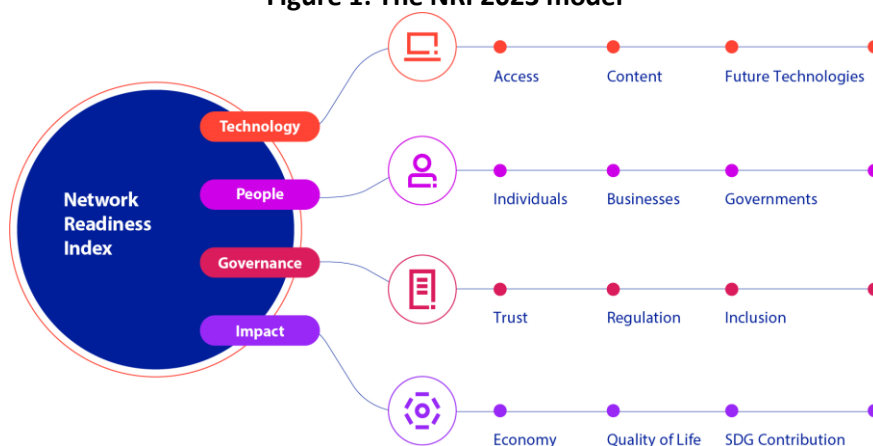


## Poland

*The Network Readiness Index (NRI) is one of the leading global indices on the application and impact of information and communication technology (ICT) in economies around the world. In its latest version of 2023 the NRI Report maps the network-based readiness landscape of 134 economies based on their performances in four different pillars: Technology, People, Governance, and Impact. Each of these pillars is itself comprised of three sub-pillars (see Figure 1) that have been populated by a total of 58 variables.*

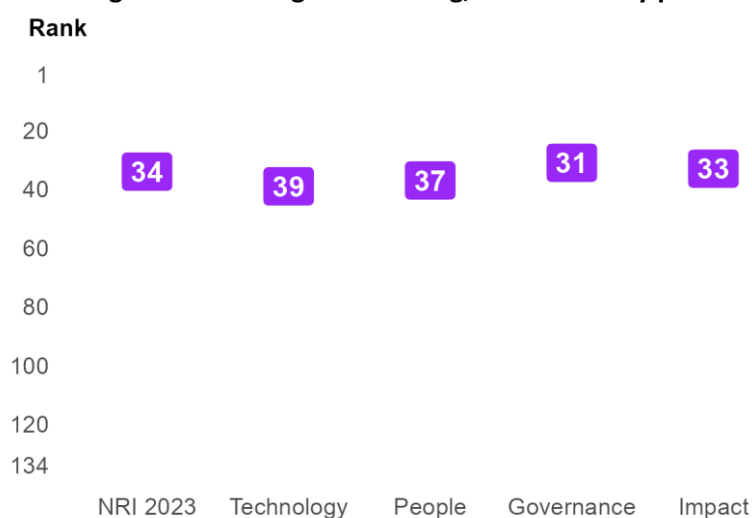
Figure 1: The NRI 2023 model



### Global NRI position of Poland

Poland ranks 34th out of the 134 economies included in the NRI 2023 (Figure 2). Its main strength relates to Governance. The greatest scope for improvement, meanwhile, concerns Technology.

Figure 2: Poland global ranking, overall and by pillar



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## Performance at sub-pillar level

When it comes to sub-pillars, the strongest showings of Poland relate to Access, Trust and Quality of Life, among others (Table 1). More could be done, though, to improve the economy's performances in the Regulation, Governments and Future Technologies sub-pillars.

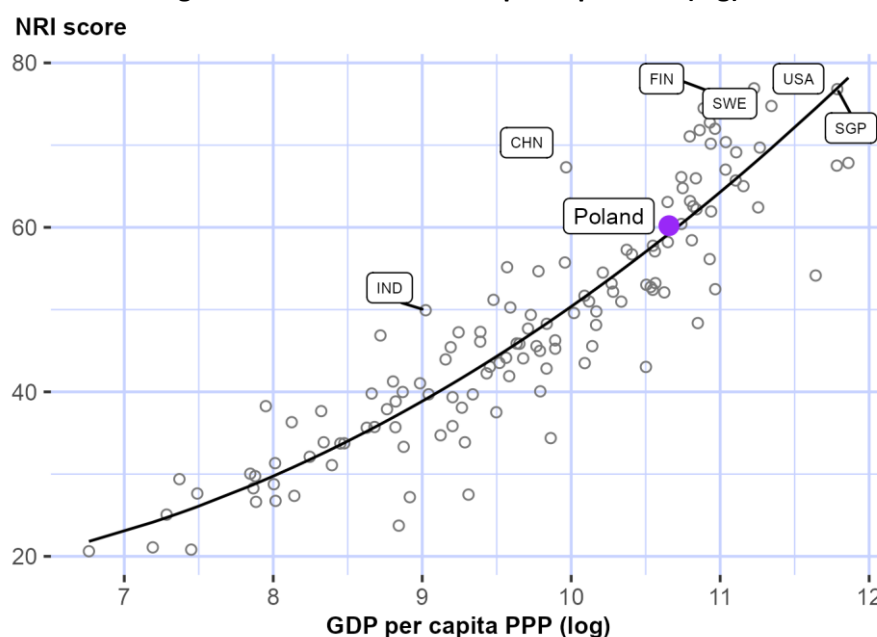
**Table 1: Poland rankings by sub-pillar**

Sub-pillar	Rank	Sub-pillar	Rank
Access	11	Content	37
Trust	16	Inclusion	41
Quality of Life	27	Economy	45
Businesses	29	Regulation	49
SDG Contribution	32	Governments	51
Individuals	35	Future Technologies	71

## NRI score and income

Figure 3 shows the position of Poland in terms of both NRI score and GDP per capita (PPP). The trend line shows the expected NRI score given an economy's income level. As can be seen, Poland is slightly above the trend line, which suggests that its network readiness is more or less in line with what would be expected given its income level.

**Figure 3: NRI score and GDP per capita PPP (log)**



Note: USA = United States (rank: 1), SGP = Singapore (rank: 2), FIN = Finland (3), NLD = Netherlands (4), SWE = Sweden (5), CHN = China (20), IND = India (61). Poland belongs to the group of high-income countries, where the best performer is United States of America (USA). The top performer of its region-Europe-is Finland (FIN).

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## Performance against its income group and region

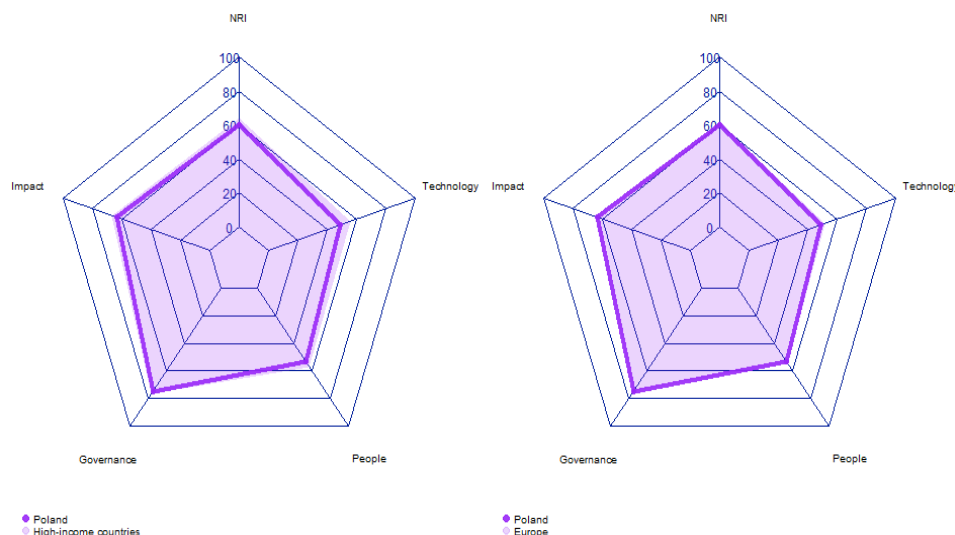
### High-income countries

Poland is ranked 33rd in the group of high-income countries (Figure 4, left panel). In terms of pillar performance, it has a score below the income group average in each of the four pillars. At the sub-pillar level, it outperforms high-income countries in four of the twelve sub-pillars: Access, Individuals, Businesses and Trust.

### Europe

Poland is ranked 24th within Europe (Figure 4, right panel). It has a score above the regional average in one of the four pillars: Governance. With regard to sub-pillars, it outperforms the average in Europe in six of the twelve sub-pillars: Access, Individuals, Businesses, Trust, Quality of Life and SDG Contribution.

**Figure 4: Performance of Poland against its income group and region, overall and by pillar**



**Table 2: Poland scores vs. averages of its income group and region, overall and by pillar**

Dimension	Poland	High-income countries	Europe
NRI	60.20	64.07	61.25
Technology	48.95	55.76	51.90
People	53.19	56.99	54.16
Governance	75.16	76.81	74.33
Impact	63.50	66.73	64.61

# Network Readiness Index 2023



## Strongest and weakest indicators

The indicators where Poland performs particularly well include 1.1.4 Population covered by at least a 3G mobile network, 1.1.6 Internet access in schools, and 3.2.4 E-commerce legislation (Table 3). By contrast, the economy's weakest indicators include 1.3.2 Investment in emerging technologies, 3.2.3 Regulation of emerging technologies, and 4.2.2 Freedom to make life choices.

**Table 3: Highlight of Strengths and Opportunities for Poland**

Strongest indicators	Rank	Weakest indicators	Rank
1.1.4 Population covered by at least a 3G mobile network	1	2.3.3 Government promotion of investment in emerging technologies	65
1.1.6 Internet access in schools	1	4.2.2 Freedom to make life choices	71
3.2.4 E-commerce legislation	1	1.3.2 Investment in emerging technologies	74
2.1.5 Adult literacy rate	6	3.2.3 Regulation of emerging technologies	74
4.3.2 SDG 4: Quality Education	9		
1.1.2 Handset prices	10		
3.1.3 Online access to financial account	15		
4.2.3 Income inequality	15		
2.1.1 Mobile broadband internet traffic within the country	17		
3.1.4 Internet shopping	18		
1.2.4 AI scientific publications	21		
4.1.4 Domestic market size	21		

Note: For the full list of strengths and weaknesses, see At-A-Glance table.

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## NRI 2023 At-A-Glance: Poland

Network Readiness Index

Rank: 34 (out of 134)

Score: 60.20

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	39	48.95	C. Governance pillar	31	75.16
1st sub-pillar: Access	11	79.18	1st sub-pillar: Trust	16	80.76
2nd sub-pillar: Content	37	36.33	2nd sub-pillar: Regulation	49	71.96
3rd sub-pillar: Future Technologies	71	31.35	3rd sub-pillar: Inclusion	41	72.76
B. People pillar	37	53.19	D. Impact pillar	33	63.50
1st sub-pillar: Individuals	35	53.95	1st sub-pillar: Economy	45	34.62
2nd sub-pillar: Businesses	29	61.26	2nd sub-pillar: Quality of Life	27	79.70
3rd sub-pillar: Governments	51	44.37	3rd sub-pillar: SDG Contribution	32	76.17

### The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score	
A. Technology pillar	39	48.95	C. Governance pillar	31	75.16	
1st sub-pillar: Access	11	79.18	1st sub-pillar: Trust	16	80.76	
1.1.1 Mobile tariffs	31	78.42	3.1.1 Secure Internet servers	26	80.86	
1.1.2 Handset prices	10	82.53	• 3.1.2 Cybersecurity	37	93.75	
1.1.3 FTTH/building Internet subscriptions	29	43.45	3.1.3 Online access to financial account	15	70.34	•
1.1.4 Population covered by at least a 3G mobile network	1	100.00	• 3.1.4 Internet shopping	18	78.11	•
1.1.5 International Internet bandwidth	68	70.66	2nd sub-pillar: Regulation	49	71.96	
1.1.6 Internet access in schools	1	100.00	• 3.2.1 Regulatory quality	36	68.58	
2nd sub-pillar: Content	37	36.33	3.2.2 ICT regulatory environment	42	87.65	
1.2.1 GitHub commits	34	30.85	3.2.3 Regulation of emerging technologies	74	41.04	○
1.2.2 Internet domain registrations	36	18.28	3.2.4 E-commerce legislation	1	100.00	•
1.2.3 Mobile apps development	36	73.14	3.2.5 Privacy protection by law content	70	62.56	
1.2.4 AI scientific publications	21	23.08	• 3rd sub-pillar: Inclusion	41	72.76	
3rd sub-pillar: Future Technologies	71	31.35	3.3.1 E-Participation	51	63.95	
1.3.1 Adoption of emerging technologies	61	48.92	3.3.2 Socioeconomic gap in use of digital payments	35	90.29	
1.3.2 Investment in emerging technologies	74	37.25	○ 3.3.3 Availability of local online content	52	67.07	



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Indicator	Rank	Score	Indicator	Rank	Score
1.3.3 Robot density	28	9.61	3.3.4 Gender gap in Internet use	52	68.72
1.3.4 Computer software spending	40	29.62	3.3.5 Rural gap in use of digital payments	35	73.79
<b>B. People pillar</b>			<b>D. Impact pillar</b>		
<i>1st sub-pillar: Individuals</i>	35	53.95	<i>1st sub-pillar: Economy</i>	45	34.62
2.1.1 Mobile broadband internet traffic within the country	17	38.20	4.1.1 High-tech and medium-high-tech manufacturing	45	33.49
2.1.2 ICT skills in the education system	54	54.71	4.1.2 High-tech exports	52	16.89
2.1.3 Use of virtual social networks	69	62.17	4.1.3 PCT patent applications	39	9.03
2.1.4 Tertiary enrollment	35	45.73	4.1.4 Domestic market size	21	71.52
2.1.5 Adult literacy rate	6	99.73	4.1.5 Prevalence of gig economy	47	52.62
2.1.6 AI talent concentration	18	23.18	4.1.6 ICT services exports	44	24.16
<i>2nd sub-pillar: Businesses</i>	29	61.26	<i>2nd sub-pillar: Quality of Life</i>	27	79.70
2.2.1 Firms with website	31	71.52	4.2.1 Happiness	25	80.23
2.2.2 GERD financed by business enterprise	26	62.64	4.2.2 Freedom to make life choices	71	70.81
2.2.3 Knowledge intensive employment	27	63.15	4.2.3 Income inequality	15	85.93
2.2.4 Annual investment in telecommunication services	23	85.77	4.2.4 Healthy life expectancy at birth	38	81.81
2.2.5 GERD performed by business enterprise	26	23.20	<i>3rd sub-pillar: SDG Contribution</i>	32	76.17
<i>3rd sub-pillar: Governments</i>	51	44.37	4.3.1 SDG 3: Good Health and Well-Being	52	74.86
2.3.1 Government online services	43	77.11	4.3.2 SDG 4: Quality Education	9	72.98
2.3.2 Publication and use of open data	45	36.76	4.3.3 SDG 5: Women's economic opportunity	29	91.15
2.3.3 Government promotion of investment in emerging tech	65	37.92	4.3.4 SDG 7: Affordable and Clean Energy	61	73.48
2.3.4 R&D expenditure by governments and higher education	29	25.70	4.3.5 SDG 11: Sustainable Cities and Communities	60	68.39

NOTE: ● a strength and ○ a weakness.



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