

Nokia - Marie-Curie / MSCA Programme

Dr. Didier Bourse (Senior Director, European R&I Programs)

ANRT Webinar – 22.06.22 - Online

A diverse group of young people, including a woman with a black headband and a man in a grey t-shirt, are gathered around a smartphone. They are all smiling and looking at the screen, suggesting a collaborative and positive interaction. The background is slightly blurred, showing a pink inflatable object and green foliage, indicating an outdoor setting.

At Nokia, we create technology
that helps the world act together.

We have a responsibility to develop technology to address the world's challenges



Pressure on the planet is increasing

Reducing carbon emissions and the use of scarce natural resources



Productivity is stalling

Bringing digitalization to the physical industries it has not yet reached



Inclusive access to opportunity remains stubbornly unequal

Providing more inclusive access to work, healthcare and education

We are committed to deliver critical networks through technology leadership and trusted partnerships

Four strategic commitments define our focus

1

We are a **trusted partner** for critical networks

2

We focus on **technology leadership** in each of our businesses

3

We capture the value shift to **cloud and new business models**

4

We create value with **long-term research and intellectual property**

Together with our customers, we create the world's networks



Communications service providers

6.6bn+ Subscriptions supported by our mobile networks

500m+ Fixed broadband lines and ports shipped



Industry and public sector

2,200+ Mission-critical customers

450+ Private wireless customers



Licensing opportunities

20,000+ Patent families

4000+ Patent families declared essential to 5G

Building technology leadership across the industry



- Radio Access Networks
- Microwave Radio Links
- Related network management software and services

€9.7 bn net sales 2021



- Business applications
- Core network solutions
- Cloud and cognitive services
- Enterprise solutions

€3.1 bn net sales 2021



- IP networks
- Optical networks
- Fixed networks
- Alcatel Submarine Networks

€7.7 bn net sales 2021



- Brand licensing
- Patent licensing
- Technology licensing

€1.5 bn net sales 2021

Transforming the industry through innovation

Researching future technologies through Nokia Bell Labs

- Defining the future of networks for the 6G era and beyond
- Focusing on new value chains, business opportunities and ecosystems

Collaborating in standards and ecosystems

- 3GPP
- Hexa-X
- O-RAN Alliance
- Next G Alliance
- U.S. National Science Foundation's RINGS (Resilient & Intelligent NextG Systems)

Leading patent and intellectual property generation

- 20,000+ patent families
- 1,500+ inventions based on patents filed in 2021

9 Nobel Prizes

7 Emmys

5 Turing Awards

2 Grammys

1 Oscar

Leading our business ambition



Pekka Lundmark
President and Chief Executive Officer



Tommi Uitto
President of
Mobile Networks

Mobile Networks



Ricky Corker
Chief Customer
Experience Officer

Network Infrastructure

Federico Guillén
President of
Network Infrastructure



Raghav Sahgal
President of
Cloud and Network
Services

Cloud and Network Services

Ricky Corker
Chief Customer
Experience Officer

Nokia Technologies

Jenni Lukander
President of
Nokia Technologies



Marco Wirén
Chief Financial
Officer



Nassib Abou-Khalil
Chief Legal
Officer



Nishant Batra
Chief Strategy and
Technology Officer



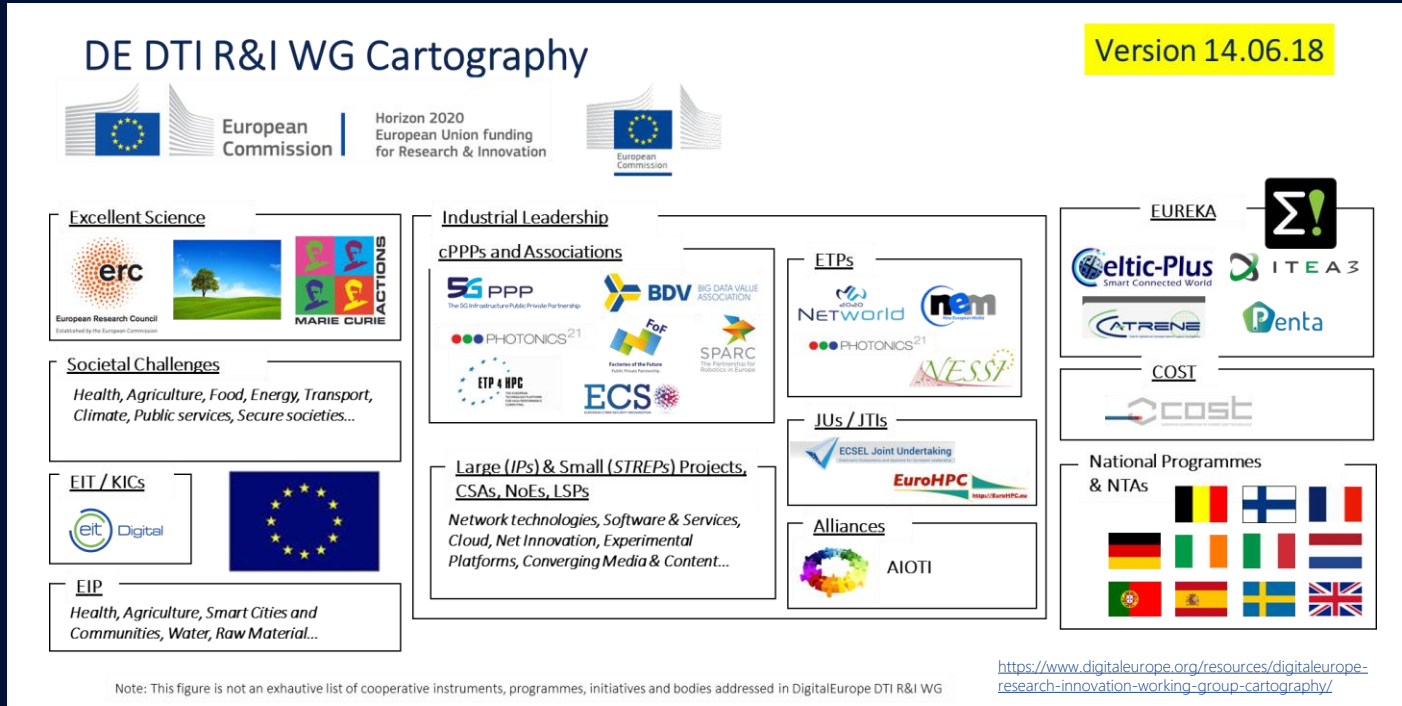
Stephanie Werner-Dietz
Chief People
Officer



Melissa Schoeb
Chief Corporate
Affairs Officer

Nokia R&I Cooperative Programs & Ecosystems (1/9)

Nokia R&I Cooperation – DigitalEurope R&I WG Cartography



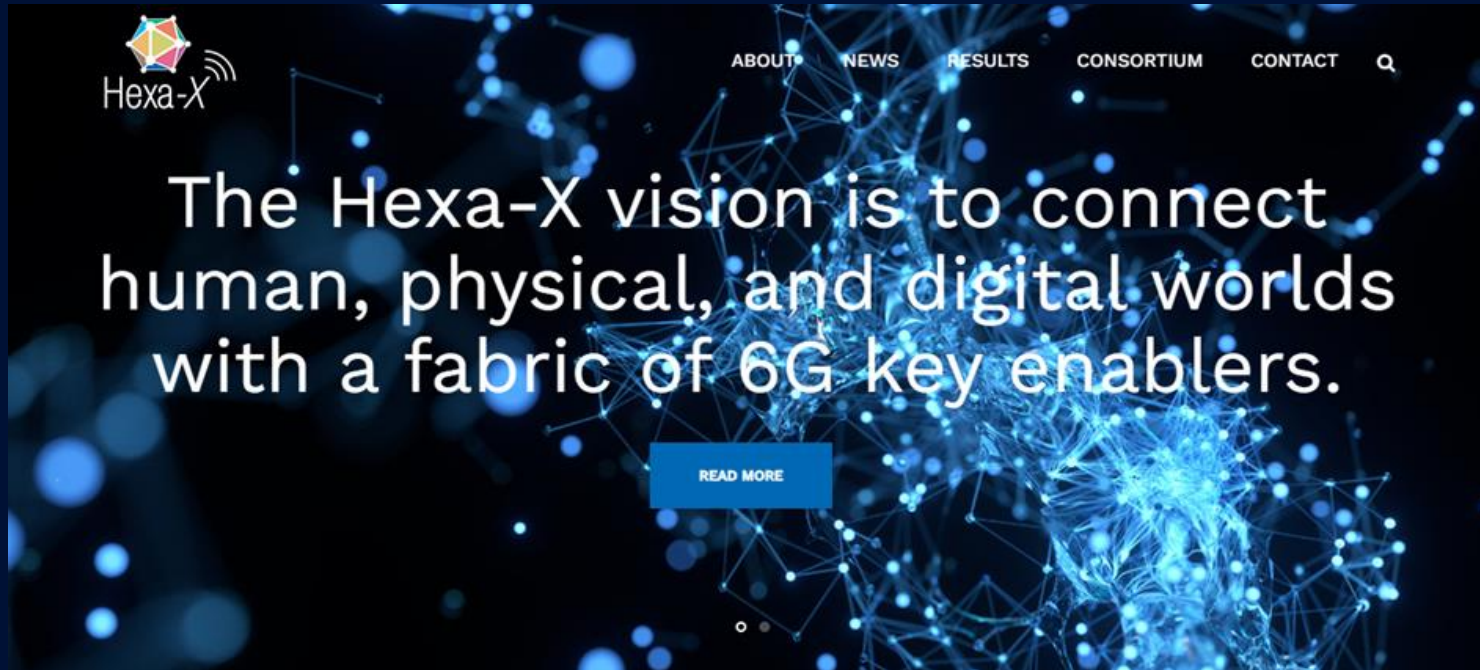
Nokia R&I Cooperative Programs & Ecosystems (2/9)

Nokia R&I Cooperation – EC H2020 5G Infrastructure PPP

The screenshot displays the website for the 5G Infrastructure Public-Private Partnership (5G PPP). At the top left, the email address 'info@5g-ppp.eu' is visible. The main header features the '5G IA' logo and the '5G PPP' logo, with the tagline 'The 5G Infrastructure Public Private Partnership'. A search bar is located to the right of the logo. Below the header is a navigation menu with the following items: 'About us' (highlighted), 'Getting Involved', 'Plans & Papers', 'Events', 'European 5G Activities', 'Media & News', and 'Contact'. The main content area is titled 'The 5G Infrastructure Public-Private Partnership' and features a large, colorful illustration of a city. The illustration is divided into several sections: 'CONNECTED CITY' (top right), 'CONNECTED THINGS' (top left), 'CONNECTED HOUSE' (middle left), 'CONNECTED PEOPLE' (bottom left), and 'CONNECTED TRANSPORTATION' (bottom right). The illustration shows various buildings, houses, people, and vehicles, all connected by a network of lines and icons representing 5G connectivity. At the bottom of the page, there are four sections: 'Tweets from 5G-PPP', 'About the 5G PPP:', a link to 'https://5g-ppp.eu/', and 'Recent News'.

Nokia R&I Cooperative Programs & Ecosystems (3/9)

Nokia R&I Cooperation – PPP - ICT-52 – System/Flagship and Enablers – Hexa-X



<https://hexa-x.eu/>

Public

Nokia R&I Cooperative Programs & Ecosystems (4/9)

Nokia R&I Cooperation – New Framework Programme - HEU / DEP / CEF2

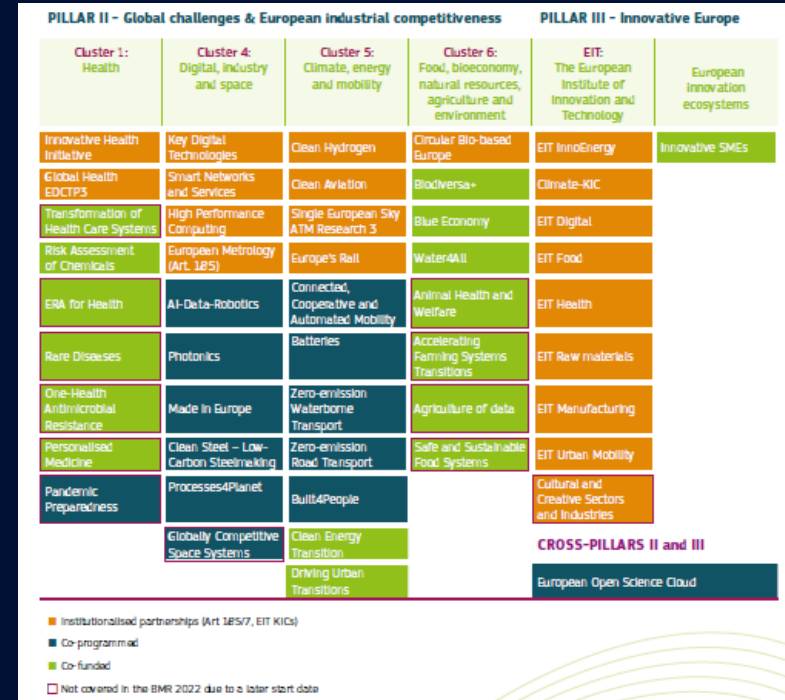
EU-wide collective effort					National regional and local			Financial instrument
Horizon Europe	Digital Europe	CEF	Creative Europe	Health	Cohesion	Agriculture Funds	RRF	InvestEU
Research Innovation	Strategic capacities: computing, data, testbeds, etc. Advanced digital skills EU-Wide deployment	Broadband and 5G roll out Connecting Communities	Creative industry Media	Telemedicine eHDSI	Digital connectivity in white and grey areas Support to enterprises in line with Smart specialisation Digital skills for all citizens	Making use of Big Data for CAP monitoring Broadband rollout in rural areas	Connect Scale-up Modernise Reskill and Upskill 20% digital	Leverage private capital for investments in SMEs, research, digital, infrastructure, skills...



Nokia R&I Cooperative Programs & Ecosystems (5/9)

Nokia R&I Cooperation – EC HEU Partnerships

Joint undertaking <i>Institutionalised partnership</i>	EU/EFTA funding (max)	Private funding (min)
Key Digital Technologies	1800	2 511
Smart Networks and Services	900	900*
Innovative Health Initiative	1200	1000*
EU-Africa Global Health	800	440*
Circular Bio-based Europe	1000	1000*
Clean Hydrogen	1000	1000*
Clean Aviation	1700	3039*
Single European Sky	600	500
Rail	600	600*



Nokia R&I Cooperative Programs & Ecosystems (6/9)

Nokia R&I Cooperation – Marie Curie / MSCA Projects

- 25+ Marie Curie / MSCA Projects in the Portfolio
- Most Projects in ITN incl. ETN and EID
- ETN focused on ENG and PHY
- Partner as Beneficiary / Full Participant and Partner Organization / Associate
- Starting in EC FP7 with EIF HYSSOP, ETN PROPHET, EID ARTISAN, EID IN-POWER, EID GetPICS and ETN CleanSky
- Boosted in H2020 with e.g. EID ACT5G, ETN 5G STEP FWD, ETN WindMill, ETN SEMANTIC, ETN META-WIRELESS...
- One Project in RISE: RANDNET

Nokia R&I Cooperative Programs & Ecosystems (7/9)

Nokia R&I Cooperation – Marie Curie / MSCA Experience

- Great Programme, Projects, Partners, Students...
- Great Research, Partnerships incl. Universities and Research Centers, Publications, Events, Summer Schools...
- Clear issue of oversubscription and low acceptance rate
 - Submissions and Resubmissions
 - Issue of Evaluations Scores consistency and continuity
 - Experience in H2020: 64.00 (2016) / 86.00 (2017) / 78.00 (2018) / 79.00 (2019) / 69.80 (2020) and 67.60 (2016) / 93.60 (2017) / 87.20 (2018) / 93.20 (2019)
- EC Programme bottom-up approach / Portfolio of Projects incl. by Thematics

Nokia R&I Cooperative Programs & Ecosystems (8/9)

Nokia R&I Cooperation – Marie Curie / MSCA Evaluation & Scores (1/2)

	MSCA-DH-2021: Cumulative percentage of proposals above this threshold, with a given score or higher (with funding range marked in green)									
Number of eligible proposals	128 proposals	23 proposals	359 proposals	99 proposals	261 proposals	13 proposals	83 proposals	105 proposals	1071 proposals	
cut off score for funding	93.2	84.4	84.2	95.2	92.8	100	92.8	88.8		
Score equal to or above	CHE	ECO	ENG	ENV	LIF	MAT	PHY	SOC		Grand total
100	0.00%	0.00%	0.28%	1.01%	0.77%	7.69%	0.00%	0.00%		0.47%
99	0.00%	0.00%	1.11%	1.01%	1.93%	7.69%	1.20%	0.00%		1.03%
98	2.34%	0.00%	2.51%	2.02%	3.45%	7.69%	4.82%	0.95%		2.71%
97	3.13%	0.00%	4.46%	3.08%	4.40%	7.69%	6.23%	0.95%		4.01%
96	4.69%	0.00%	6.41%	9.09%	5.34%	7.69%	6.02%	3.81%		5.79%
95	5.47%	0.00%	8.47%	15.15%	8.09%	7.69%	7.23%	5.81%		8.22%
94	10.16%	1.18%	14.76%	20.20%	10.34%	7.69%	9.64%	4.76%		11.95%
93	14.84%	1.18%	17.27%	24.24%	15.08%	15.38%	12.05%	5.71%		14.75%
92	16.41%	1.18%	18.84%	28.28%	17.62%	15.38%	19.28%	6.67%		17.65%
91	22.66%	1.18%	22.84%	30.30%	20.89%	15.38%	22.89%	7.62%		21.01%
90	27.34%	1.18%	25.91%	35.35%	22.99%	23.08%	26.51%	11.43%		24.37%
89	30.47%	1.18%	33.69%	39.39%	26.05%	38.46%	31.33%	12.38%		27.45%
88	32.03%	1.18%	30.64%	41.41%	27.99%	38.46%	37.35%	16.19%		29.69%
87	37.50%	1.18%	33.98%	44.44%	31.80%	38.46%	44.38%	19.05%		33.61%
86	41.41%	1.18%	37.31%	47.47%	37.26%	38.46%	48.39%	20.91%		37.25%
85	45.09%	1.18%	40.97%	53.54%	41.38%	38.46%	51.83%	25.71%		41.27%
84	46.44%	3.55%	44.57%	56.57%	44.44%	38.46%	55.42%	31.43%		44.91%
83	55.91%	4.74%	49.03%	61.62%	50.96%	46.15%	59.06%	38.10%		50.23%
82	58.59%	6.76%	54.03%	62.61%	54.78%	46.15%	63.80%	48.81%		54.44%
81	64.06%	4.74%	57.66%	66.67%	59.00%	53.85%	66.67%	51.43%		58.92%
80	69.53%	4.74%	61.28%	70.71%	63.80%	61.54%	74.70%	51.43%		62.84%
79	73.44%	9.29%	62.95%	71.72%	67.41%	61.54%	75.90%	54.24%		66.36%
78	77.34%	8.29%	65.74%	75.76%	71.40%	61.54%	77.11%	57.44%		69.72%
77	78.69%	11.85%	67.69%	78.79%	75.81%	70.92%	84.34%	59.05%		71.21%
76	81.25%	11.85%	71.03%	79.80%	79.80%	81.62%	84.34%	62.86%		74.04%
75	83.81%	13.05%	74.37%	79.80%	79.80%	81.62%	85.54%	64.76%		76.28%
74	85.84%	13.05%	80.84%	79.80%	80.84%	81.62%	86.76%	69.51%		78.34%
73	86.72%	14.22%	79.27%	81.82%	83.14%	81.62%	87.98%	71.43%		80.19%
72	87.50%	14.22%	81.06%	83.84%	84.29%	81.62%	91.57%	73.98%		82.29%
71	88.25%	15.40%	83.03%	85.86%	85.44%	81.62%	93.07%	76.29%		84.63%
70	89.06%	15.40%	85.24%	85.86%	87.36%	81.62%	92.77%	78.10%		85.19%
470	90.84%	84.80%	14.76%	14.34%	12.64%	15.38%	7.23%	21.90%		16.47%

How to interpret this table

The percentage of proposals with a given score or higher is shown, per ranking list. Green shows the funding range (main-list).

For example:

- in the CHE ranking, 14.84% of all proposals submitted in the ranking list (total 128) scored 93 or higher. The funding cut-off score is 93.2.
- in the ENG ranking, 14.76% of all proposals submitted in the ranking list (total 359) scored 94 or higher. The funding cut-off score is 94.2.
- in the SOC ranking, 21.90% of the proposals scored less than 70.

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cut off score for funding	93.2	84.4	84.2	95.2	92.8	100	92.8	88.8	
Score equal to or above	CHE	ECO	ENG	ENV	LIF	MAT	PHY	SOC	Grand total
100	0.00%	0.00%	0.28%	1.01%	0.77%	7.69%	0.00%	0.00%	0.47%
99	0.00%	0.00%	1.11%	1.01%	1.93%	7.69%	1.20%	0.00%	1.03%
98	2.34%	0.00%	2.51%	2.02%	3.45%	7.69%	4.82%	0.95%	2.71%
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91	22.66%	1.18%	22.84%	30.30%	20.89%	15.38%	22.89%	7.62%	21.01%
90	27.34%	1.18%	25.91%	35.35%	22.99%	23.08%	26.51%	11.43%	24.37%
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80	69.53%	4.74%	61.28%	70.71%	63.80%	61.54%	74.70%	51.43%	62.84%
79	73.44%	9.29%	62.95%	71.72%	67.41%	61.54%	75.90%	54.24%	66.36%
78	77.34%	8.29%	65.74%	75.76%	71.40%	61.54%	77.11%	57.44%	69.72%
77	78.69%	11.85%	67.69%	78.79%	75.81%	70.92%	84.34%	59.05%	71.21%
76	81.25%	11.85%	71.03%	79.80%	79.80%	81.62%	84.34%	62.86%	74.04%
75	83.81%	13.05%	74.37%	79.80%	79.80%	81.62%	85.54%	64.76%	76.28%
74	85.84%	13.05%	80.84%	79.80%	80.84%	81.62%	86.76%	69.51%	78.34%
73	86.72%	14.22%	79.27%	81.82%	83.14%	81.62%	87.98%	71.43%	80.19%
72	87.50%	14.22%	81.06%	83.84%	84.29%	81.62%	91.57%	73.98%	82.29%
71	88.25%	15.40%	83.03%	85.86%	85.44%	81.62%	93.07%	76.29%	84.63%
70	89.06%	15.40%	85.24%	85.86%	87.36%	81.62%	92.77%	78.10%	85.19%
470	90.84%	84.80%	14.76%	14.34%	12.64%	15.38%	7.23%	21.90%	16.47%

Funding & tenders (europa.eu)

Nokia R&I Cooperative Programs & Ecosystems (9/9)

Nokia R&I Cooperation – Marie Curie / MSCA Evaluation & Scores (2/2)

Panel	Type of Action	Evaluated	Retained	Success Rate
CHE	HORIZON-TMA-MSCA-DN	102	13	12,75 %
ECO	HORIZON-TMA-MSCA-DN	17	0	0,00 %
ENG	HORIZON-TMA-MSCA-DN	287	34	11,85 %
ENV	HORIZON-TMA-MSCA-DN	89	14	15,73 %
LIF	HORIZON-TMA-MSCA-DN	233	30	12,88 %
MAT	HORIZON-TMA-MSCA-DN	8	1	12,50 %
PHY	HORIZON-TMA-MSCA-DN	72	10	13,89 %
SOC	HORIZON-TMA-MSCA-DN	88	14	15,91 %
CHE	HORIZON-TMA-MSCA-DN-ID	11	1	9,09 %
ECO	HORIZON-TMA-MSCA-DN-ID	6	2	33,33 %
ENG	HORIZON-TMA-MSCA-DN-ID	56	13	23,21 %
ENV	HORIZON-TMA-MSCA-DN-ID	6	0	0,00 %
LIF	HORIZON-TMA-MSCA-DN-ID	11	2	18,18 %
MAT	HORIZON-TMA-MSCA-DN-ID	2	0	0,00 %
PHY	HORIZON-TMA-MSCA-DN-ID	1	0	0,00 %
SOC	HORIZON-TMA-MSCA-DN-ID	5	0	0,00 %

Panel	Cut-off score
CHE	93,2
ECO	84,4
ENG	94,2
ENV	95,2
LIF	92,8
MAT	100
PHY	92,8
SOC	88,8

2021 Proposals Experience (highlights)

- Resubmission: 78.00% -> 91.40%
- Resubmission: 92.40% -> 93.80%
- Resubmission: 82.20% -> 67.40%

NOKIA