015 – Institut Mines-Télécom and France Brevets today signed an extension of the partnership agreement that has united them since 2011, with three new fields of research, and have reasserted their commitment to 5G.

This cooperation is exemplary in international standardization in the field of telecommunications.

Four years after its launch, the partnership between France Brevets and Institut Mines-Télécom is today a success. An initial collaboration was created around MIMO technology, an encoding mechanism for high-speed data transfer, and which can be used in 5G. From three patents at the start, fifteen new patents have been filed in 18 months of joint work, illustrating the efficiency and productivity of this original approach.

France Brevets' participation leads to a strategy that is honed by research and the filing of patents, and informed by monitoring and analysis of patents in the field. The financial and methodological support from France Brevets in the identification, drawing up and filing of patents for key technologies creates a strong position that allows better promotion of the patents.

In addition to strengthened filing of patents, France Brevets supports Institut Mines-Télécom in the transfer of its results within the rich, dynamic environment of 5G.

This cooperation now covers new fields:

- ⇒ **FBMC (Filter Bank Multiple Carrier) modulation**, an original and high-performance form of modulation. This disruptive technology in the field of mobile networks may be used for 5G norms,
- ⇒ **Antennas**, among other things, for optimization of 5G technology,
- ⇒ **very high speed optical modulation and encoding** for long-distance communication, with **Codopt** technology.



Communiqué France Brevets – Institut Mines-Télécom 2015

For a long time, Institut Mines-Télécom has been developing renowned international expertise in the field of mobile telecommunications, in particular encoding and decoding, modulation, software technology and devices for infrastructure and end users. This experience has led notably to the creation of an internationally adopted standard: the Turbocodes, developed in partnership with France Télécom. Capitalizing on this expertise, the Institute is legitimately able to contribute to taking the results of French public research in high speed mobile telecommunications (5G) within international markets to the highest international level.

This partnership fits perfectly with the strategy of France Brevets which supports research laboratories in the development and spread of their technology. It is also representative of the “Carnot” spirit, an accreditation that Institut Mines-Télécom has enjoyed since 2006.

About Institut Mines-Télécom www.mines-telecom.fr

Institut Mines-Télécom is a public establishment dedicated to higher education, research and innovation in the engineering and digital fields. It is made up of 10 Mines and Télécom "grandes écoles", under the aegis of the Minister for Productivity.

There are 2 subsidiary schools and 2 strategic partners and a network of 11 partner schools.

Institut Mines-Télécom is nationally and internationally renowned for the high standard of its courses for engineers, managers and PhD students, and its research and innovation activities.

Institut Mines-Télécom is a member of the Allistene, Aviesan and Athena national alliances for research planning. It maintains close relationships with the business world and has two Instituts Carnot. Every year, some one hundred start-up businesses are born.

About France Brevets

Owned 50% by the Caisse des Dépôts and 50% by the State within the framework of the PIA (Future Investments Program), France Brevets rolls out financial and human resources to help public or private research generate patents and implement promotion strategies. France Brevets works in the fields of IT and telecommunications technology, security, energy, space, materials and medical technology (*MedTech*).

France Brevets :

Image Sept

Isabelle de Segonzac

01 53 70 74 89

06 89 87 61 39

isegonzac@image7.fr

Nathalie Feld

01 53 70 94 23

06 30 47 18 37

nfeld@image7.fr

Institut Mines-Télécom :

Agence OXYGEN

Paramita Chakraborty, Maëlle Garrido

+33 (0)1 41 11 37 79

paramita@oxygen-rp.com / maelle@oxygen-rp.com

Jérôme Vauselle

+33 (0)1 45 81 75 05

jerome.vauselle@mines-telecom.fr

Groupe Caisse des Dépôts

Neyla Bouaïta

01 58 50 40 00 – 06 77 88 48 71

neyla.bouaita@caissedesdepots.fr