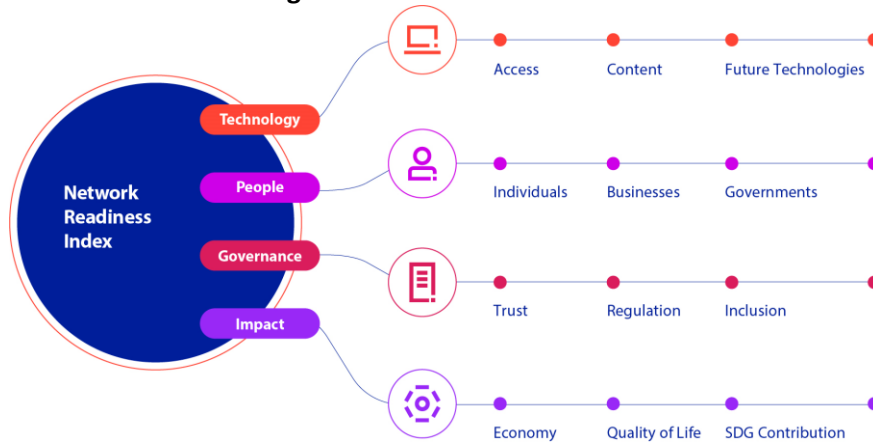# Network Readiness Index 2023

Belgium

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.
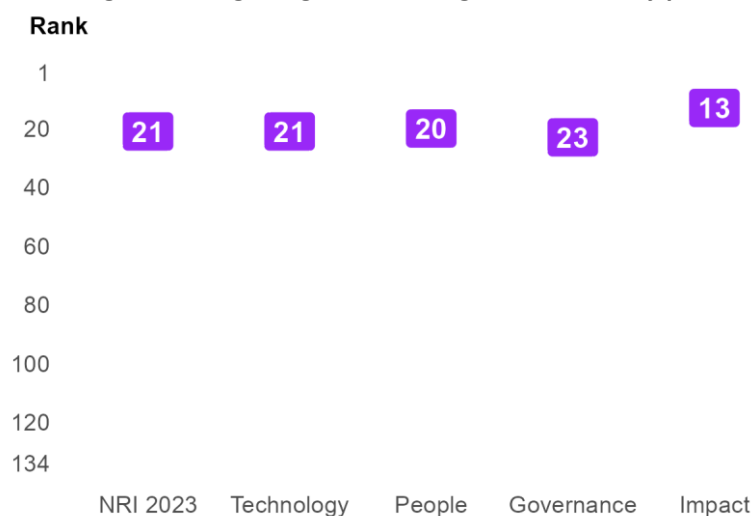
Figure 1: The NRI 2023 model

Global NRI position of Belgium

Belgium ranks 21st 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 Governance.

Figure 2: Belgium global ranking, overall and by pillar

Performance at sub-pillar level

When it comes to sub-pillars, the strongest showings of Belgium relate to Businesses, Quality of Life and Trust, among others (Table 1). More could be done, though, to improve the economy's performances in the Access, Inclusion and Individuals sub-pillars.
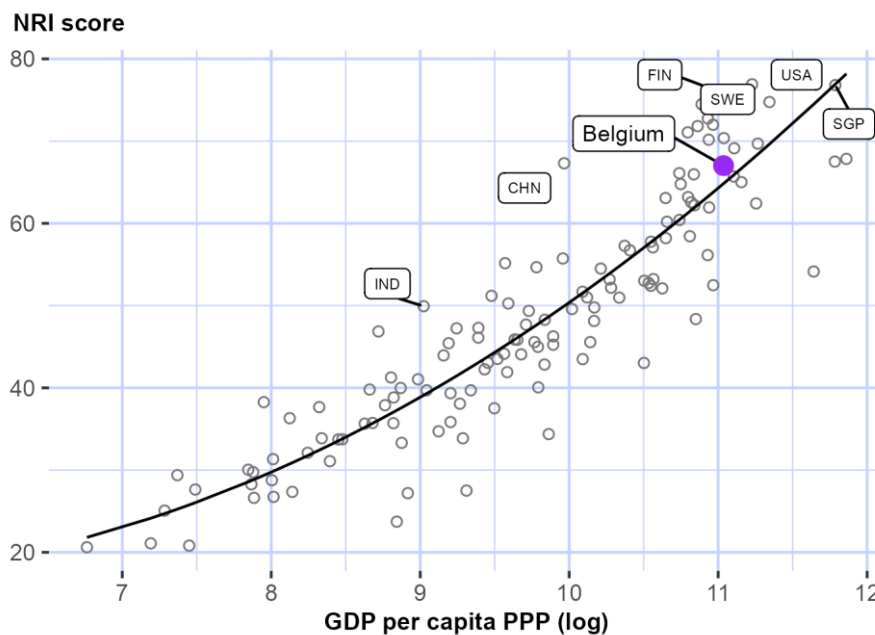
Table 1: Belgium rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Businesses	4	Economy	21
Quality of Life	8	Content	23
Trust	14	Regulation	24
SDG Contribution	17	Access	36
Future Technologies	21	Inclusion	39
Governments	21	Individuals	90

NRI score and income

Figure 3 shows the position of Belgium 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, Belgium is well above the trend line, which suggests that it has a greater network readiness than 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). Belgium 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
Belgium is ranked 20th 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 each of the four pillars. At the sub-pillar level, it outperforms high-income countries in nine of the twelve sub-pillars: Content, Future Technologies, Businesses, Governments, Trust, Regulation, Economy, Quality of Life and SDG Contribution.

Europe
Belgium is ranked 14th 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 eleven of the twelve sub-pillars: Access, Content, Future Technologies, Businesses, Governments, Trust, Regulation, Inclusion, Economy, Quality of Life and SDG Contribution.

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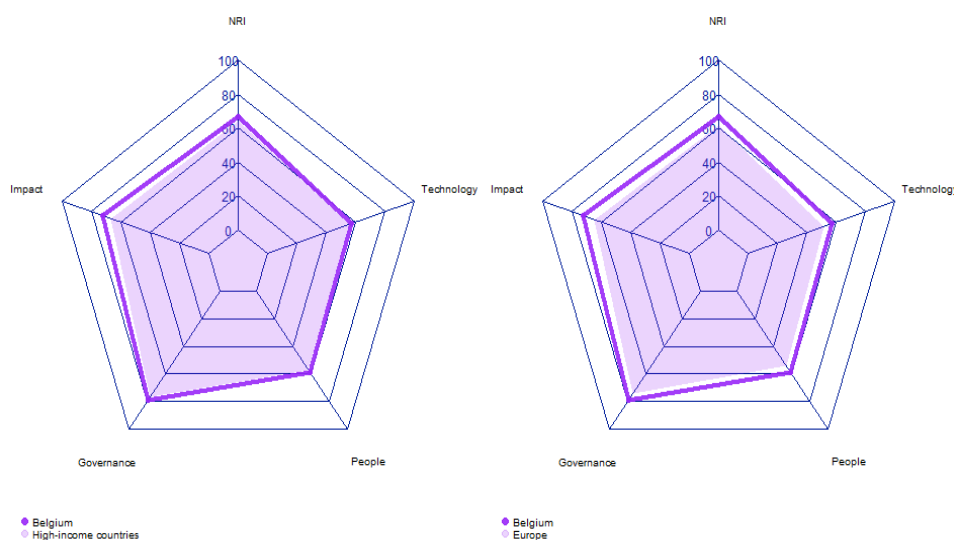

Table 2: Belgium scores vs. averages of its income group and region, overall and by pillar

Dimension	Belgium	High-income countries	Europe
NRI	67.02	64.07	61.25
Technology	57.11	55.76	51.90
People	59.10	56.99	54.16
Governance	79.40	76.81	74.33
Impact	72.47	66.73	64.61

Strongest and weakest indicators

The indicators where Belgium performs particularly well include 1.1.4 Population covered by at least a 3G mobile network, 1.1.6 Internet access in schools, and 4.3.3 SDG 5: Women's economic opportunity (Table 3). By contrast, the economy's weakest indicators include 1.1.3 FTTH/building Internet subscriptions, 3.2.4 E-commerce legislation, and 3.3.1 E-Participation.

Table 3: Highlight of Strengths and Opportunities for Belgium

Strongest indicators	Rank	Weakest indicators	Rank
1.1.4 Population covered by at least a 3G mobile network	1	2.1.6 AI talent concentration	37
1.1.6 Internet access in schools	1	1.2.3 Mobile apps development	80
4.3.3 SDG 5: Women's economic opportunity	1	3.3.1 E-Participation	82
2.2.5 GERD performed by business enterprise	5	3.2.4 E-commerce legislation	87
4.2.3 Income inequality	5	1.1.3 FTTH/building Internet subscriptions	104
2.3.4 R&D expenditure by governments and higher education	6		
2.2.1 Firms with website	7		
2.2.2 GERD financed by business enterprise	8		
3.2.3 Regulation of emerging technologies	8		
1.3.4 Computer software spending	10		
3.3.5 Rural gap in use of digital payments	10		
2.2.3 Knowledge intensive employment	12		
3.1.3 Online access to financial account	13		

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

NRI 2023 At-A-Glance: Belgium

Network Readiness Index   Rank: 21 (out of 134)   Score: 67.02

Pillar/sub-pillar	Rank	Score
A. Technology pillar	21	57.11
1st sub-pillar: Access	36	72.75
2nd sub-pillar: Content	23	45.17
3rd sub-pillar: Future Technologies	21	53.41
B. People pillar	20	59.10
1st sub-pillar: Individuals	90	41.13
2nd sub-pillar: Businesses	4	78.33
3rd sub-pillar: Governments	21	57.84

Pillar/sub-pillar	Rank	Score
C. Governance pillar	23	79.40
1st sub-pillar: Trust	14	82.15
2nd sub-pillar: Regulation	24	81.79
3rd sub-pillar: Inclusion	39	74.27
D. Impact pillar	13	72.47
1st sub-pillar: Economy	21	45.60
2nd sub-pillar: Quality of Life	8	87.67
3rd sub-pillar: SDG Contribution	17	84.14

The Network Readiness Index in detail

Indicator	Rank	Score	
A. Technology pillar	21	57.11	
1st sub-pillar: Access	36	72.75	
1.1.1 Mobile tariffs	28	80.45	
1.1.2 Handset prices	32	69.58	
1.1.3 FTTH/building Internet subscriptions	104	12.03	○
1.1.4 Population covered by at least a 3G mobile network	1	100.00	●
1.1.5 International Internet bandwidth	49	74.45	
1.1.6 Internet access in schools	1	100.00	●
2nd sub-pillar: Content	23	45.17	
1.2.1 GitHub commits	17	57.73	
1.2.2 Internet domain registrations	17	47.69	
1.2.3 Mobile apps development	80	62.20	○
1.2.4 AI scientific publications	39	13.05	
3rd sub-pillar: Future Technologies	21	53.41	
1.3.1 Adoption of emerging technologies	NA	NA	
1.3.2 Investment in emerging technologies	21	67.50	

Indicator	Rank	Score	
C. Governance pillar	23	79.40	
1st sub-pillar: Trust	14	82.15	
3.1.1 Secure Internet servers	28	80.55	
3.1.2 Cybersecurity	26	96.18	
3.1.3 Online access to financial account	13	73.15	●
3.1.4 Internet shopping	16	78.72	
2nd sub-pillar: Regulation	24	81.79	
3.2.1 Regulatory quality	22	79.93	
3.2.2 ICT regulatory environment	26	92.94	
3.2.3 Regulation of emerging technologies	8	82.34	●
3.2.4 E-commerce legislation	87	66.67	○
3.2.5 Privacy protection by law content	16	87.07	
3rd sub-pillar: Inclusion	39	74.27	
3.3.1 E-Participation	82	44.18	○
3.3.2 Socioeconomic gap in use of digital payments	23	95.02	
3.3.3 Availability of local online content	25	84.62	

Indicator	Rank	Score		Indicator	Rank	Score	
1.3.3 Robot density	15	29.47		3.3.4 Gender gap in Internet use	45	69.45	
1.3.4 Computer software spending	10	63.25	●	3.3.5 Rural gap in use of digital payments	10	78.08	●
B. People pillar	20	59.10		**D. Impact pillar**	13	72.47	
1st sub-pillar: Individuals	90	41.13		*1st sub-pillar: Economy*	21	45.60	
2.1.1 Mobile broadband internet traffic within the country	62	10.21		4.1.1 High-tech and medium-high-tech manufacturing	18	57.40	
2.1.2 ICT skills in the education system	42	57.43		4.1.2 High-tech exports	26	33.02	
2.1.3 Use of virtual social networks	29	76.44		4.1.3 PCT patent applications	17	45.05	
2.1.4 Tertiary enrollment	22	52.76		4.1.4 Domestic market size	36	63.80	
2.1.5 Adult literacy rate	NA	NA		4.1.5 Prevalence of gig economy	NA	NA	
2.1.6 AI talent concentration	37	8.80	○	4.1.6 ICT services exports	32	28.74	
2nd sub-pillar: Businesses	4	78.33		*2nd sub-pillar: Quality of Life*	8	87.67	
2.2.1 Firms with website	7	89.09	●	4.2.1 Happiness	18	83.78	
2.2.2 GERD financed by business enterprise	8	79.53	●	4.2.2 Freedom to make life choices	30	85.77	
2.2.3 Knowledge intensive employment	12	75.62	●	4.2.3 Income inequality	5	92.96	●
2.2.4 Annual investment in telecommunication services	27	85.31		4.2.4 Healthy life expectancy at birth	26	88.15	
2.2.5 GERD performed by business enterprise	5	62.12	●	*3rd sub-pillar: SDG Contribution*	17	84.14	
3rd sub-pillar: Governments	21	57.84		4.3.1 SDG 3: Good Health and Well-Being	15	93.69	
2.3.1 Government online services	67	65.73		4.3.2 SDG 4: Quality Education	19	67.69	
2.3.2 Publication and use of open data	27	50.00		4.3.3 SDG 5: Women's economic opportunity	1	100.00	●
2.3.3 Government promotion of investment in emerging tech	NA	NA		4.3.4 SDG 7: Affordable and Clean Energy	64	72.54	
2.3.4 R&D expenditure by governments and higher education	6	57.79	●	4.3.5 SDG 11: Sustainable Cities and Communities	28	86.75	

NOTE: ● a strength and ○ a weakness.

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