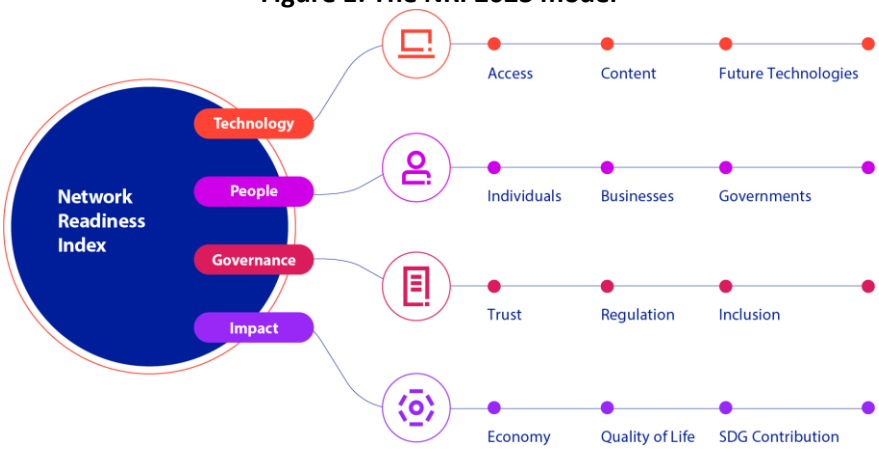
Ireland

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.

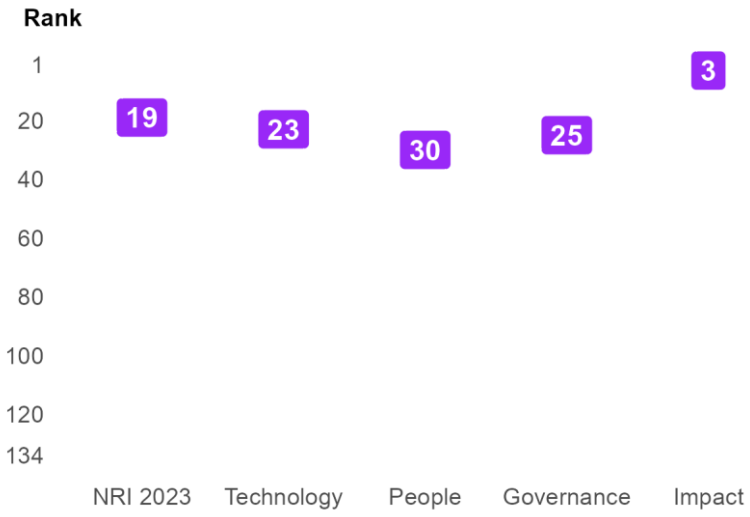
Figure 1: The NRI 2023 model



Global NRI position of Ireland

Ireland ranks 19th out of the 134 economies included in the NRI 2023 (Figure 2). Its main strength relates to Impact. The greatest scope for improvement, meanwhile, concerns People.

Figure 2: Ireland global ranking, overall and by pillar



Performance at sub-pillar level

When it comes to sub-pillars, the strongest showings of Ireland relate to SDG Contribution, Economy and Quality of Life, among others (Table 1). More could be done, though, to improve the economy's performances in the Regulation, Governments and Individuals sub-pillars.

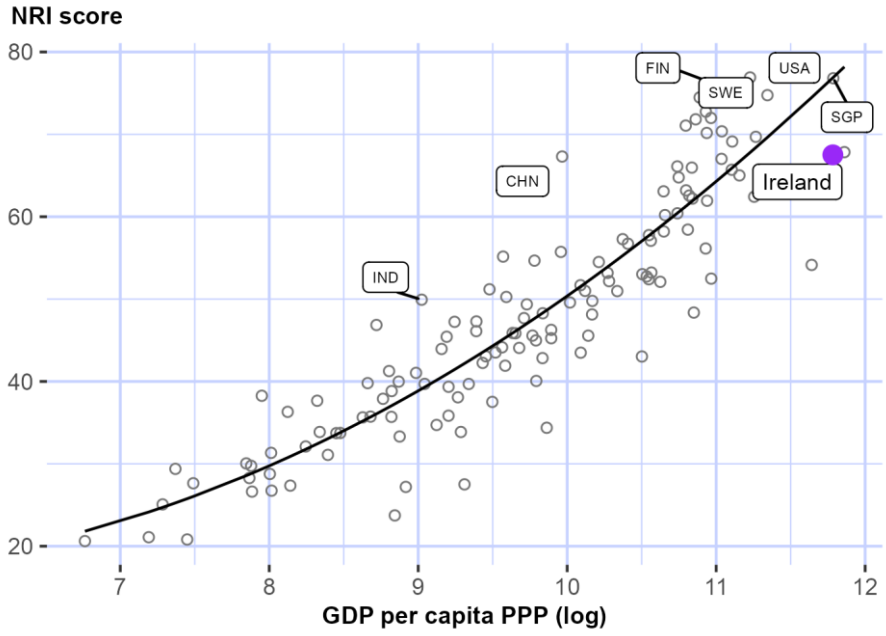
Table 1: Ireland rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
SDG Contribution	1	Access	27
Economy	5	Content	27
Quality of Life	12	Inclusion	27
Businesses	18	Regulation	29
Trust	19	Governments	33
Future Technologies	22	Individuals	58

NRI score and income

Figure 3 shows the position of Ireland 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, Ireland is well below the trend line, which suggests that it is underachieving and that one would expect it could raise its network readiness in view of 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). Ireland 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).

Performance against its income group and region

High-income countries

Ireland is ranked 19th in the group of high-income countries (Figure 4, left panel). In terms of pillar performance, it has a score higher than the income group average in three of the four pillars: NRI, Technology, Governance and Impact. At the sub-pillar level, it outperforms high-income countries in eight of the twelve sub-pillars: Access, Future Technologies, Businesses, Trust, Inclusion, Economy, Quality of Life and SDG Contribution.

Europe

Ireland is ranked 13th within Europe (Figure 4, right panel). It outperforms its region in each of the four pillars. With regard to sub-pillars, it outperforms the average in Europe in ten of the twelve sub-pillars: Access, Content, Future Technologies, Businesses, Trust, Regulation, Inclusion, Economy, Quality of Life and SDG Contribution.

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

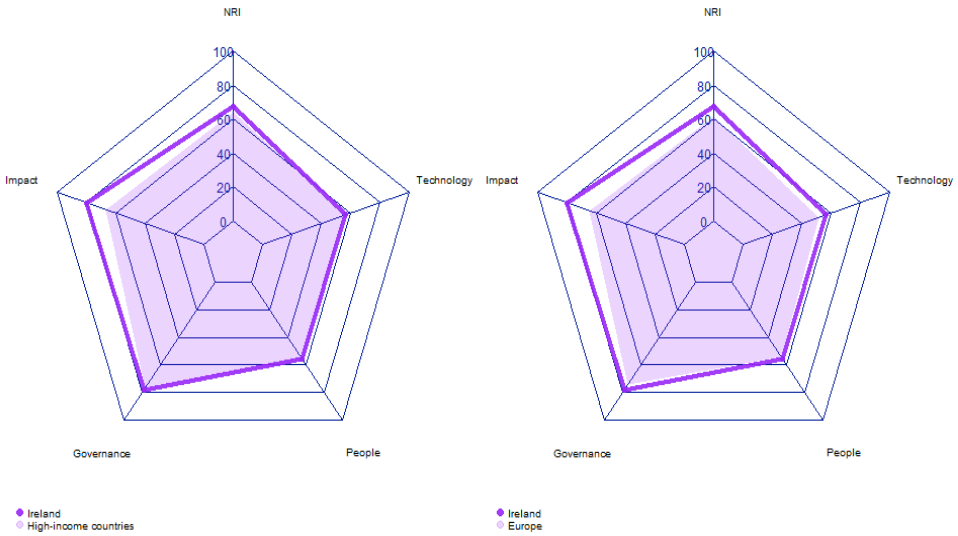


Table 2: Ireland scores vs. averages of its income group and region, overall and by pillar

Dimension	Ireland	High-income countries	Europe
NRI	67.51	64.07	61.25
Technology	56.58	55.76	51.90
People	55.58	56.99	54.16
Governance	78.29	76.81	74.33
Impact	79.58	66.73	64.61

Strongest and weakest indicators

The indicators where Ireland performs particularly well include 1.1.1 Mobile tariffs, 3.2.4 E-commerce legislation, and 4.1.6 ICT services exports (Table 3). By contrast, the economy's weakest indicators include 1.1.3 FTTH/building Internet subscriptions, 3.2.5 Privacy protection by law content, and 1.1.4 Population covered by at least a 3G mobile network.

Table 3: Highlight of Strengths and Opportunities for Ireland

Strongest indicators	Rank	Weakest indicators	Rank
1.1.1 Mobile tariffs	1	1.1.5 International Internet bandwidth	91
3.2.4 E-commerce legislation	1	1.1.4 Population covered by at least a 3G mobile network	93
4.1.6 ICT services exports	1	3.2.5 Privacy protection by law content	97
4.3.3 SDG 5: Women's economic opportunity	1	1.1.3 FTTH/building Internet subscriptions	99
1.1.2 Handset prices	2		
3.2.2 ICT regulatory environment	3		
4.3.5 SDG 11: Sustainable Cities and Communities	4		
4.3.4 SDG 7: Affordable and Clean Energy	5		
3.1.1 Secure Internet servers	6		
4.1.1 High-tech and medium-high-tech manufacturing	6		
2.1.2 ICT skills in the education system	7		
3.1.4 Internet shopping	12		

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

NRI 2023 At-A-Glance: Ireland

Network Readiness Index Rank: 19 (out of 134) Score: 67.51

Pillar/sub-pillar	Rank	Score
A. Technology pillar	23	56.58
1st sub-pillar: Access	27	75.36
2nd sub-pillar: Content	27	42.93
3rd sub-pillar: Future Technologies	22	51.46
B. People pillar	30	55.58
1st sub-pillar: Individuals	58	49.10
2nd sub-pillar: Businesses	18	67.45
3rd sub-pillar: Governments	33	50.20

Pillar/sub-pillar	Rank	Score
C. Governance pillar	25	78.29
1st sub-pillar: Trust	19	78.03
2nd sub-pillar: Regulation	29	79.21
3rd sub-pillar: Inclusion	27	77.64
D. Impact pillar	3	79.58
1st sub-pillar: Economy	5	63.15
2nd sub-pillar: Quality of Life	12	86.36
3rd sub-pillar: SDG Contribution	1	89.21

The Network Readiness Index in detail

Indicator	Rank	Score	
A. Technology pillar	23	56.58	
1st sub-pillar: Access	27	75.36	
1.1.1 Mobile tariffs	1	100.00	●
1.1.2 Handset prices	2	97.58	●
1.1.3 FTTH/building Internet subscriptions	99	14.18	○
1.1.4 Population covered by at least a 3G mobile network	93	98.31	○
1.1.5 International Internet bandwidth	91	66.74	○
1.1.6 Internet access in schools	NA	NA	
2nd sub-pillar: Content	27	42.93	
1.2.1 GitHub commits	21	53.14	
1.2.2 Internet domain registrations	21	40.90	
1.2.3 Mobile apps development	29	74.37	
1.2.4 AI scientific publications	76	3.29	
3rd sub-pillar: Future Technologies	22	51.46	
1.3.1 Adoption of emerging technologies	26	71.34	
1.3.2 Investment in emerging technologies	18	70.50	
1.3.3 Robot density	31	8.68	

Indicator	Rank	Score	
C. Governance pillar	25	78.29	
1st sub-pillar: Trust	19	78.03	
3.1.1 Secure Internet servers	6	93.04	●
3.1.2 Cybersecurity	54	85.61	
3.1.3 Online access to financial account	32	50.93	
3.1.4 Internet shopping	12	82.53	●
2nd sub-pillar: Regulation	29	79.21	
3.2.1 Regulatory quality	14	84.89	
3.2.2 ICT regulatory environment	3	97.65	●
3.2.3 Regulation of emerging technologies	35	63.38	
3.2.4 E-commerce legislation	1	100.00	●
3.2.5 Privacy protection by law content	97	50.16	○
3rd sub-pillar: Inclusion	27	77.64	
3.3.1 E-Participation	47	67.44	
3.3.2 Socioeconomic gap in use of digital payments	25	93.94	
3.3.3 Availability of local online content	38	77.16	
3.3.4 Gender gap in Internet use	12	75.18	

Indicator	Rank	Score	
1.3.4 Computer software spending	17	55.34	
B. People pillar	30	55.58	
1st sub-pillar: Individuals	58	49.10	
2.1.1 Mobile broadband internet traffic within the country	78	6.67	
2.1.2 ICT skills in the education system	7	84.01	●
2.1.3 Use of virtual social networks	33	75.37	
2.1.4 Tertiary enrollment	27	48.57	
2.1.5 Adult literacy rate	NA	NA	
2.1.6 AI talent concentration	12	30.90	
2nd sub-pillar: Businesses	18	67.45	
2.2.1 Firms with website	16	84.18	
2.2.2 GERD financed by business enterprise	10	77.66	
2.2.3 Knowledge intensive employment	16	72.41	
2.2.4 Annual investment in telecommunication services	46	81.46	
2.2.5 GERD performed by business enterprise	29	21.56	
3rd sub-pillar: Governments	33	50.20	
2.3.1 Government online services	45	75.64	
2.3.2 Publication and use of open data	30	48.53	
2.3.3 Government promotion of investment in emerging tech	27	57.76	
2.3.4 R&D expenditure by governments and higher education	38	18.86	

Indicator	Rank	Score	
3.3.5 Rural gap in use of digital payments	31	74.48	
D. Impact pillar	3	79.58	
1st sub-pillar: Economy	5	63.15	
4.1.1 High-tech and medium-high-tech manufacturing	6	73.90	●
4.1.2 High-tech exports	14	46.06	
4.1.3 PCT patent applications	22	34.33	
4.1.4 Domestic market size	39	63.00	
4.1.5 Prevalence of gig economy	31	61.63	
4.1.6 ICT services exports	1	100.00	●
2nd sub-pillar: Quality of Life	12	86.36	
4.2.1 Happiness	17	84.02	
4.2.2 Freedom to make life choices	28	86.62	
4.2.3 Income inequality	18	84.92	
4.2.4 Healthy life expectancy at birth	17	89.89	
3rd sub-pillar: SDG Contribution	1	89.21	
4.3.1 SDG 3: Good Health and Well-Being	24	89.29	
4.3.2 SDG 4: Quality Education	10	69.61	
4.3.3 SDG 5: Women's economic opportunity	1	100.00	●
4.3.4 SDG 7: Affordable and Clean Energy	5	89.81	●
4.3.5 SDG 11: Sustainable Cities and Communities	4	97.34	●

NOTE: ● a strength and ○ a weakness.

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