



VINNOVA's approach to innovation in international ICT

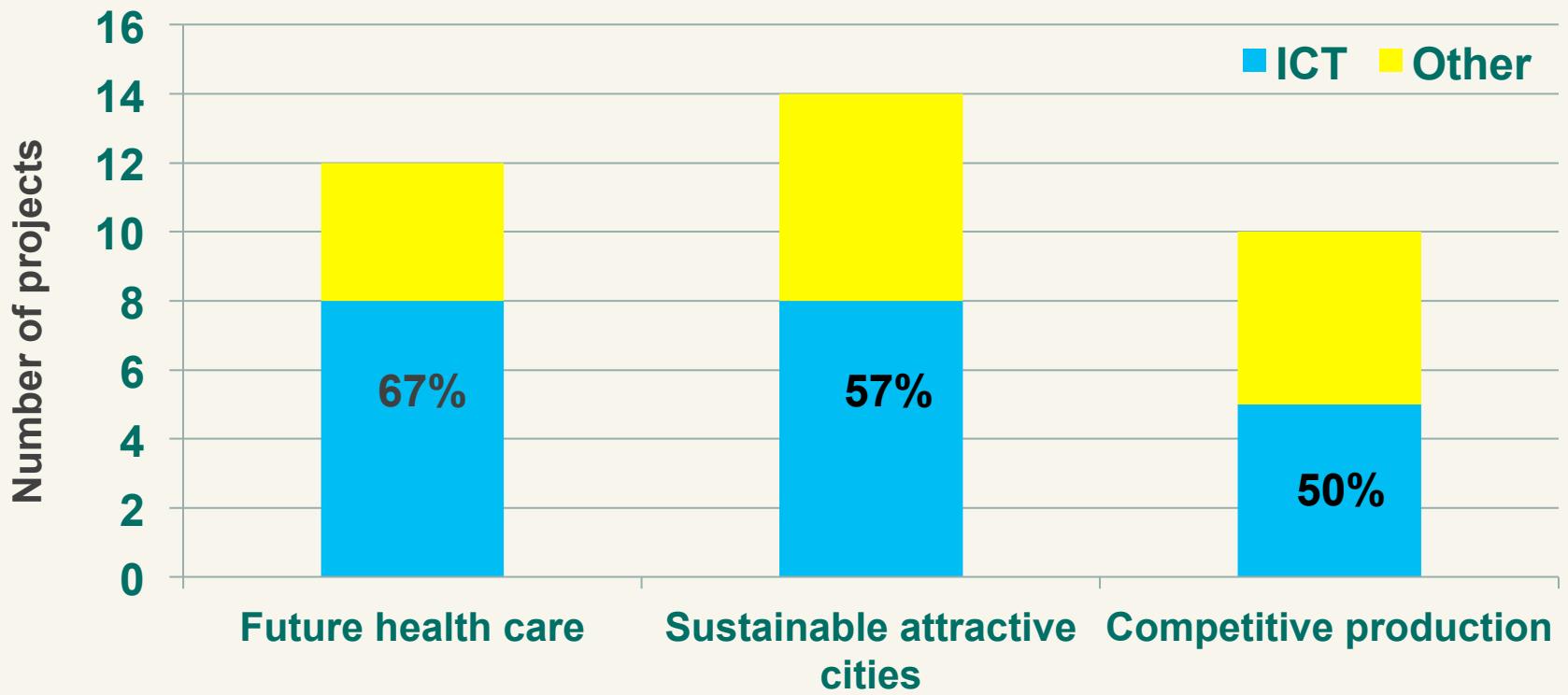
Swedsoft STEW, Kista, September 25 2014

Jonas Bjarne, Johan Lindberg, Andrej Litwin
VINNOVA

ICT enables innovation

- As digitalisation is the main driver for renewal ICT becomes the **enabling technology**
- The results will be experienced by everyone, foremost in **many sectors** outside the ICT-sector
- Mindset: ICT is the “**steam engine**” of our time

Results from VINNOVA's program Challenge-driven Innovation (UDI): ICT enables innovation



Results from VINNOVA's program Strategic Innovation Areas (SIO): ICT enables innovation

- VINNOVA funds 11 SIO programmes to support the innovation agendas that are most important for Sweden:
 - Innovair, Graphene, ICT electronic components & systems, Internet of things, BIO innovation, Life science, Mining & metal production, Light materials, Process industrial IT & automation
- These programmes span **wide application domains**
- **75%** of them have clearly defined **ICT needs**
- Most needed ICT (60-75%): Sensors and sensor networks, energy optimization, production technology and automation, modelling and simulation

International ICT at VINNOVA – what is that?

- All VINNOVA's R&D-programs in international ICT
- >10 different EU, EUREKA and bilateral programs
- >150 MSEK/year from VINNOVA+EU (<50% of costs)
- Enabling an ICT project portfolio of >300 MSEK/year
- >10 persons involved at VINNOVA

International ICT

VINNOVA's
R&D-programs
in international ICT

Bilateral

Euripides2

Celtic plus

Catrene

ITEA 3

Individual
projects

EUREKA

Eurostars
/ICT

EU +
EUREKA

Brazil-
Sweden
/ICT

India-
Sweden
/ICT

China-
Sweden
/ICT

Horizon
2020
/ICT

Ecsel

Flag-ERA
/Graphene

EU



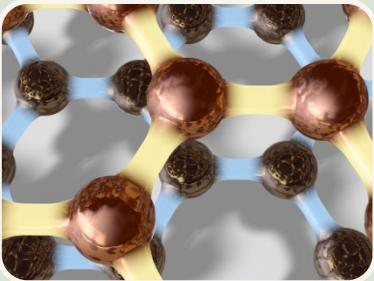
ICT in Horizon 2020

A step towards Enabling ICT

Johan Lindberg

Horizon 2020

The basics: three priorities



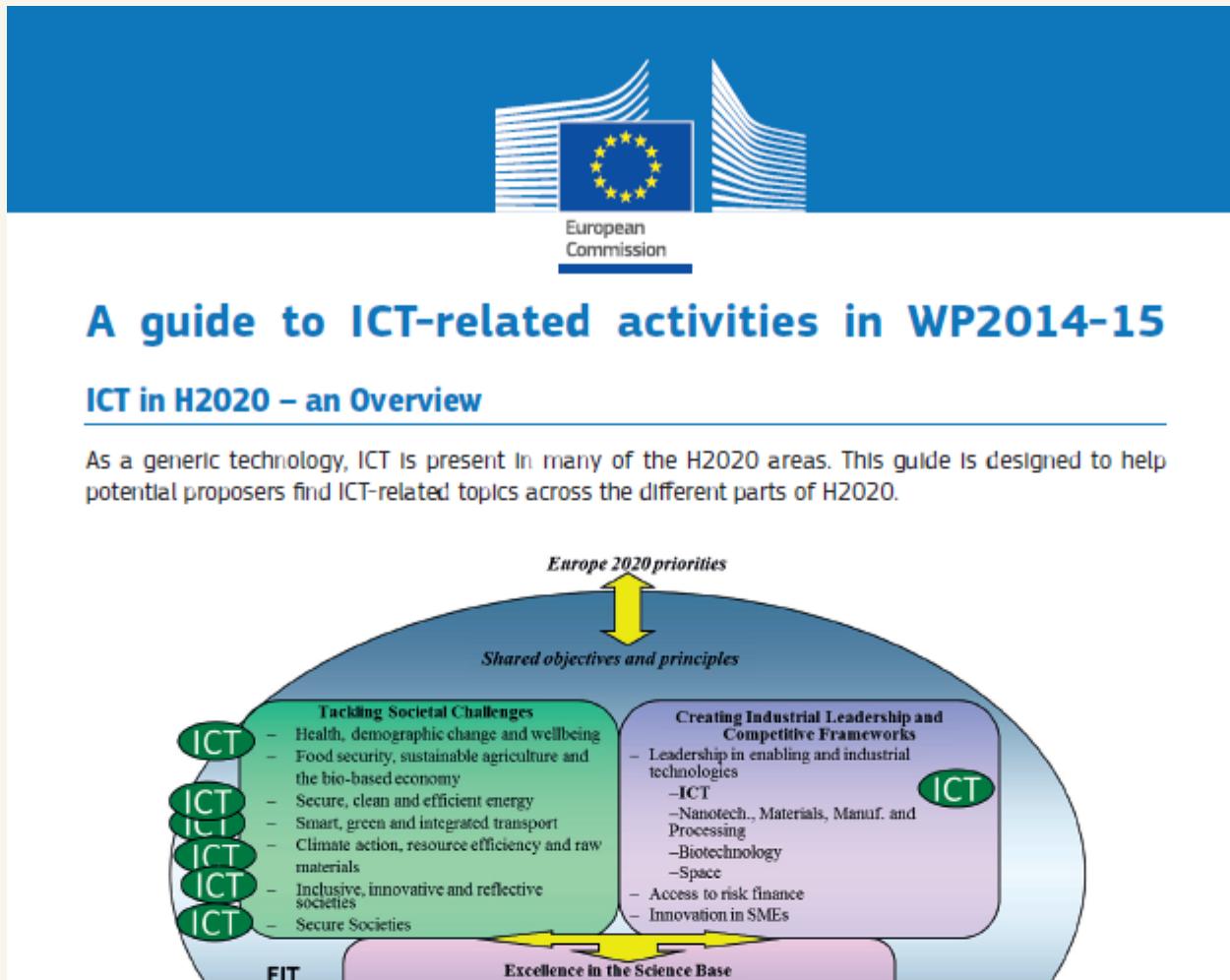
Excellent
science

Industrial
leadership

Societal
challenges

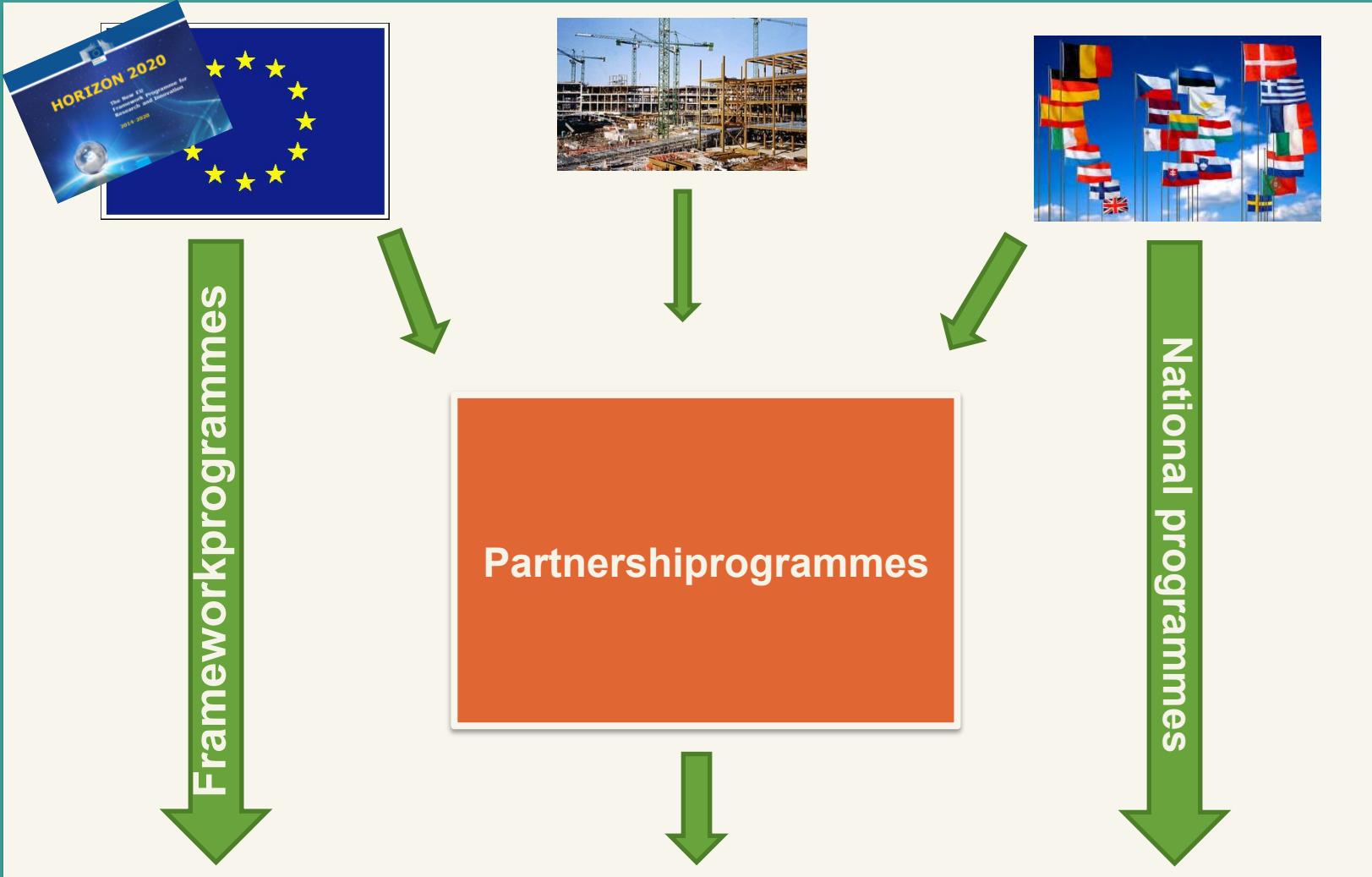
Guide to ICT in Horizon 2014-2015

- <https://ec.europa.eu/digital-agenda/node/68342>



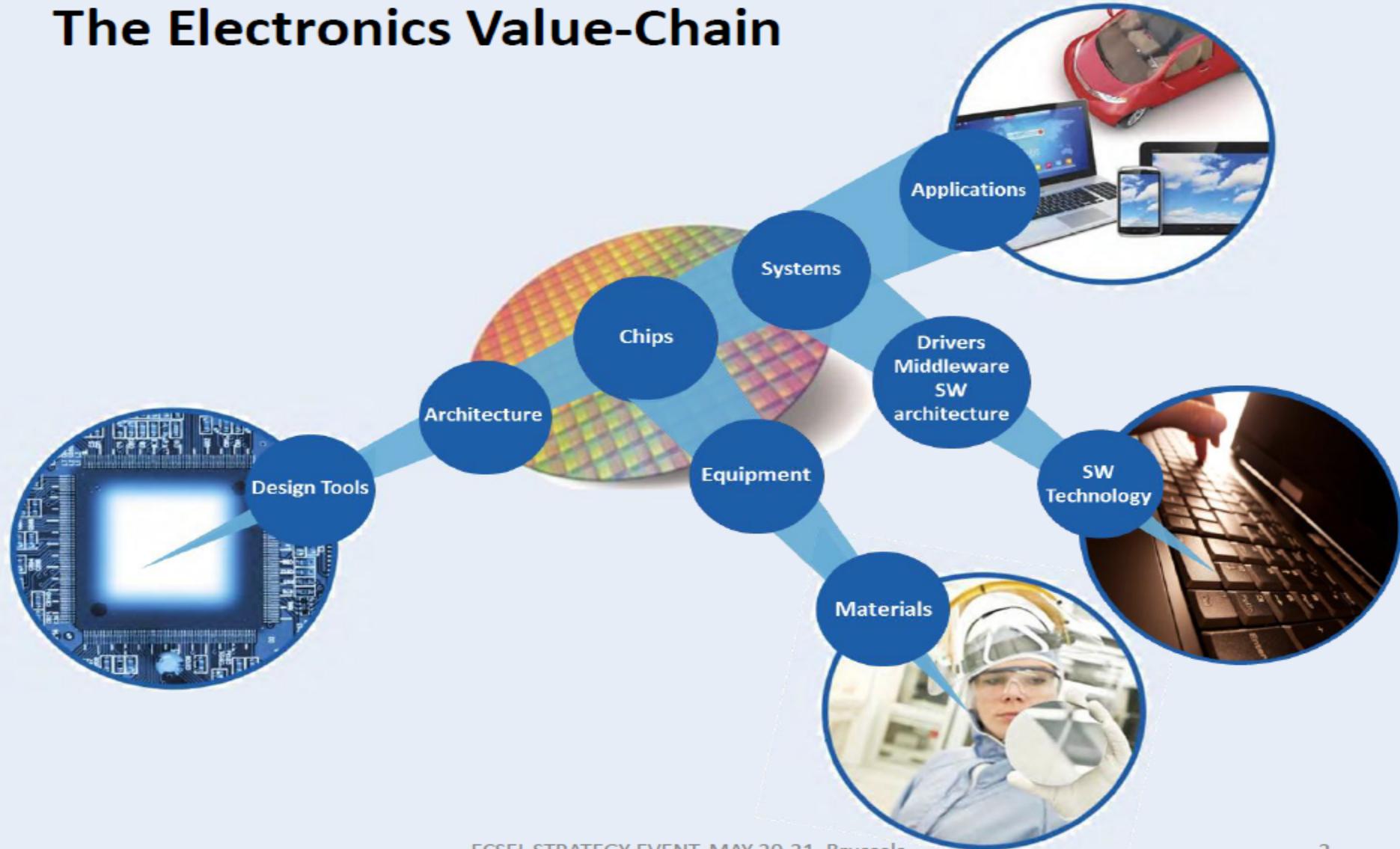
Timing EU events

- ICT proposers day, 9-10 October, Florens, Italy
 - <http://ec.europa.eu/digital-agenda/en/ict-proposers-day-9-10-october-2014>
 - Dead-line for proposals 14/4-2015
- WorkProgramme 2016-2017, to be planned NOW !
 - Contact Bogumil Hausman, VINNOVA with possible input



ECSEL: Electronic Components & Systems for European Leadership

The Electronics Value-Chain



EU JTI ECSEL 2014 call

- Focus:
Electronic Components and Systems [ARTEMIS (embedded) + ENIAC (nanoelectronics) + EPoSS (smart systems)]
- Info: <http://ecsel.eu/>
- Two calls:
- Research and Innovation Actions (RIA)
- Innovation Actions (IA)
- Calls closed: September 17
- VINNOVA+EU-budget: 11 MEUR, RIA max 3.4 MEUR
- VINNOVA contact:
Andrey Litwin, Andrey.Litwin@VINNOVA.se, 08-473 3045

Results of 1:st ECSEL call

	A	B	C	AB	AC	BC	ABC	TOTAL
ECSEL-2014-1	3	11	1	2	4	4	9	34
ECSEL-2014-2	4	3	0	2	3	0	2	14
Grand Total	7	14	1	4	7	4	11	48

CALL 2014-1	Total Eligible Cost	Requested JU grants	Grant %
A	70,394,854 €	35,018,064 €	49.7%
B	210,398,424 €	105,157,269 €	50.0%
C	5,127,754 €	2,563,877 €	50.0%
AB	43,643,866 €	21,821,943 €	50.0%
BC	49,542,380 €	24,513,922 €	49.5%
CA	148,787,537 €	74,299,362 €	49.9%
ABC	264,093,350 €	131,253,079 €	49.7%
TOTAL	791,988,165 €	394,627,516 €	49.8%

CALL 2014-2	Total Eligible Cost	Requested JU grants	Grant %
a	355,895,106 €	106,474,447 €	29.9%
b	86,603,530 €	29,954,456 €	34.6%
c	0 €	0 €	N/A
ab	71,752,471 €	24,883,799 €	34.7%
bc	0 €	0 €	N/A
ca	285,714,439 €	85,725,930 €	30.0%
abc	239,496,261 €	74,353,626 €	31.0%
	1,039,461,807 €	321,392,258 €	30.9%

(a= semiconductors; b = embedded systems and cyber-physical systems; c = system integrations)

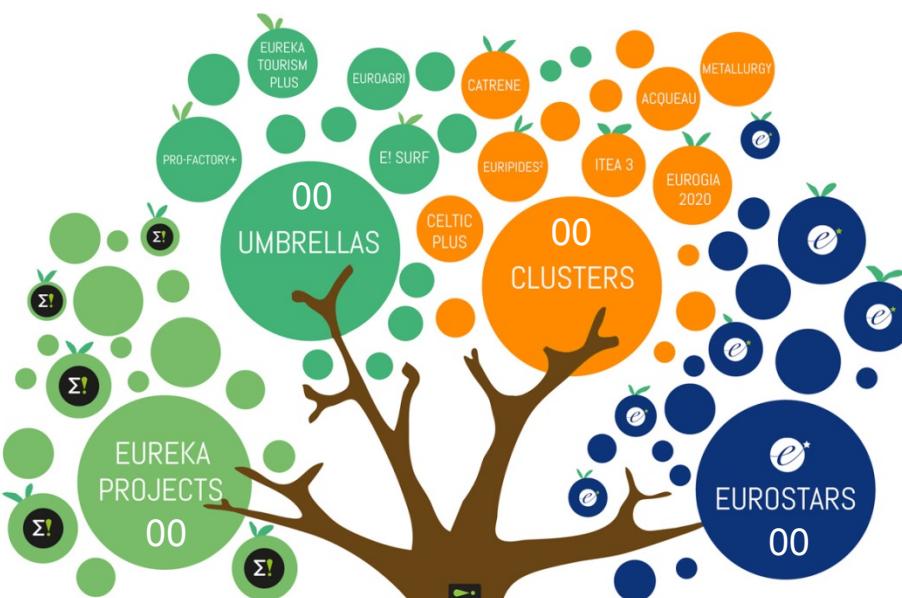
Funding rates

Type of partner	<u>JU funding</u> Research and Innovation Action	Vinnova funding RIA (conditions apply)	<i>Total public funding</i> RIA	<u>JU funding</u> Innovation Action	VINNOVA funding IA (conditions apply)	<i>Total public funding</i> IA
Industry	50%	50%	100%	25%	25%	50%
SME	50%	50%	100%	35%	35%	70%
RTO	50%	50%	100%	50%	50%	100%
Univ, non profit	50%	50%	100%	50%	50%	100%

JU funding is based on cost declared eligible according to H2020 rules.

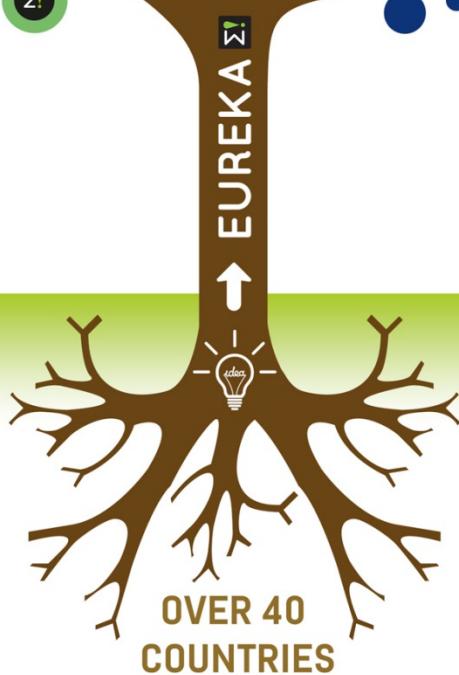
VINNOVA funding rates similar to JU funding.

EUREKA instruments



EUREKA

innovation across borders



A large, stylized brown number '3' is positioned on the left. To its right is a yellow circular graphic resembling a tree trunk or a clock face, with concentric circles and radial lines. The word 'YEARS' is written in bold, black, sans-serif capital letters across the center of the tree ring graphic.

EUREKA instruments main features

(project mean values for number of participants,
total budget and number of participant type ratios)

INDIVIDUAL PROJECTS

 + 5
average number
of participants

5.3 MILLION €
public-private
funding

 39%
SMEs
 29%
Universities and Institutes
 29%
Large companies

CLUSTER PROJECTS

 + 19
average number
of participants

17.2 MILLION €
public-private
funding

 35%
SMEs
 31%
Universities and Institutes
 33%
Large companies

EUROSTARS-2 PROJECTS

 + 3
average number
of participants

1.4 MILLION €
public-private
funding

 70%
SMEs
 23%
Universities and Institutes
 6%
Large companies

VINNOVA
 ≤ 15 MSEK/
year

VINNOVA
 ≈ 25 MSEK/
year

VINNOVA+EU
 ≤ 90 MSEK/
year

VINNOVA+EU
 $\Sigma \leq 130$ MSEK/
year

EUREKA 2014 individual and ICT cluster calls

- Info:

www.vinnova.se/sv/For-Foretag/Internationell-finansiering/EUREKA/

- VINNOVA-budget: 4 MEUR (tentative total)

	Individual	ITEA 3	Catrene	Celtic plus	Euripides2
Focus	Market-oriented international ICT R&D projects	Software-intensive Systems & Services	Nanoelectronics	Telecom, new media, future Internet, "Smart Connected World"	heterogeneous electronic products integration, smart sensors, power electronics
Calls open	Always open	September 23	Closed	Open	Open (FPP)
Calls close	Continuous, 4 decisions/year	October 31	September 4 (PO required)	October 15	Sept. 23 (PO), Nov. 20 (FPP)
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EUREKA Eurostars 2014-15 calls

- **Focus:**

Research-performing companies, especially SMEs, in transnational consortia. Wide scope, i.e. not only ICT.

- **Info:**

www.eurostars-eureka.eu/

<http://www.vinnova.se/sv/For-Foretag/Internationell-finansiering/Eurostars/>

- **Calls open:** Always open
- **Calls close:** March 5, September 17 2015
- **(VINNOVA+EU)-budget:** 10 MEUR/year (tentative)
- **VINNOVA ICT contact:**

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Further information

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H2020 ICT information day video:

www.vinnova.se/sv/Aktuellt--publicerat/Kalendarium/2014/140212-Informationsmote-om-informations--och-kommunikationsteknik-ICT-i-Horisont-2020-/

Sveriges innovationsmyndighet



**Vi stärker Sveriges innovationskraft för hållbar
tillväxt och samhällsnytta**

www.VINNOVA.se