

Germany



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1. Introduction

1.1 Background

As Europe's largest economy and second most populous nation (after Russia), Germany is a key member of the continent's economic, political, and defense organizations. European power struggles immersed Germany in two devastating world wars in the first half of the 20th century and left the country occupied by the victorious Allied powers of the US, UK, France, and the Soviet Union in 1945. With the advent of the Cold War, two German states were formed in 1949: the western Federal Republic of Germany (FRG) and the eastern German Democratic Republic (GDR). The democratic FRG embedded itself in key western economic and security organizations, the EC (now the EU) and NATO, while the communist GDR was on the front line of the Soviet-led Warsaw Pact. The decline of the USSR and the end of the Cold War allowed for German reunification in 1990. Since then, Germany has expended considerable funds to bring eastern productivity and wages up to western standards. In January 1999, Germany and 10 other EU countries introduced a common European exchange currency, the euro.

2. Geography

2.1 Location

Central Europe, bordering the Baltic Sea and the North Sea, between the Netherlands and Poland, south of Denmark

2.2 Geographic coordinates

51 00 N, 9 00 E

2.3 Map references

Europe

2.4 Area

total:

357,022 sq km

land:

348,672 sq km

water:

8,350 sq km

2.5 Area - comparative

three times the size of Pennsylvania; slightly smaller than Montana

2.6 Land boundaries

total:

3,714 km

border countries (9):

Austria 801 km, Belgium 133 km, Czech Republic 704 km, Denmark 140 km, France 418 km, Luxembourg 128 km, Netherlands 575 km, Poland 467 km, Switzerland 348 km

2.7 Coastline

2,389 km

2.8 Maritime claims

territorial sea:

12 nm

exclusive economic zone:

200 nm

continental shelf:

200-m depth or to the depth of exploitation

2.9 Climate

temperate and marine; cool, cloudy, wet winters and summers; occasional warm mountain (foehn) wind

2.10 Terrain

lowlands in north, uplands in center, Bavarian Alps in south

2.11 Elevation

mean elevation:

263 m

lowest point:

Neuendorf bei Wilster -3.5 m

highest point:

Zugspitze 2,963 m

2.12 Natural resources

coal, lignite, natural gas, iron ore, copper, nickel, uranium, potash, salt, construction materials, timber, arable land

2.13 Land use

agricultural land:

48% (2018 est.) arable land: 34.1% (2018 est.) permanent crops: 0.6% (2018 est.) permanent pasture: 13.3% (2018 est.)

forest:

31.8% (2018 est.)

other:

20.2% (2018 est.)

2.14 Irrigated land

6,500 sq km (2012)

2.15 Population distribution

most populous country in Europe; a fairly even distribution throughout most of the country, with urban areas attracting larger and denser populations, particularly in the far western part of the industrial state of North Rhine-Westphalia

2.16 Natural hazards

flooding

2.17 Geography - note

strategic location on North European Plain and along the entrance to the Baltic Sea; most major rivers in Germany - the Rhine, Weser, Oder, Elbe - flow northward; the Danube, which originates in the Black Forest, flows eastward

3. People And Society

3.1 Population

79,903,481 (July 2021 est.)

3.2 Nationality

noun:

German(s)

adjective:

German

3.3 Ethnic groups

German 87.2%, Turkish 1.8%, Polish 1%, Syrian 1%, other 9% (2017 est.) note: data represent population by nationality

3.4 Languages

German (official)

note:

Danish, Frisian, Sorbian, and Romani are official minority languages; Low German, Danish, North Frisian, Sater Frisian, Lower Sorbian, Upper Sorbian, and Romani are recognized as regional languages under the European Charter for Regional or Minority Languages

3.5 Religions

Roman Catholic 27.7%, Protestant 25.5%, Muslim 5.1%, Orthodox 1.9%, other Christian 1.1%, other .9%, none 37.8% (2018 est.)

3.6 Age structure

0-14 years:

12.89% (male 5,302,850/female 5,025,863)

15-24 years:

9.81% (male 4,012,412/female 3,854,471)

25-54 years:

38.58% (male 15,553,328/female 15,370,417)

55-64 years:

15.74% (male 6,297,886/female 6,316,024)

65 years and over:

22.99% (male 8,148,873/female 10,277,538) (2020 est.)

3.7 Dependency ratios

total dependency ratio:

55.4

youth dependency ratio:

21.7

elderly dependency ratio:

33.7

potential support ratio:

3 (2020 est.)

3.8 Median age

total:

47.8 years

male:

46.5 years

female:

49.1 years (2020 est.)

3.9 Population growth rate

-0.21% (2021 est.)

3.10 Birth rate

8.63 births/1,000 population (2021 est.)

3.11 Death rate

12.22 deaths/1,000 population (2021 est.)

3.12 Net migration rate

1.5 migrant(s)/1,000 population (2021 est.)

3.13 Population distribution

most populous country in Europe; a fairly even distribution throughout most of the country, with urban areas attracting larger and denser populations, particularly in the far western part of the industrial state of North Rhine-Westphalia

3.14 Urbanization

urban population:

77.5% of total population (2020)

rate of urbanization:

0.27% annual rate of change (2015-20 est.)

3.15 Major urban areas - population

3.567 million BERLIN (capital), 1.789 million Hamburg, 1.553 million Munich, 1.129 million Cologne, 785,000 Frankfurt (2021)

3.16 Sex ratio

at birth:

1.05 male(s)/female

0-14 years:

1.06 male(s)/female

15-24 years:

1.04 male(s)/female

25-54 years:

1.01 male(s)/female

55-64 years:

1 male(s)/female

65 years and over:

0.79 male(s)/female

total population:

0.96 male(s)/female (2020 est.)

3.17 Mother's mean age at first birth

29.6 years (2017 est.)

3.18 Maternal mortality rate

7 deaths/100,000 live births (2017 est.)

3.19 Infant mortality rate

total:

3.24 deaths/1,000 live births

male:

3.61 deaths/1,000 live births

female:

2.84 deaths/1,000 live births (2021 est.)

3.20 Life expectancy at birth

total population:

81.3 years

male:

78.93 years

female:

83.8 years (2021 est.)

3.21 Total fertility rate

1.48 children born/woman (2021 est.)

3.22 Contraceptive prevalence rate

80.3% (2011)

note:

percent of women aged 18-49

3.23 Drinking water source

improved:

urban: 100% of population rural: 100% of population total: 100% of population

unimproved:

urban: 0% of population rural: 0% of population total: 0% of population (2017 est.)

3.24 Current Health Expenditure

11.4% (2018)

3.25 Physicians density

4.25 physicians/1,000 population (2017)

3.26 Hospital bed density

8 beds/1,000 population (2017)

3.27 Sanitation facility access

improved:

urban: 100% of population rural: 100% of population total: 100% of population

unimproved:

urban: 0% of population rural: 0% of population total: 0% of population (2017 est.)

3.28 HIV/AIDS - adult prevalence rate

0.1% (2018 est.)

3.29 HIV/AIDS - people living with HIV/AIDS

87,000 (2018 est.)

3.30 HIV/AIDS - deaths

<500 (2018 est.)

3.31 Obesity - adult prevalence rate

22.3% (2016)

3.32 Children under the age of 5 years underweight

0.5% (2014/17)

3.33 Education expenditures

4.9% of GDP (2017)

3.34 School life expectancy (primary to tertiary education)

total:

17 years

male:

17 years

female:

17 years (2018)

3.35 Unemployment, youth ages 15-24

total:

6.2%

male:

7.1%

female:

5.1% (2018 est.)

4. Government

4.1 Country name

conventional long form:

Federal Republic of Germany

conventional short form:

Germany

local long form:

Bundesrepublik Deutschland

local short form:

Deutschland

former:

German Reich

etymology:

the Gauls (Celts) of Western Europe may have referred to the newly arriving Germanic tribes who settled in neighboring areas east of the Rhine during the first centuries B.C. as "Germani," a term the Romans adopted as "Germania"; the native designation "Deutsch" comes from the Old High German "diutisc" meaning "of the people"

4.2 Government type

federal parliamentary republic

4.3 Capital

name:

Berlin

geographic coordinates:

52 31 N, 13 24 E

time difference:

UTC+1 (6 hours ahead of Washington, DC, during Standard Time)

daylight saving time:

+1hr, begins last Sunday in March; ends last Sunday in October

etymology:

the origin of the name is unclear but may be related to the old West Slavic (Polabian) word "berl" or "birl," meaning "swamp"

4.4 Administrative divisions

16 states (Laender, singular - Land); Baden-Wuerttemberg, Bayern (Bavaria), Berlin, Brandenburg, Bremen, Hamburg, Hessen (Hesse), Mecklenburg-Vorpommern (Mecklenburg-Western Pomerania), Niedersachsen (Lower Saxony), Nordrhein-Westfalen (North Rhine-Westphalia), Rheinland-Pfalz (Rhineland-Palatinate), Saarland, Sachsen (Saxony), Sachsen-Anhalt (Saxony-Anhalt), Schleswig-Holstein, Thuringen (Thuringia); note - Bayern, Sachsen, and Thuringen refer to themselves as free states (Freistaaten, singular - Freistaat), while Bremen calls itself a Free Hanseatic City (Freie Hansestadt) and Hamburg considers itself a Free and Hanseatic City (Freie und Hansestadt)

4.5 Independence

18 January 1871 (establishment of the German Empire); divided into four zones of occupation (UK, US, USSR, and France) in 1945 following World War II; Federal Republic of Germany (FRG or West Germany) proclaimed on 23 May 1949 and included the former UK, US, and French zones; German Democratic Republic (GDR or East Germany) proclaimed on 7 October 1949 and included the former USSR zone; West Germany and East Germany unified on 3 October 1990; all four powers formally relinquished rights on 15 March 1991; notable earlier dates: 10 August 843 (Eastern Francia established from the division of the Carolingian Empire); 2 February 962 (crowning of OTTO I, recognized as the first Holy Roman Emperor)

4.6 National holiday

German Unity Day, 3 October (1990)

4.7 Constitution

history:

previous 1919 (Weimar Constitution); latest drafted 10-23 August 1948, approved 12 May 1949, promulgated 23 May 1949, entered into force 24 May 1949

amendments:

proposed by Parliament; passage and enactment into law require two-thirds majority vote by both the Bundesrat (upper house) and the Bundestag (lower house) of Parliament; articles including those on basic human rights and freedoms cannot be amended; amended many times, last in 2020; note - in early 2021, the German federal government introduced a bill to incorporate children's rights into the constitution

4.8 Legal system

civil law system

4.9 International law organization participation

accepts compulsory ICJ jurisdiction with reservations; accepts ICCt jurisdiction

4.10 Citizenship

citizenship by birth:

no

citizenship by descent only:

at least one parent must be a German citizen or a resident alien who has lived in Germany at least 8 years

dual citizenship recognized:

yes, but requires prior permission from government

residency requirement for naturalization:

8 years

4.11 Suffrage

18 years of age; universal; age 16 for some state and municipal elections

4.12 Executive branch

chief of state:

President Frank-Walter STEINMEIER (since 19 March 2017)

head of government:

Chancellor Angela MERKEL (since 22 November 2005)

cabinet:

Cabinet or Bundesminister (Federal Ministers) recommended by the chancellor, appointed by the president

elections/appointments:

president indirectly elected by a Federal Convention consisting of all members of the Federal Parliament (Bundestag) and an equivalent number of delegates indirectly elected by the state parliaments; president serves a 5-year term (eligible for a second term); election last held on 12 February 2017 (next to be held in February 2022); following the most recent Federal Parliament election, the party or coalition with the most representatives usually elects the chancellor (Angela MERKEL since 2005) and appointed by the president to serve a renewable 4-year term; Federal Parliament vote for chancellor last held on 14 March 2018 (next to be held after the Bundestag elections in 2021)

election results:

Frank-Walter STEINMEIER elected president; Federal Convention vote count - Frank-Walter STEINMEIER (SPD) 931, Christopher BUTTERWEGGE (The Left) 128, Albrecht GLASER (Alternative for Germany AfD) 42, Alexander HOLD (BVB/FW) 25, Engelbert SONNEBORN (Pirates) 10; Angela MERKEL (CDU) reelected chancellor; Federal Parliament vote - 364 to 315

4.13 Legislative branch

description:

bicameral Parliament or Parliament consists of: Federal Council or Bundesrat (69 seats; members appointed by each of the 16 state governments) Federal Diet or Bundestag (709 seats - total seats can vary each electoral term; approximately one-half of members directly elected in multi-seat constituencies by proportional representation vote and approximately one-half directly elected in single-seat constituencies by simple majority vote; members serve 4-year terms)

elections:

Bundesrat - none; composition is determined by the composition of the state-level governments; the composition of the Bundesrat has the potential to change any time one of the 16 states holds an election Bundestag - last held on 24 September 2017 (next to be held in 2021 at the latest); most postwar German governments have been coalitions

election results:

Bundesrat - composition - men 50, women 19, percent of women 27.5% Bundestag - percent of vote by party - CDU/CSU 33%, SPD 20.5%, AfD 12.6%, FDP 10.7%, The Left 9.2%, Alliance '90/Greens 8.9%, other 5%; seats by party - CDU/CSU 246, SPD 152, AfD 91, FDP 80, The Left 69, Alliance '90/Greens 67; composition - men 490, women 219, percent of women 30.5%; note - total Parliament percent of women 30.5%

4.14 Judicial branch

highest courts:

Federal Court of Justice (court consists of 127 judges, including the court president, vice presidents, presiding judges, other judges and organized into 25 Senates subdivided into 12 civil panels, 5 criminal panels, and 8 special panels); Federal Constitutional Court or Bundesverfassungsgericht (consists of 2 Senates each subdivided into 3 chambers, each with a chairman and 8 members)

judge selection and term of office:

Federal Court of Justice judges selected by the Judges Election Committee, which consists of the Secretaries of Justice from each of the 16 federated states and 16 members appointed by the Federal Parliament; judges appointed by the president; judges serve until mandatory retirement at age 65; Federal Constitutional Court judges - one-half elected by the House of Representatives and one-half by the Senate; judges appointed for 12-year terms with mandatory retirement at age 68

subordinate courts:

Federal Administrative Court; Federal Finance Court; Federal Labor Court; Federal Social Court; each of the 16 federated states or Land has its own constitutional court and a hierarchy of ordinary (civil, criminal, family) and specialized (administrative, finance, labor, social) courts; two English-speaking commercial courts opened in late 2020 in the state of Baden-Wuerttemberg - Stuttgart Commercial Court and Mannheim Commercial Court

4.15 Political parties and leaders

Alliance '90/Greens [Annalena BAERBOCK and Robert HABECK]Alternative for Germany or AfD [Alexander GAULAND and Joerg MEUTHEN]Christian Democratic Union or CDU [Armin LASCHET]Christian Social Union or CSU [Markus SOEDER]Free Democratic Party or FDP [Christian LINDNER]The Left or Die Linke [Katja KIPPING and Bernd RIEXINGER]Social Democratic Party or SPD [Saskia ESKEN and Norbert WALTER-BORJANS]

4.16 International organization participation

ADB (nonregional member), AfDB (nonregional member), Arctic Council (observer), Australia Group, BIS, BSEC (observer), CBSS, CD, CDB, CE, CERN, EAPC, EBRD, ECB, EIB, EITI (implementing country), EMU, ESA, EU, FAO, FATF, G-5, G-7, G-8, G-10, G-20, IADB, IAEA, IBRD, ICAO, ICC (national committees), ICtI, ICRM, IDA, IEA, IFAD, IFC, IFRCS, IGAD (partners), IHO, ILO, IMF, IMO, IMSO, Interpol, IOC, IOM, IPU, ISO, ITSO, ITU, ITUC (NGOs), MIGA, MINURSO, MINUSMA, NATO, NEA, NSG, OAS (observer), OECD, OPCW, OSCE, Pacific Alliance (observer), Paris Club, PCA, Schengen Convention, SELEC (observer), SICA (observer), UN, UNAMID, UNCTAD, UNESCO, UNHCR, UNIDO, UNIFIL, UNMISS, UNRWA, UNWTO, UPU, WCO, WHO, WIPO, WMO, WTO, ZC

4.17 Diplomatic representation in the US

chief of mission:

Ambassador Emily Margarethe HABER (since 22 June 2018)

chancery:

4645 Reservoir Road NW, Washington, DC 20007

telephone:

[1] (202) 298-4000

FAX:

[1] (202) 298-4249

consulate(s) general:

Atlanta, Boston, Chicago, Houston, Los Angeles, Miami, New York, San Francisco

4.18 Diplomatic representation from the US

chief of mission:

Ambassador Richard GRENNELL (since 8 May 2018)

telephone:

[49] (30) 8305-0

embassy:

Clayallee 170, 14191 Berlin

mailing address:

Clayallee 170, 14191 Berlin

FAX:

[49] (30) 8305-1215

consulate(s) general:

Dusseldorf, Frankfurt am Main, Hamburg, Leipzig, Munich

4.19 Flag description

three equal horizontal bands of black (top), red, and gold; these colors have played an important role in German history and can be traced back to the medieval banner of the Holy Roman Emperor - a black eagle with red claws and beak on a gold field

4.20 National symbol(s)

eagle; national colors: black, red, yellow

4.21 National anthem

name:

"Das Lied der Deutschen" (Song of the Germans)

lyrics/music:

August Heinrich HOFFMANN VON FALLERSLEBEN/Franz Joseph HAYDN

note: adopted 1922; the anthem, also known as "Deutschlandlied" (Song of Germany), was originally adopted for its connection to the March 1848 liberal revolution; following appropriation by the Nazis of the first verse, specifically the phrase, "Deutschland, Deutschland ueber alles" (Germany, Germany above all) to promote nationalism, it was banned after 1945; in 1952, its third verse was adopted by West Germany as its national anthem; in 1990, it became the national anthem for the reunited Germany

5. Economy

5.1 Economic overview

The German economy - the fifth largest economy in the world in PPP terms and Europe's largest - is a leading exporter of machinery, vehicles, chemicals, and household equipment. Germany benefits from a highly skilled labor force, but, like its Western European neighbors, faces significant demographic challenges to sustained long-term growth. Low fertility rates and a large increase in net immigration are increasing pressure on the country's social welfare system and necessitate structural reforms.

Reforms launched by the government of Chancellor Gerhard SCHROEDER (1998-2005), deemed necessary to address chronically high unemployment and low average growth, contributed to strong economic growth and falling unemployment. These advances, as well as a government subsidized, reduced working hour scheme, help explain the relatively modest increase in unemployment during the 2008-09 recession - the deepest since World War II. The German Government introduced a minimum wage in 2015 that increased to \$9.79 (8.84 euros) in January 2017.

Stimulus and stabilization efforts initiated in 2008 and 2009 and tax cuts introduced in Chancellor Angela MERKEL's second term increased Germany's total budget deficit

- including federal, state, and municipal - to 4.1% in 2010, but slower spending and higher tax revenues reduced the deficit to 0.8% in 2011 and in 2017 Germany reached a budget surplus of 0.7%. A constitutional amendment approved in 2009 limits the federal government to structural deficits of no more than 0.35% of GDP per annum as of 2016, though the target was already reached in 2012.

Following the March 2011 Fukushima nuclear disaster, Chancellor Angela MERKEL announced in May 2011 that eight of the country's 17 nuclear reactors would be shut down immediately and the remaining plants would close by 2022. Germany plans to replace nuclear power largely with renewable energy, which accounted for 29.5% of gross electricity consumption in 2016, up from 9% in 2000. Before the shutdown of the eight reactors, Germany relied on nuclear power for 23% of its electricity generating capacity and 46% of its base-load electricity production.

The German economy suffers from low levels of investment, and a government plan to invest 15 billion euros during 2016-18, largely in infrastructure, is intended to spur needed private investment. Domestic consumption, investment, and exports are likely to drive German GDP growth in 2018, and the country's budget and trade surpluses are likely to remain high.

5.2 Real GDP growth rate

0.59% (2019 est.)1.3% (2018 est.)2.91% (2017 est.)

5.3 Inflation rate (consumer prices)

1.4% (2019 est.)1.7% (2018 est.)1.5% (2017 est.)

5.4 Credit ratings

Fitch rating:

AAA (1994)

Moody's rating:

Aaa (1986)

StandardPoors rating:

AAA (1983)Credit ratings prior to 1989 refer to West Germany.

5.5 Real GDP (purchasing power parity)

\$4,482,448,000,000 (2019 est.)\$4,457,688,000,000 (2018 est.)\$4,401,873,000,000 (2017 est.)

note:

data are in 2010 dollars

5.6 GDP (official exchange rate)

\$3,860,923,000,000 (2019 est.)

5.7 Real GDP per capita

\$53,919 (2019 est.)\$53,768 (2018 est.)\$53,255 (2017 est.)

note:

data are in 2017 dollars

5.8 Gross national saving

28.5% of GDP (2019 est.)28.7% of GDP (2018 est.)28.4% of GDP (2017 est.)

5.9 GDP - composition, by sector of origin

agriculture:

0.7% (2017 est.)

industry:

30.7% (2017 est.)

services:

68.6% (2017 est.)

5.10 GDP - composition, by end use

household consumption:

53.1% (2017 est.)

government consumption:

19.5% (2017 est.)

investment in fixed capital:

20.4% (2017 est.)

investment in inventories:

-0.5% (2017 est.)

exports of goods and services:

47.3% (2017 est.)

imports of goods and services:

-39.7% (2017 est.)

5.11 Ease of Doing Business Index scores

79.7 (2020)

5.12 Agricultural products

milk, sugar beet, wheat, barley, potatoes, pork, maize, rye, rapeseed, triticale

5.13 Industries

among the world's largest and most technologically advanced producers of iron, steel, coal, cement, chemicals, machinery, vehicles, machine tools, electronics, automobiles, food and beverages, shipbuilding, textiles

5.14 Industrial production growth rate

3.3% (2017 est.)

5.15 Labor force

44.585 million (2020 est.)

5.16 Labor force - by occupation

agriculture:

1.4%

industry:

24.2%

services:

74.3% (2016)

5.17 Unemployment rate

4.98% (2019 est.)5.19% (2018 est.)

5.18 Population below poverty line

16.7% (2015 est.)

5.19 Gini Index coefficient - distribution of family income

31.9 (2016 est.)30 (1994)

5.20 Household income or consumption by percentage share

lowest 10%:

3.6%

highest 10%:

24% (2000)

5.21 Budget

revenues:

1.665 trillion (2017 est.)

expenditures:

1.619 trillion (2017 est.)

5.22 Taxes and other revenues

45% (of GDP) (2017 est.)

5.23 Budget surplus (+) or deficit (-)

1.3% (of GDP) (2017 est.)

5.24 Public debt

63.9% of GDP (2017 est.) 67.9% of GDP (2016 est.)

note: general government gross debt is defined in the Maastricht Treaty as consolidated general government gross debt at nominal value, outstanding at the end of the year in the following categories of government liabilities (as defined in ESA95): currency and deposits (AF.2), securities other than shares excluding financial derivatives (AF.3, excluding AF.34), and loans (AF.4); the general government sector comprises the sub-sectors of central government, state government, local government and social security funds; the series are presented as a percentage of GDP and in millions of euros; GDP used as a denominator is the gross domestic product at current market prices; data expressed in national currency are converted into euro using end-of-year exchange rates provided by the European Central Bank

5.25 Fiscal year

calendar year

5.26 Current account balance

\$280.238 billion (2019 est.) \$297.434 billion (2018 est.)

5.27 Exports

\$2,004,158,000,000 (2019 est.) \$1,984,745,000,000 (2018 est.) \$1,937,273,000,000 (2017 est.)

5.28 Exports - partners

United States 9%, France 8%, China 7%, Netherlands 6%, United Kingdom 6%, Italy 5%, Poland 5%, Austria 5% (2019)

5.29 Exports - commodities

cars and vehicle parts, packaged medicines, aircraft, medical cultures/vaccines, industrial machinery (2019)

5.30 Imports

\$1,804,453,000,000 (2019 est.) \$1,759,299,000,000 (2018 est.) \$1,695,300,000,000 (2017 est.)

5.31 Imports - partners

Netherlands 9%, China 8%, France 7%, Belgium 6%, Poland 6%, Italy 6%, Czechia 5%, United States 5% (2019)

5.32 Imports - commodities

cars and vehicle parts, packaged medicines, crude petroleum, refined petroleum, medical cultures/vaccines (2019)

5.33 Reserves of foreign exchange and gold

\$200.1 billion (31 December 2017 est.)\$173.7 billion (31 December 2015 est.)

5.34 Debt - external

\$5,671,463,000,000 (2019 est.)\$5,751,408,000,000 (2018 est.)

5.35 Exchange rates

euros (EUR) per US dollar -0.82771 (2020 est.)0.90338 (2019 est.)0.87789 (2018 est.)0.885 (2014 est.)0.7634 (2013 est.)

6. Energy

6.1 Electricity access

electrification - total population:

100% (2020)

6.2 Electricity - production

612.8 billion kWh (2016 est.)

6.3 Electricity - consumption

536.5 billion kWh (2016 est.)

6.4 Electricity - exports

78.86 billion kWh (2016 est.)

6.5 Electricity - imports

28.34 billion kWh (2016 est.)

6.6 Electricity - installed generating capacity

208.5 million kW (2016 est.)

6.7 Electricity - from fossil fuels

41% of total installed capacity (2016 est.)

6.8 Electricity - from nuclear fuels

5% of total installed capacity (2017 est.)

6.9 Electricity - from hydroelectric plants

2% of total installed capacity (2017 est.)

6.10 Electricity - from other renewable sources

52% of total installed capacity (2017 est.)

6.11 Crude oil - production

41,000 bbl/day (2018 est.)

6.12 Crude oil - exports

6,569 bbl/day (2017 est.)

6.13 Crude oil - imports

1.836 million bbl/day (2017 est.)

6.14 Crude oil - proved reserves

129.6 million bbl (1 January 2018 est.)

6.15 Refined petroleum products - production

2.158 million bbl/day (2017 est.)

6.16 Refined petroleum products - consumption

2.46 million bbl/day (2017 est.)

6.17 Refined petroleum products - exports

494,000 bbl/day (2017 est.)

6.18 Refined petroleum products - imports

883,800 bbl/day (2017 est.)

6.19 Natural gas - production

7.9 billion cu m (2017 est.)

6.20 Natural gas - consumption

93.36 billion cu m (2017 est.)

6.21 Natural gas - exports

34.61 billion cu m (2017 est.)

6.22 Natural gas - imports

119.5 billion cu m (2017 est.)

6.23 Natural gas - proved reserves

39.5 billion cu m (1 January 2018 est.)

6.24 Carbon dioxide emissions from consumption of energy

847.6 million Mt (2017 est.)

7. Communications

7.1 Telephones - fixed lines

total subscriptions:

38,847,530

subscriptions per 100 inhabitants:

48.37 (2019 est.)

7.2 Telephones - mobile cellular

total subscriptions:

103,090,116

subscriptions per 100 inhabitants:

128.36 (2019 est.)

7.3 Telecommunication systems

general assessment:

one of the world's most technologically advanced telecommunications systems; as a result of intensive capital expenditures since reunification, the formerly backward system of the eastern part of the country, dating back to World War II, has been modernized and

integrated with that of the western part; universal 3G infrastructure available and LTE networks; mobile market the largest in Europe 107.5 million as of 2019; available reach of 5G services in 5 cities; 98% LTE coverage; penetration in broadband and mobile sectors average for region; Hamburg develops smart city concept (2020)

domestic:

extensive system of automatic telephone exchanges connected by modern networks of fiber-optic cable, coaxial cable, microwave radio relay, and a domestic satellite system; cellular telephone service is widely available, expanding rapidly, and includes roaming service to many foreign countries; 48 per 100 for fixed-line and 128 per 100 for mobile-cellular (2019)

international:

country code - 49; landing points for SeaMeWe-3, TAT-14, AC-1, CONTACT-3, Fehmarn Balt, C-Lion1, GC1, GlobalConnect-KPN, and Germany-Denmark 2 & 3 -submarine cables to Europe, Africa, the Middle East, Asia, Southeast Asia and Australia; as well as earth stations in the Inmarsat, Intelsat, Eutelsat, and Intersputnik satellite systems (2019)

note:

the COVID-19 outbreak is negatively impacting telecommunications production and supply chains globally; consumer spending on telecom devices and services has also slowed due to the pandemic's effect on economies worldwide; overall progress towards improvements in all facets of the telecom industry - mobile, fixed-line, broadband, submarine cable and satellite - has moderated

7.4 Broadcast media

a mixture of publicly operated and privately owned TV and radio stations; 70 national and regional public broadcasters compete with nearly 400 privately owned national and regional TV stations; more than 90% of households have cable or satellite TV; hundreds of radio stations including multiple national radio networks, regional radio networks, and a large number of local radio stations

7.5 Internet country code

.de

7.6 Internet users

total:

72,202,773

percent of population:

89.74% (July 2018 est.)

7.7 Broadband - fixed subscriptions

total:

34,174,900

subscriptions per 100 inhabitants:

42 (2018 est.)

8. Transportation

8.1 National air transport system

number of registered air carriers:

20 (2020)

inventory of registered aircraft operated by air carriers:

1,113

annual passenger traffic on registered air carriers:

109,796,202 (2018)

annual freight traffic on registered air carriers:

7,969,860,000 mt-km (2018)

8.2 Civil aircraft registration country code prefix

D (2016)

8.3 Airports

total:

539 (2013)

8.4 Airports - with paved runways

total:

318 (2017)

over 3,047 m:

14 (2017)

2,438 to 3,047 m:

49 (2017)

1,524 to 2,437 m:

60 (2017)

914 to 1,523 m:

70 (2017)

under 914 m:

125 (2017)

8.5 Airports - with unpaved runways

total:

221 (2013)

1,524 to 2,437 m:

1 (2013)

914 to 1,523 m:

35 (2013)

under 914 m:

185 (2013)

8.6 Heliports

23 (2013)

8.7 Pipelines

37 km condensate, 26985 km gas, 2400 km oil, 4479 km refined products, 8 km water (2013)

8.8 Railways

total:

33,590 km (2017)

standard gauge:

33,331 km 1.435-m gauge (19,973 km electrified) (2015)

narrow gauge:

220 km 1.000-m gauge (79 km electrified) 15 km 0.900-m gauge, 24 km 0.750-m gauge (2015)

8.9 Roadways

total:

625,000 km (2017)

paved:

625,000 km (includes 12,996 km of expressways) (2017)

note:

includes local roads

8.10 Waterways

7,467 km (Rhine River carries most goods; Main-Danube Canal links North Sea and Black Sea) (2012)

8.11 Merchant marine

total:

607

by type:

bulk carrier 1, container ship 84, general cargo 86, oil tanker 37, other 399 (2020)

8.12 Ports and terminals

major seaport(s):

Baltic Sea - Rostock

oil terminal(s):

Brunsbüttel Canal terminals

container port(s) (TEUs):

Bremen/Bremerhaven (5,510,000), Hamburg (8,860,000) (2017)

LNG terminal(s) (import):

Hamburg

river port(s):

Bremen (Weser) North Sea - Wilhelmshaven Bremerhaven (Geeste) Duisburg, Karlsruhe, Neuss-Düsseldorf (Rhine) Brunsbüttel, Hamburg (Elbe) Lubeck (Wakenitz)

9. Military And Security

9.1 Military and security forces

Federal Armed Forces (Bundeswehr): Army (Heer), Navy (Deutsche Marine, includes naval air arm), Air Force (Luftwaffe, includes air defense), Joint Support Service (Streitkräftebasis, SKB), Central Medical Service (Zentraler Sanitätsdienst, ZSanDstBw), Cyber and Information Space Command (Kommando Cyber- und Informationsraum, Kdo CIR) (2021)

9.2 Military expenditures

1.57% of GDP (2020 est.) 1.36% of GDP (2019) 1.24% of GDP (2018) 1.23% of GDP (2017) 1.19% of GDP (2016)

9.3 Military and security service personnel strengths

the German Federal Armed Forces have approximately 180,000 active duty personnel (62,000 Army; 16,000 Navy; 28,000 Air Force; 27,000 Joint Support Service; 20,000 Medical Service, 13,000 Cyber and Information Space Command; 14,000 other) (2020) note - Germany in 2020 announced it planned to increase the size of the military to about 200,000 troops by 2024

9.4 Military equipment inventories and acquisitions

the German Federal Armed Forces inventory is mostly comprised of weapons systems produced domestically or jointly with other European countries; since 2010, the US is the leading foreign supplier of armaments to Germany; Germany's defense industry is capable of manufacturing the full spectrum of air, land, and naval military weapons systems, and is one of the world's leading arms exporters (2020)

9.5 Military deployments

1,300 Afghanistan (NATO (Feb 2021)); approximately 500 Middle East (NATO/Counter-ISIS campaign); 130 Lebanon (UNIFIL); 500 Lithuania (NATO); 425 Mali (MINUSMA); 400 Mali (EUTM); note - Germany is a contributing member of the EuroCorps (2020)

9.6 Military service age and obligation

17-23 years of age for male and female voluntary military service; conscription ended July 2011; service obligation 8-23 months or 12 years; women have been eligible for voluntary service in all military branches and positions since 2001 (2019)

10. Terrorism

10.1 Terrorist group(s)

Islamic Revolutionary Guard Corps/Qods Force; Islamic State of Iraq and ash-Sham (2019)note: details about the history, aims, leadership, organization, areas of operation, tactics, targets, weapons, size, and sources of support of the group(s) appear(s) in Appendix-T

11. Transnational Issues

11.1 Disputes - international

none

11.2 Refugees and internally displaced persons

refugees (country of origin):

572,818 (Syria), 141,650 (Iraq), 140,366 (Afghanistan), 58,569 (Eritrea), 43,244 (Iran), 28,470 (Turkey), 26,015 (Somalia), 8,722 (Russia), 8,639 (Serbia and Kosovo), 8,125 (Pakistan), 7,828 (Nigeria) (2019)

stateless persons:

14,947 (2019)

11.3 Illicit drugs

source of precursor chemicals for South American cocaine processors; transshipment point for and consumer of Southwest Asian heroin, Latin American cocaine, and European-produced synthetic drugs; major financial center