During 2010-11 **thirteen European projects** (from which 10 are FP7 projects), **three international projects** (involving European countries, USA, Japan and Korea) and **twenty two national projects** (7 in UK, 5 in Poland 2 in Irland, France, Germany and Sweden, 1 in Italy and Switzerland) in the fields relevant to Nanosil are running with participation of Nanosil partners, which naturally assure a good links with this projects. As example we can talk about collaboration and exchange of knowledge between Nanosil and EuroSOI+, COMON, GRAND, STEEPER, SQWIRE…projects.

Lists of European and National projects of relevance are available on the Nanosil web-site (updated yearly), web-links to the corresponded project sites are introduced whenever possible.

Nanosil partner	Other Partners	Title of the project	National/ European/ International	Funding source
URV, UGR, UCL, IMEC, Tyndall, Chalmers LIVUNI, WUT, INPG, LETI, EPFL	Grenoble INP, URG, SOITEC, VTT, Cissoid, Phillips, ISP, IUE, WUT, Xfab, Chalmers, QUB, CSIC-CNM, IMMS, Polito, UAB, USAL, DITOCOM, ISEP, UT	EUROSOI+	European	FP7, Cooperation Programme, ICT, Coordination Action
URV, UCL, EPFL	UniK (NO), TUC (GR), UdS (FR), TU-Ilmenau (DE), ITE (PL), Infineon (DE), AMS (DE), RFMD Ltd (UK), AdMOS GmbH (DE), DOLPHIN Integration SA (FR), Melexis Inc (UA), AIM-Software (NO)	COMON (Compact Modelling Network)	European	FP7, People Programme, Industry-Academia Partnership & Pathway
KTH, URV, ETHZ	28 other partners	OSIRIS	European	EU FP6
IUNET, AMO, LETI, Tyndall	UCAM DPHYS (UK)	Graphene-based Nanoelectronic Devices (GRAND)	European	EU FP7
FZJ		DECISIF (Catrene)	European	National
FZJ, EPFL, IUNET, CEA/LETI	Infineon, IBM, Global foundries, Technical Univ. Dortmund, Sciprom Sarl	Steep Subthreshold Slope Switches for Energy Efficient Electronics (STEEPER)	European	EU FP7
Tyndall, IMEC, INPG, CEA/LETI, URV	Intel_Irland, Magwel nv, Soitec	Silicon Quantum wire transistors (SQWIRE)	European	EU FP7
UoG IMEC	INTEL	TRAMS	European	EU FP7
UoG ST, IUNET, LETI	Infenion, NXP	MODERN	European	ENIAC
GU IMEC, LETI, ST, Demokritos	IBM	DUALLOGIC: Dual-channel CMOS for sub-22 nm high performance logic	European	FP7
EPFL, IUNET CEA-LETI FZJ	Global Foundries, IBM Zurich, Infineon	Steep subthreshold slope switches for energy efficient nanoelectronics circuits (STEEPER)	European	FP7
ST, CNRS, Synopsys, UNEW, ETHZ		ATEMOX : Advanced TEchnology MOdelling for eXtra-functionality devices	European	FP7

UCL, KTH, Grenoble-INP, CEA-LETI, Tyndall, IUNET, IMEC, AMO	VTT, Catalan inst. of nanotechnology,	Nanofunction, NoE	European	FP7
Tyndall	Queens University Belfast, Dublin City University, University of Texas at Dallas	Future Oxides and Channel Materials for Ultimate Scaling (FOCUS)	International	Science Foundation Ireland (www.sfi.ie), Invest Northern Ireland and National Science Foundation
INPG/FMNT	U. Stanford, Korea University	CORE - transport in core/shell nanowires	International	Nanoscience Foundation
USTUTT	-RIEC, Tohoku Univ. Sendai, Japan. - IHP, Berlin Institute of Technology, Germany. - IMEC Leuven, Belgium - CINaM-CNRS, France. - New Materials group (FA-3) University of Vigo, Spain. -Massachusetts Inst. of Technology (MIT), USA. - Princeton Univ., USA	The Excellence Initiative for New Group IV Semiconductor Material & Processing, (EI4GroupIV)	International	Institute resources
Warwick	IMEC, Glasgow, Sheffield	Renaissance Germanium	National	EPCRC
RWTH AACHEN	AMO	Experimentelle und theoretische Untersuchung der Wirkungsweise von Silizium-Nanodraht-MOSFETs (experimental and theoretical investigations of Si NW MOSFETs)	National	DFG
KTH		SB nanowire MOSFETs	National	Swedish Research Council
KTH		1/f noise in advanced MOSFETs	National	Swedish Research Council
IUNET-Udine, Bologna, Pisa		Modellistica e simulazione di transistori in grafene per applicazioni logiche ad alte prestazioni e bassa dissipazione di potenza (GRANFET)	National	Italian Ministry of University and Research
UPS, CEA/LETI	LPMCN, IMS	ACCENT: Multiscale simulation of carbon nanotube devices	National	ANR
UPS, IEMN, CEA/LETI	OMMIC, CIMAP	MOS35: Low-bandgap MOSFETs for high frequency/low power applications	National	ANR
Tyndall		Grant 05/IN/I888: Advanced Scalable Silicon-on-Insulator Devices for Beyond-End-of-Roadmap Semiconductors.	National	Science Foundation Ireland
Tyndall	Dublin City University, Trinity College Dublin and INTEL	Investigating Emerging Non Silicon Transistors (INVENT)	National	Science Foundation Ireland
ETHZ EPFL	IBM Zurich	ENABLER	National	Swiss NanoTera
LIVUNI	University of Ulster	A biologically plausible spiking neuron in hardware	National	EPSRC, £436k

LIVUNI		e-FuturesXD: university research in electronics	National	EPSRC with UK semiconductor and circuit designer, £650k
LIVUNI		e-Futures: university research in electronics	National	EPSRC with UK semiconductor and circuit designer, £150k
UNEW		ALD of piezoelectrics and ferroelectrics	National	CPI (Commercial)
UNEW		NanoLAB cross disciplinary research	National	EPSRC
UNEW		Ferroelectrics for nanoelectronics	National	EPSRC
WUT		Electrical characterization of dielectric-semiconductor interface in advanced MOS structures	National	Polish Ministry of Science and Higher Education
WUT		Modelling of silicon structures with low-dimensional electron gas	National	Polish Ministry of Science and Higher Education
WUT		Technology and characterization of MIS devices with double gate dielectric stacks for non-volatile semiconductor memories (NVSM) applications	National	Polish Ministry of Science and Higher Education
WUT		Modeling and investigation of the double barrier metal-oxide-semiconductor tunnel structures	National	Polish Ministry of Science and Higher Education
WUT		Technology and characterization of MIS structures with double gate dielectric stacks for non-volatile semiconductor memory (NVSM) applications	National	Polish Ministry of Science and Higher Education
FZJ		KZWEI	National	National

It is worth to mention that **25 new projects** (the same number as in 2009) have been submitted/accepted during 2010-11 by members of Nanosil, among which 6 EU projects within FP7, 1 CATRENE and 18 national projects (5 in France, 3 in UK, 2 in Spain, 2 in Ireland, 2 in Poland, 2 in Belgium, 1 in Germany, 1 in Switzerland). It is worth to point high number (14) of the projects submitted in the collaboration between two (or more) Nanosil partners, which evidence strong integration/collaboration between Nanosil partners. Surely, good collaboration between Nanosil and these new projects is foreseen.

Nanosil partner	Other Partners	Title of the project	National/ European/ International	Funding source	Status (submitted/ accepted/ started)
STM, CEA/LETI, INPG/FMNT, GU, UCL, FZJ, EPFL, UGR, IUNET	Infineon, Global Foundaries, Soitec, SMEs	REsearch on optimal ArCHitecture and INteGration of 22/20nm node core digital CMOS technology-Electrical proof of concept REACHING 22	EU/National	CATRENE	Accepted

FZJ, EPFL, IUNET, CEA/LETI	Infineon, IBM, Global foundries, Technical Univ. Dortmund, Sciprom Sarl	Steep Subthreshold Slope Switches for Energy Efficient Electronics (STEEPER)	European	EU	Started on july 2010
EPFL, ETH, CEA, CNRS, UCL, Imec, KTH, ST, Sinano, Tyndall-UCC	CTTC, HIQSCREEN, IBM, Intel, Infineon, KU Leuven, NXP, VTT, ITE, Thales, ULUND, UCAM, SIE, SARD	" Guardian Angels for a Smarter Planet " (GA) FET Flagship	EU	FP7	Accepted
UCL, KTH, Grenoble-INP, CEA-LETI, Tyndall, IUNET, IMEC, AMO	VTT, Catalan inst. of nanotechnology,	Nanofunction, NoE	EU	FP7	started
Tyndall, IMEC, INPG, CEA/LETI, URV	Intel_Irland, Magwel nv, Soitec	Silicon Quantum wire transistors (SQWIRE)	EU	EU FP7	started
ETHZ, CNRS STM, SNPS, UNEW	Fraunhofer, Semilab, Probion EXCICO	ATEMOX 258547	European	FP7-ICT STREP	started
LIVUNI, RWTH, AMO, Tyndall-UCC	National University of Ireland, Lot Oriel, X-FAB, SAFC Hitech Ltd	Selecting high-k for analog and RF process technologies	European	ECC, STREP	Not funded, £189k
INPG/FMNT, IEMN, CEA/ LETI, STM	IM2NP, CEA/INAC, I. Néel	QUASANOVA	National	ANR	Started
UCL	-	Towards 10 nm MOSFET	national	FNRS	started
UCL		Graphene nanoelectromechanics - A step towards a new field: StressTronics -	national	FNRS	Started 2011
ISEN-IEMN CEA-LITEN	Id3	CAMIGAZ Capteurs Autonomes MIniatures communicants pour la détection de GAZ de combats	National (ANR-Agence Nationale de la Recherche)	ANR	Accepted
RWTH, AMO		Experimentelle und theoretische Untersuchung der Wirkungsweise von Silizium-Nanodraht-MOSFETs (experimental and theoretical investigations of silicon nanowire MOSFETs)	National	DFG	Request for extension submitted in 2010
UPS, CEA/INAC & LETI,	Néel Inst., LPS, Nanotimes	NANOSIM_GRAPHENE: Simulation of Graphene-based Nanomaterials and Nanodevices : Multiscale Approaches	National	ANR	started
UPS, IEMN,	LPA, LPN	MIGRAQUEL: MIcrowave GRAphene QUantum ELectronics	National	ANR	started
UPS; CEA/LITEN,	LFPINAC, CIMAP, IPCM	SQUID PV: Silicon QUantum Dots and Investigation of Transport and Doping Phenomena for PhotoVoltaic Applications	National	ANR	submitted
UGR		Development of 1T-DRAMs cells.	National	Regional Govern-ment	Accepted
UGR		A-RAM family: the first step towards a universal memory (URAM)	National	National Govern-ment	Submitted
Tyndall		Semiconductor nanowire Transistors	National	Science Foundation Ireland	started

Tyndall	Dublin City University, Trinity College Dublin and INTEL	Investigating Emerging Non Silicon Transistors (INVENT)	National	Science Foundation Ireland	started
ETHZ EPFL	IBM Zurich	ENABLER	National	Swiss NanoTera	started
LIVUNI	University of Cambridge, Liverpool John Moores University	High permittivity dielectrics on Ge for end of Roadmap application	National	EPSRC	Started, £522k
LIVUNI	Industry: TWI, Plessey, Zarlink, Unisem, and Leeds University; and 2 SMEs: Qudos and JLS	Precision Passive Component Design & Manufacture in Micro-Module Electronics (PPM2)	National	UK Technology Strategy Board	Started, £320k
LIVUNI		High-efficiency rectenna arrays for solar energy collection	National	EPSRC	Submitted, £875k
WUT		Investigations on photonic sources for coherent emission from silicon integrated systems	National	Polish Ministry of Science and Higher Education	started
WUT		Application of ultrashallow fluorine implantation for improvement of radiation hardness of MOS structures for 1MeV electrons	National	Polish Ministry of Science and Higher Education	started