

NEREID

ICT-CSA: Micro- and Nano-Electronics Technologies
Grant Agreement n° 685559

Francis Balestra

Grenoble INP/CNRS, Coordinator of Nereid

KICK-OFF meeting

Berlin, Nov. 30 – Dec. 1, 2015

Title : *NanoElectronics Roadmap for Europe: Identification and Dissemination*



Agenda

- ENI2 and the genesis of NEREID L. Baldi 10mn
- Management and Administrative issues F.Balestra 10mn
- Landscape and general approach E. Sangiorgi 10mn
- WP presentations WPLs 10mn/WP
- Methodology of General Workshops P. Corsi, Cayak 10mn
- Discussion/Next steps

NEREID: Management and Administrative Issues

- Partners:

No	Name	Short name	Country	Project entry month*	Project exit month
1	INSTITUT POLYTECHNIQUE DE GRENOBLE	INP GRENOBLE	France	1	36
2	INSTITUT SINANO ASSOCIATION	SINANO	France	1	36
3	edacentrum GmbH	EDAC	Germany	1	36
4	ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE	EPFL	Switzerland	1	36
5	FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV	Fraunhofer	Germany	1	36
6	FUNDACIO INSTITUT CATALA DE NANOCIENCIA I NANOTECNOLOGIA	ICN2	Spain	1	36
7	INTERUNIVERSITAIR MICRO-ELECTRONICACENTRUM IMEC VZW	IMEC	Belgium	1	36
8	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LA NANOELETTRONICA	IUNET	Italy	1	36
9	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	CEA	France	1	36
10	POLITECNICO DI TORINO	POLITO	Italy	1	36
11	UNIVERSITY COLLEGE CORK - NATIONAL UNIVERSITY OF IRELAND, CORK	Tyndall-UCC	Ireland	1	36
12	Teknologian tutkimuskeskus VTT Oy	VTT	Finland	1	36
13	AENEAS	AENEAS	France	1	36

NEREID: Management and Administrative Issues

- WPs:

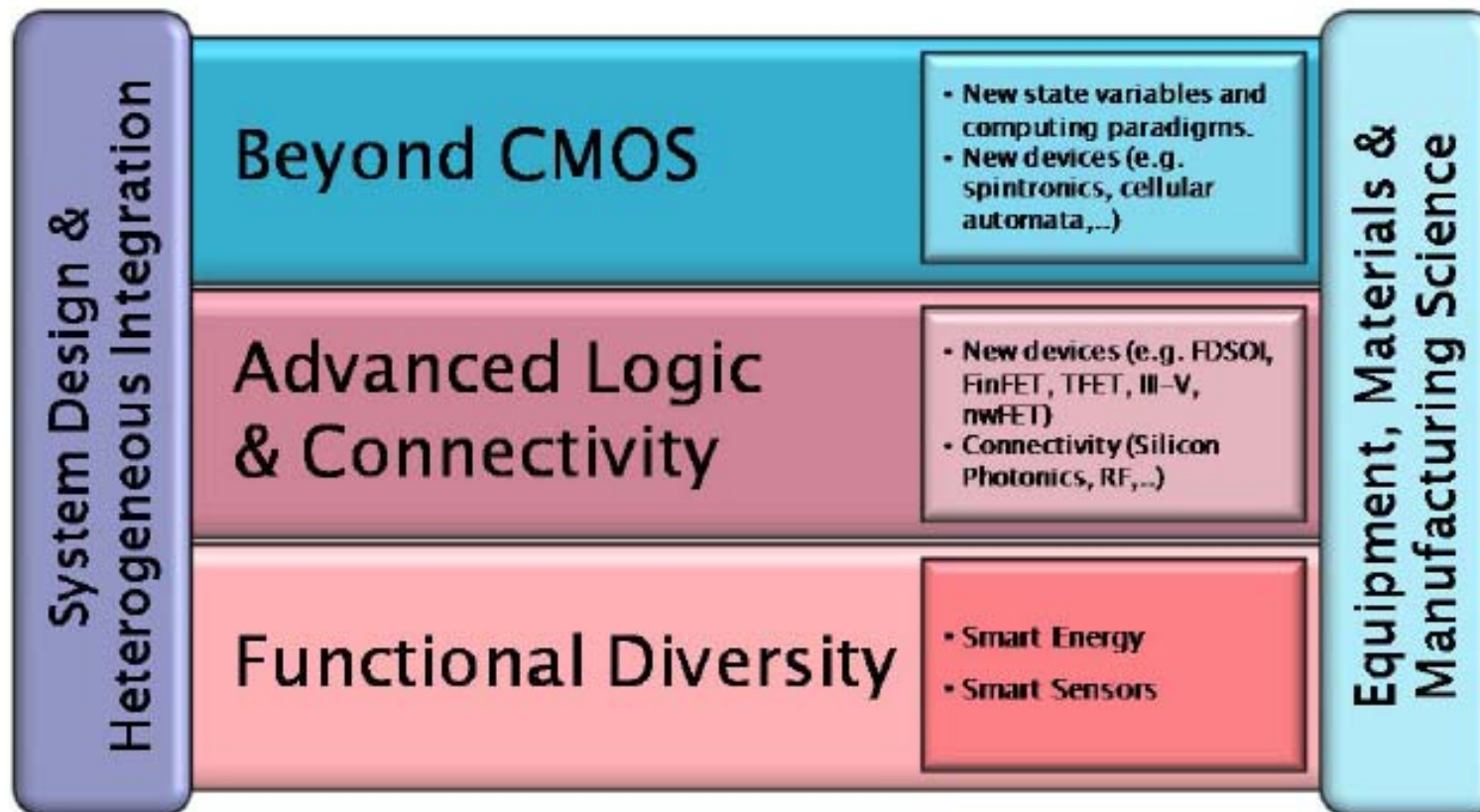
WP Number	WP Title	Lead beneficiary
WP1	Management of the consortium	1 - INP GRENOBLE
WP2	Beyond CMOS	12 - VTT
WP3	Advanced Logic and Connectivity	7 - IMEC
WP4	Functional diversification	9 - CEA
WP5	System Design and Heterogeneous Integration	10 - POLITO
WP6	Equipment and Manufacturing Science	5 - Fraunhofer
WP7	Communication and Dissemination	3 - EDAC
WP8	Coordination with roadmap initiatives	4 - EPFL

NEREID: Management and Administrative Issues

WP	Work Package	Tasks
1	Management (INP, SINANO)	1.1 Administrative management (Grenoble INP)
		1.2 Technical Management (SINANO Institute)
2	Beyond CMOS (VTT)	2.1 Emerging devices (VTT)
		2.2 Computing paradigms (ICN2)
3	Advanced Logic & Connectivity (imec)	3.1 Nanoscale FET (INP)
		3.2 Connectivity (LETI)
4	Functional Diversity (LETI)	4.1 Smart sensor (EPFL)
		4.2 Smart Energy (IUNET)
5	System Design & Heter. Integr. (PoliTo)	5.1 System Design (PoliTo)
		5.2 Heterogeneous Integration (Tyndall)
6	Equipm. & Manufact. Science (FhG)	6.1 Equipment and Materials (imec)
		6.2 Manufacturing Science (FhG)
7	Exploit., Diss. and web node (EDAcentrum)	7.1 Set-up of web node and comm. Tools (ECN)
		7.2 Planning of Dissemination events (ECN)
8	Coordination of initiatives (EPFL)	Advisory Board

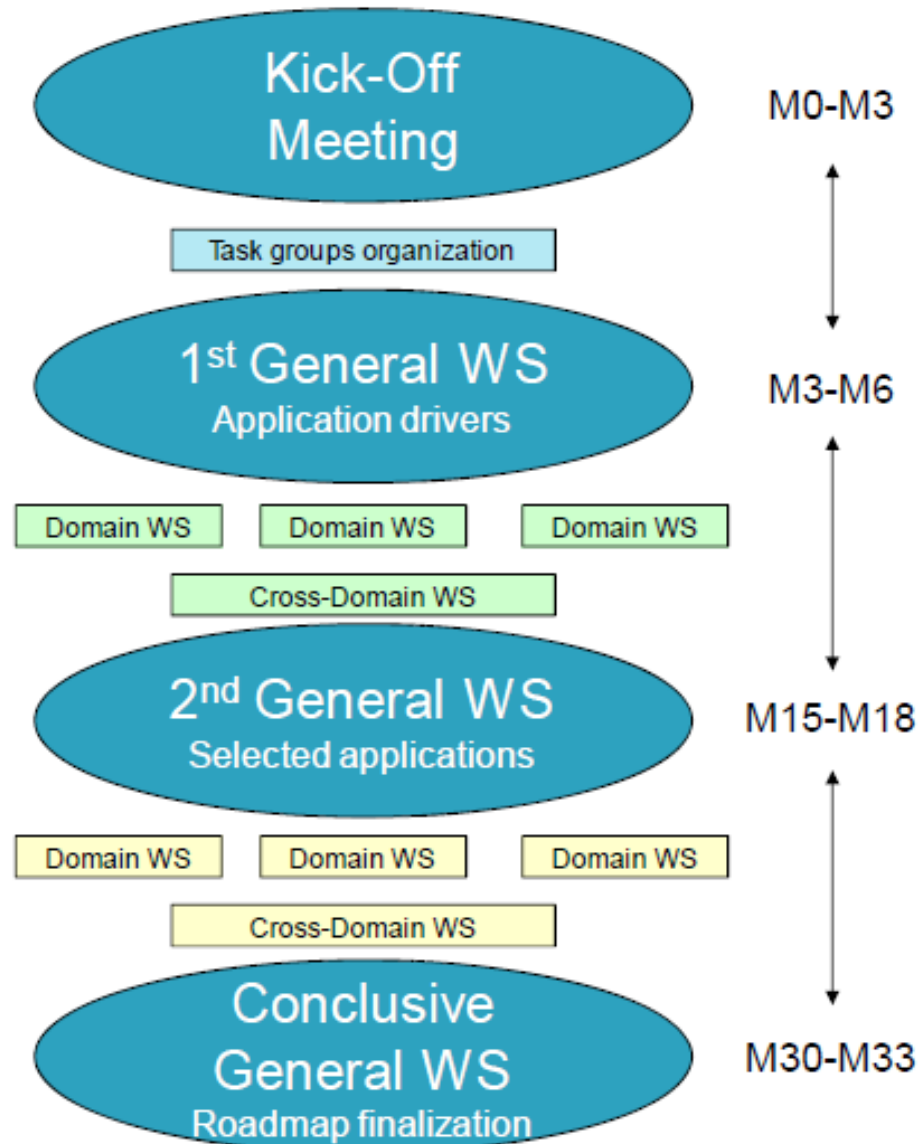
NEREID: Management and Administrative Issues

- Technical WPs of the Roadmap:

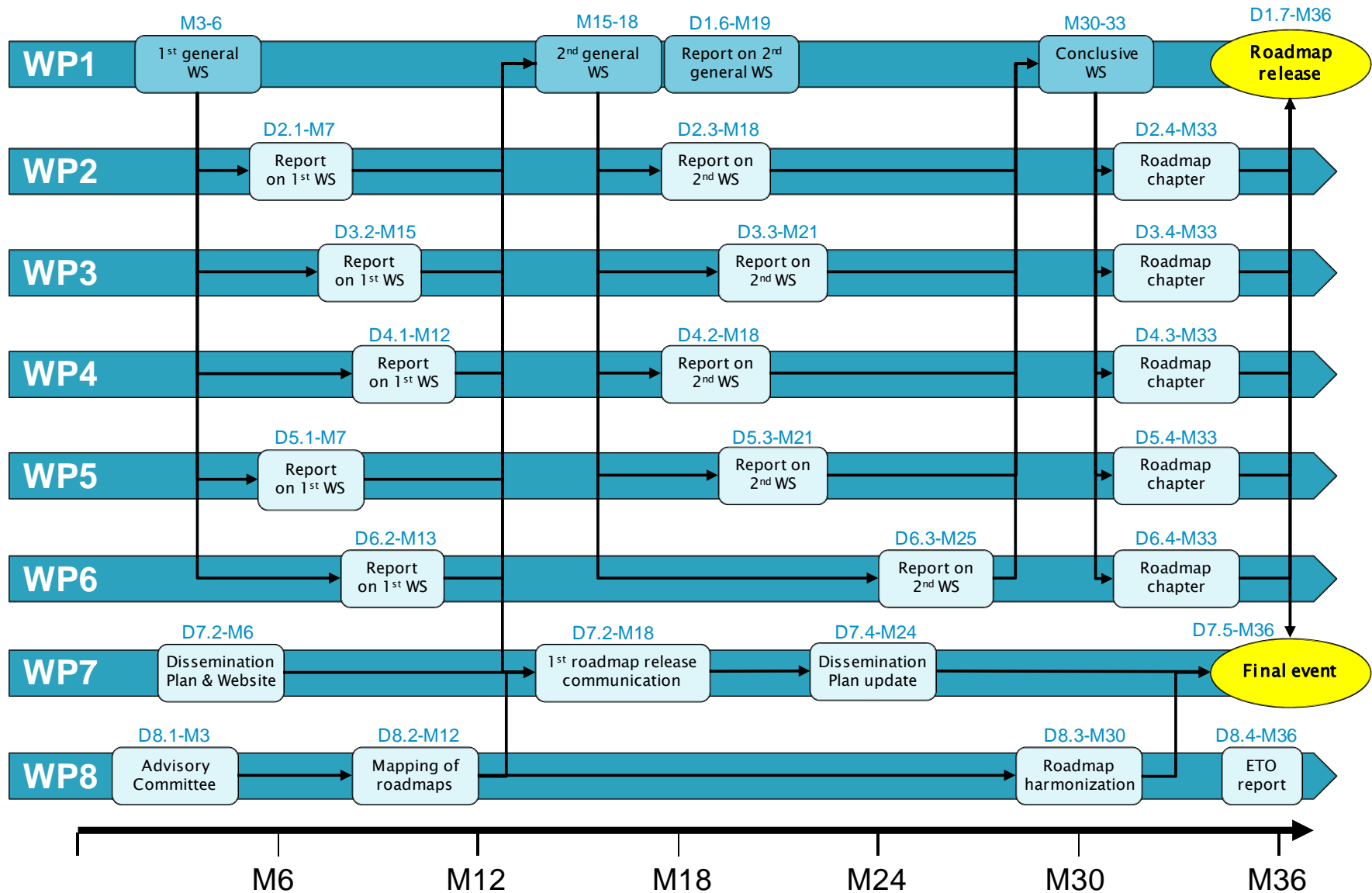


NEREID: Management and Administrative Issues

- Workshops:

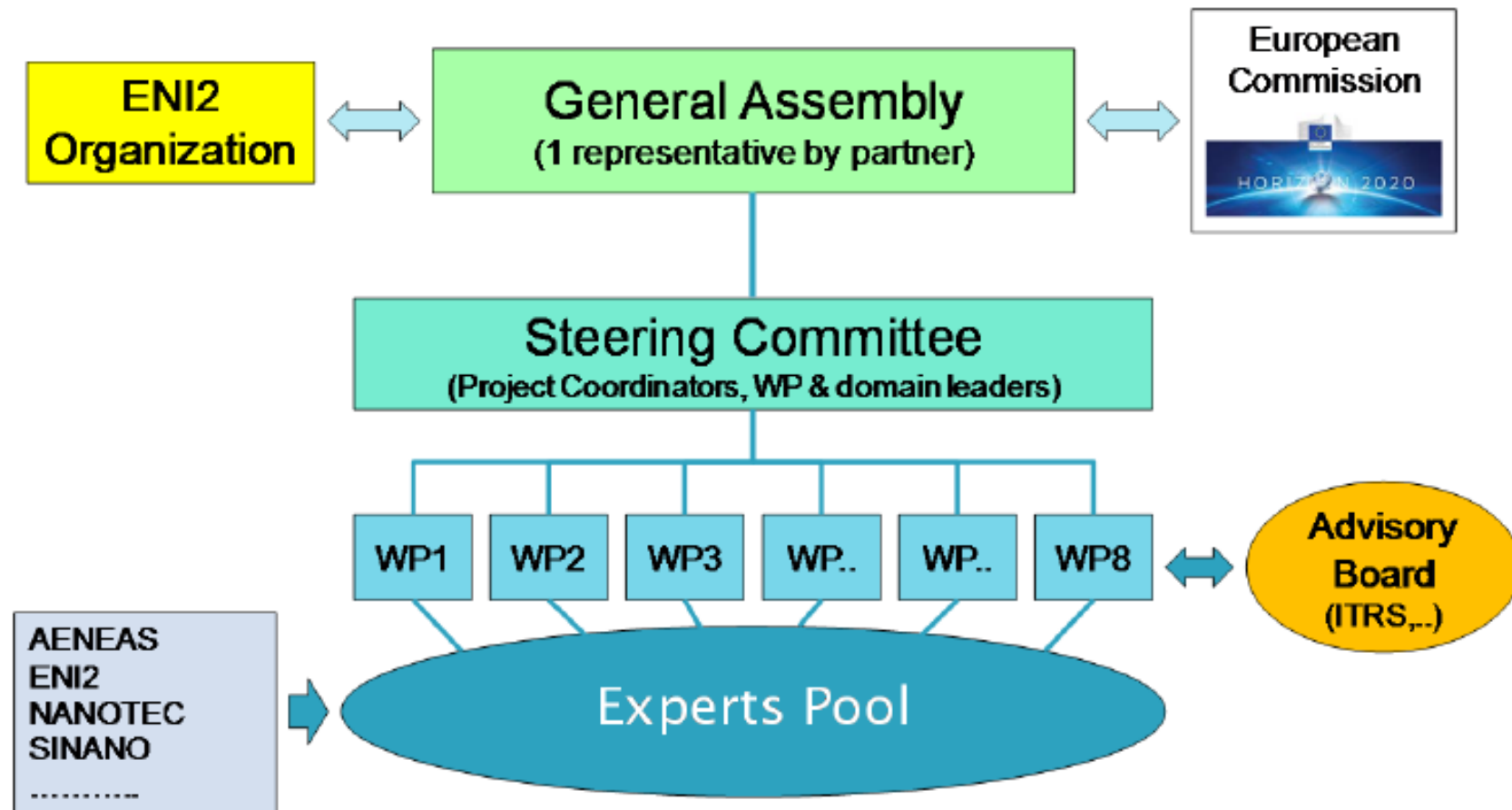


PERT Chart



NEREID: Management and Administrative Issues

- Governance:



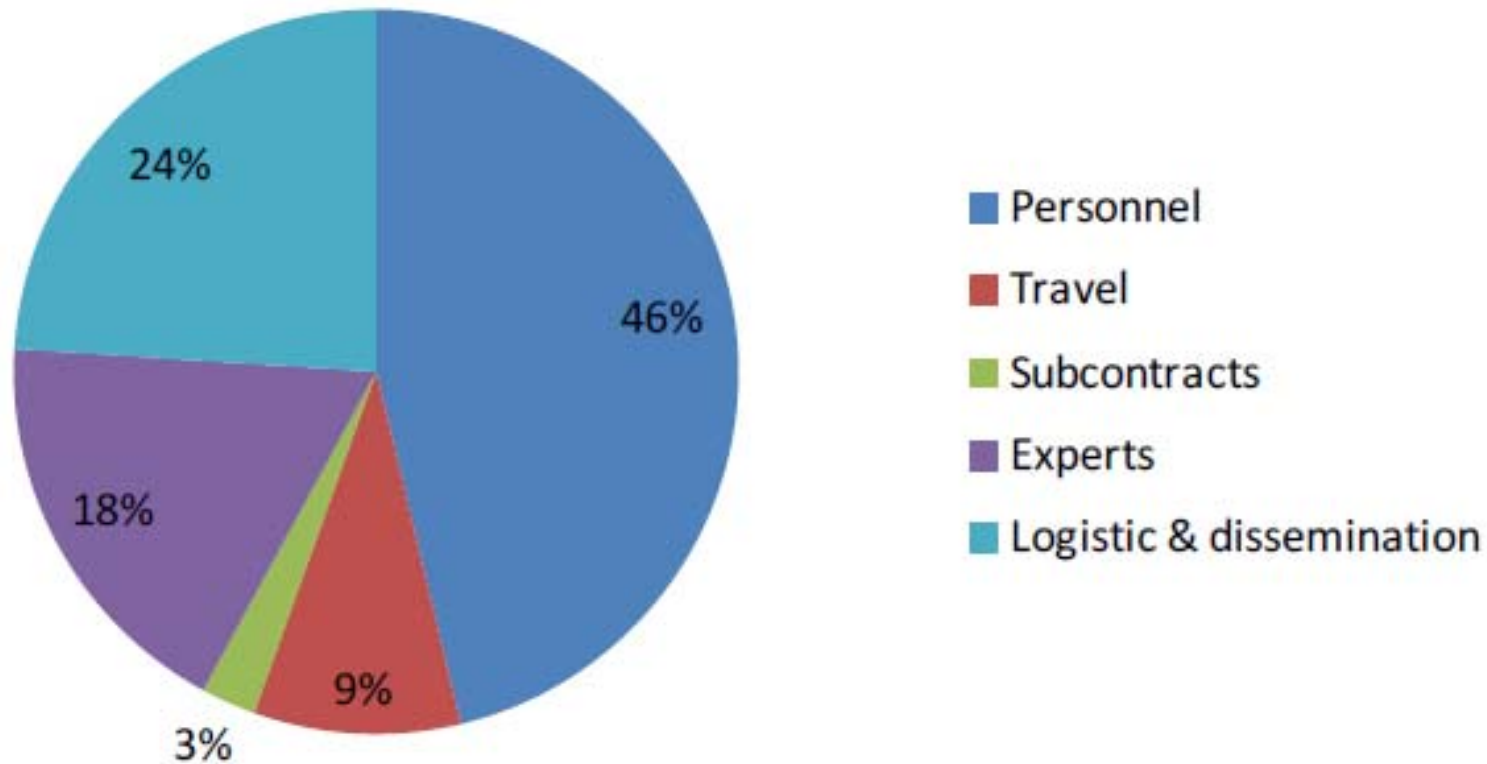
NEREID: Management and Administrative Issues

- Industrial co-Leaders:

WP	Description	Industrial co-leader	Affiliation
WP1	Management	L. Baldi	AENEAS
WP2	Beyond CMOS	H. Riel	IBM Zurich
WP3	Advanced Logic and Connectivity	S.Monfray	STMicroelectronics
WP4	Functional diversification	W. Dettman (energy)	Infineon
		R. Hoofman (sensors)	NXP
WP5	System Design & Heterogeneous Integration	R.Pferdmenges	Infineon
WP6	Equipment & Manufacturing Science	R. Hartman (equipment)	ASML
		Ph. Vialletelle (manufact.)	STMicroelectronics
WP7	Communication & Dissemination	M. Annegarn	AENEAS
WP8	Coordination with roadmap initiatives	Not applicable	

NEREID: Management and Administrative Issues

- Cost Partitioning (*EU funding 1M€*, total cost 1,123M€):



NEREID: Management and Administrative Issues

- **Experts proposal/WPs-Tasks:**

- Potential users of the roadmap in the *semiconductor and applications* world, including *industrial co-leaders* of WPs, and *academic* experts
- *Internal and external* experts
- Number of experts / institution
- Experts for the *Advisory Board* including non-European ones

- **Representatives for GA and SC:**

- **GA:** 1 meeting / year: 1 representative / Partner)
- **SC:** 2 meeting/year (*next one during 1st General Workshop in Grenoble*):
Project Adm./Tech. Coordinators, WP and Task Leaders

A fruitful collaboration will be strengthened in NEREID during 3 years!

Thank you !

NEREID

KICK-OFF meeting
Berlin, December 1, 2015

WP1



WP1: management of the consortium

(leader: Grenoble INP)

❑ Project coordinators and project co-industrial leader

Francis Balestra, Grenoble INP : Coordinator of NEREID

- Project Administrative Coordinator: administrative and financial coordination, lead of General Assembly and interface with EU, selection of experts.

Enrico Sangiorgi, SINANO Institute

- Project Technical Coordinator: technical coordination of the project and lead of the Steering Committee;

Livio Baldi

- Project Co-industrial Leader: coordination with the industrial organisations represented in AENEAS and with the ENI2 initiative.

❑ Additional contacts within WP1

Sylvie Pitot, Grenoble INP

- Administrative, legal & financial issues, reporting at M18 and M36

Pascale Caulier, SINANO Institute

- Organisation of the General Workshops, deliverables, milestones, selection of experts.

WP1: pre-financing transferred by Grenoble INP

Bank transfers were ordered on November 19, 2015 to the partners.

NEREID - Requested EC contribution - 36 months									
No.	Partner	Direct personnel costs	Other direct costs	Subcontracting	Indirect costs	Total costs	Total EU contribution	Pre-financing transferred on November 19, 2015	ratio pre-financing /total funding
1	GRENOBLE INP	46 800,00	192 000,00	15 000,00	59 700,00	313 500,00	313 500	188 100	60%
2	SINANO	31 200,00	7 000,00		9 550,00	47 750,00	47 750	28 650	60%
3	EDAC	54 600,00	46 000,00	7 500,00	25 150,00	133 250,00	133 250	79 950	60%
4	EPFL	45 000,00	25 000,00		17 500,00	87 500,00	0	0	
5	FRAUNHOFER	31 200,00	22 000,00		13 300,00	66 500,00	66 500	39 900	60%
6	ICN2	31 200,00	22 000,00		13 300,00	66 500,00	66 500	39 900	60%
7	IMEC	31 200,00	22 000,00		13 300,00	66 500,00	66 500	39 900	60%
8	IUNET	15 600,00	22 000,00		9 400,00	47 000,00	47 000	28 200	60%
9	CEA	31 200,00	32 000,00		15 800,00	79 000,00	79 000	47 400	60%
10	POLITO	31 200,00	22 000,00		13 300,00	66 500,00	66 500	39 900	60%
11	TYNDALL-UCC	18 500,00	19 100,00		9 400,00	47 000,00	47 000	28 200	60%
12	VTT	31 200,00	22 000,00		13 300,00	66 500,00	66 500	39 900	60%
13	AENEAS	23 400,00	5 000,00		7 100,00	35 500,00	0	0	
	TOTAL funding	422 300,00	458 100,00	22 500,00	220 100,00	1 123 000,00	1 000 000,00	600 000,00	

WP1: budget reserved for Workshops (direct costs)(cf. DoA)

Grenoble INP budget for General Workshops		
General Workshop 1 with applications (Grenoble, April 2016) 47 000 € + approx. 6 000 € subcontracting	Logistics (meeting room, catering etc.)	32 000 €
	Invited experts: reimbursement of travel costs by Grenoble INP (original invoices/receipts mandatory)	15 000€ (30 experts, 500€ max)
	Subcontracting (Facilitators)	Approx. 6 000 €

General Workshop 2 roadmap preparation and coordination location ? 47 000 € + approx. 6 000 € subcontracting	Logistics (meeting room, catering etc.) payment by Grenoble INP	32 000 €
	Invited experts: reimbursement of travel costs by Grenoble INP (original invoices/receipts mandatory)	15 000€ (30 experts, 500€ max)
	Subcontracting (Facilitators)	Approx. 6 000 €

General Workshop 3 for roadmap preparation and coordination location ? 47 000 €	Logistics (meeting room, catering etc.) payment by Grenoble INP	32 000 €
	Invited experts: reimbursement of travel costs by Grenoble INP (original invoices/receipts mandatory)	15 000€ (30 experts, 500€ max)

Task coordinators budget (Grenoble INP, FRAUNHOFER, ICN2, IMEC, IUNET, CEA, POLITO, TYNDALL, VTT)		
1 or 2 Domain Workshop(s) per task	Logistics for 1 (or 2) Workshop(s) per Task	5 000 € in total
10 tasks (2 tasks per WP)	10 invited experts for 1 (or 2) Workshop(s): reimbursement of travel costs by Task leader (original invoices/receipts mandatory)	10 000 € (for 1 or 2 Workshops)
TOTAL: 150 000€		
Additional expenses foreseen in the project		
Meeting of Advisory Committee and with International organisations	ECN and EPFL 2 meetings with 10 paid experts at 500€ max/each + 5 000 € for logistic costs	15 000 € *

* partially covered by Swiss funding. In addition EPFL will fund participation of Swiss partners to workshops for 5K EUR.

Nota:

- Experts will take care of their travel details and booking**

WP1

- **Consortium Agreement:**

- Collection of signatures in progress and signed version will be sent to the Partners very soon

- **Non-Disclosure Agreement:**

- To be signed by external Experts, Members of the Advisory Board, Facilitators