

# RUSSIA



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# 1. NATIONAL PROFILE

## 1.1 General<sup>1</sup>

Russia is the largest country on earth in terms of surface area, although large tracts in the north and east are inhospitable and sparsely populated. It is located in northern Eurasia bordering the Arctic Ocean between Europe and North Pacific Ocean. Neighboring countries include Azerbaijan, Belarus, China, Estonia, Finland, Georgia, Kazakhstan, North Korea, Latvia, Lithuania, Mongolia, Norway, Poland, and Ukraine. Most of the 17 million square kilometers of land is covered with vast plains, with steppes in the north and taiga in the south. In the high-latitude area, the tundra zones spread where no trees can grow. Gory Kavkaz is located near the south border between the Black Sea and Caspian Sea, and the Ural Mountains are located between the border of Asia and Europe.

Moscow is the capital. Population is 141.9 million. Majority are the Russian with different ethnic groups. Russia is a vast country with a wealth of natural resources. It is one of the world's leading producers of oil and natural gas and also the world's largest exporter of natural gas and petroleum oil. Income from vast natural resources particularly oil and gas, have helped Russia overcome the economic collapse of 1998. It is the world's eighth-largest economy. The Russian economy's reliance on commodity exports makes it vulnerable to swings in global prices.

Russia has transitioned from a centrally-planned economy to a more market-based economy in which many state-controlled firms have been privatized and sectors of the economy are liberalized.

Russia is a member of the Eurasian Economic Community (EAEC), Asian Pacific Economic Cooperation (APEC), and Black Sea Economic Cooperation (BSEC). Russia is a member of the G20, the ASEAN Regional Forum, the Asia-Pacific Economic Cooperation (APEC) grouping, the East Asia Summit, the Asia Europe Meeting and a wide range of other international organisations. As a permanent member of the UN Security Council, Russia plays a key role in addressing the international response to issues such as the situation in Syria and elimination of its chemical weapons, and Iran's nuclear program. It is also one of the countries involved in Six-Party Talks with North Korea and a member of the Middle East Peace Process Quartet.

## 1.2 Physiography<sup>2</sup>

### Area

Total: 17,098,242 km<sup>2</sup>

Land: 17,021,900 km<sup>2</sup>

Water: 79,400 km<sup>2</sup>

### Land boundaries

Total excluding Crimea: 19,917 km

There are two small parts of west Russia with no land connection to the rest of Russia: Kaliningrad Oblast and Crimea, which includes the Republic of Crimea and Sevastopol (and is disputed with neighboring Ukraine).

### Border countries

Russia excluding Kaliningrad Oblast and Crimea—Azerbaijan: 284 km; Belarus: 959 km; China: (southeast) 3,605 km, China (south): 40 km; Estonia: 294 km; Finland: 1,313 km; Georgia: 723 km; Kazakhstan: 6,846 km; Latvia: 217 km; Mongolia: 3,441 km; North Korea: 19 km; Norway: 167 km; Ukraine: 1,576 km

Kaliningrad Oblast—Lithuania: 227 km; Poland: 206 km

Coastline excluding Crimea: 37,653 km

### Maritime claims

Russian continental shelf: 200 m depth or to the depth of exploitation

Exclusive economic zone: 200 nmi (370.4 km; 230.2 mi)

Territorial sea: 12 nmi (22.2 km; 13.8 mi)

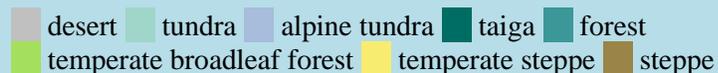
### Elevation extremes

Lowest point: Caspian Sea: -28 m

Highest point: Mount Elbrus: 5,642 m

## Topography

Geographers traditionally divide the vast territory of Russia into five natural zones: the tundra zone; the taiga, or forest, zone; the steppe, or plains, zone; the arid zone; and the mountain zone. Most of Russia consists of two plains (the East European Plain and the West Siberian Plain), two lowlands (the North Siberian and the Kolyma, in far northeastern Siberia), two plateaus (the Central Siberian Plateau and the Lena Plateau to its east), and a series of mountainous areas mainly concentrated in the extreme northeast or extending intermittently along the southern border.



### 1.3 Climate<sup>2</sup>

The climate is very different from region to region, from subtropical climate to the polar climate. Day-night temperature difference is also fierce. The country has a largely continental climate because of its sheer size and compact configuration. Most of its land is more than 400 kilometers (249 mi) from the sea, and the center is 3,840 kilometers (2,386 mi) from the sea. In addition, Russia's mountain ranges, predominantly to the south and the east, block moderating temperatures from the Indian and Pacific Oceans, but European Russian and northern Siberia lack such topographic protection from the Arctic and North Atlantic Oceans.

The average yearly temperature of nearly all of Siberia is below freezing, and the average for most of European Russia is between 5 and 0 °C (41 and 32 °F). Most of Russia has only two seasons, summer and winter, with very short intervals of moderation between them. Transportation routes, including entire railroad lines, are redirected in winter to traverse rock-solid waterways and lakes. Some areas constitute important exceptions to this description, however: the moderate maritime climate of Kaliningrad Oblast on the Baltic Sea is similar to that of the American Northwest; the Russian Far East, under the influence of the Pacific Ocean, has a monsoonal climate that reverses the direction of wind in summer and winter, sharply differentiating temperatures; and a narrow, subtropical band of territory provides Russia's most popular summer resort area on the Black Sea.

In winter, an intense high-pressure system causes winds to blow from the south and the southwest in all but the Pacific region of the Russian landmass; in summer, a low-pressure system brings winds from the north and the northwest to most of the landmass.

Russia is the coldest country of the world (average annual temperature is  $-5.5$  °C (22.1 °F)). That meteorological combination reduces the wintertime temperature difference between north and south. Thus, average January temperatures are  $-6$  °C (21 °F) in Saint Petersburg,  $-27$  °C ( $-17$  °F) in the West Siberian Plain, and  $-43$  °C ( $-45$  °F) at Yakutsk (in east-central Siberia, at approximately the same latitude as Saint Petersburg), while the winter average on the Mongolian border, whose latitude is some  $10^\circ$  farther south, is barely warmer. Summer temperatures are more affected by latitude, however; the Arctic islands average  $4$  °C (39.2 °F), and the southernmost regions average  $20$  °C (68 °F). Russia's potential for temperature extremes is typified by the national record low of  $-68$  °C ( $-90$  °F), recorded at Verkhoyansk in north-central Siberia and the record high of  $45$  °C (113.0 °F), recorded at several southern stations (Utta).

Because Russia has little exposure to ocean influences, most of the country receives low to moderate amounts of precipitation. Highest precipitation falls in the northwest, with amounts decreasing from northwest to southeast across European Russia. The wettest areas are the small, lush subtropical region adjacent to the Caucasus and along the Pacific coast: Sochi receives 1,500 millimetres (59 in) per year and the Kuril Islands typically around 1,000 to 1,500 millimetres (39 to 59 in) - much of which is snow. Along the Baltic coast, average annual

precipitation is 600 millimeters (23.6 in), and in Moscow it is 525 millimeters (20.7 in). An average of only 20 millimeters (0.79 in) falls along the Russian-Kazakh border, and as little as 15 millimeters (0.59 in) may fall along Siberia's Arctic coastline. Average annual days of snow cover, a critical factor for agriculture, depends on both latitude and altitude. Cover varies from forty to 200 days in European Russia, and from 120 to 250 days in Siberia.

#### 1.4 Socio-economic Profile<sup>3,4</sup>

<b>Socio-economic Indicators</b>		
GDP: Gross domestic product (million current US\$)	2011	1857770
GDP per capita (current US\$)	2011	13006.0
GNI: Gross national income per capita (current US\$)	2011	12586.0
Population (millions)	2014	142.83
Urban (% of population)	2014	74.16
Sex ratio (males per 100 females)	2012	86.0
Life expectancy at birth (females/males, years)	2010-2015	75.0/63.3
Adult literacy rate (% ages 15 and older)	2014	99.7
Expenditure on education (% of GDP)	2014	4.1

#### 1.5 Administrative Setup<sup>5</sup>

Type of government: Federal semi-presidential constitutional republic

President	Vladimir Putin
Prime Minister	Dmitry Medvedev
Chairman of the Federation Council	Valentina Matviyenko
Chairman of the State Duma	Sergey Naryshkin

Legislature	Federal Assembly
Upper house	Federation Council
Lower house	State Duma

Formation	
Arrival of Rurik, considered as a foundation event by the Russian authorities	862
Kievan Rus'	882
Grand Duchy of Moscow	1283
Tsardom of Russia	16 January 1547
Russian Empire	22 October 1721
Russian SFSR	6 November 1917
Soviet Union	10 December 1922
Russian Federation	25 December 1991
Adoption of the current Constitution of Russia	12 December 1993

## **2. DISASTER RISK PROFILE<sup>6</sup>**

Most of Siberia consists of permafrost, which causes floods in spring and forest fires in summer and fall. The Peninsula of Kamchatka is prone to volcanic activity and earthquakes. Drought, extreme temperatures, landslides, and wind damage may cause damages.

### **Sakhalin Earthquake (May 1995)**

On 28 May 1995, there was an earthquake measuring M7.7 in the north Sakhalin which killed 1,989 people.

### **Flood (May 1998)**

The north-eastern Republic of Sakha (Yakutia) was hit by extensive flooding in May 1998, killing 13 people and leaving 51,000 homeless. 38,780 hectares of arable land was washed away.

### **Flood (September 1994)**

On 19 September 1994, following three days of torrential rain, severe floods affected the region of Primorskiy in the far east of the country not far from Vladivostok. EMERCOM of Russia reports that 45,000 hectares are flooded, with water level in rivers still rising. 86 villages have been affected with 3 persons reported dead and 15 missing. 529 people were resettled. Water supplies to the town of Nakhodka have been cut.

**Top 10 Natural Disasters in Russia for the period 1900 to 2014 sorted by numbers of killed<sup>7</sup>**

<b>Disaster</b>	<b>Date</b>	<b>No Killed</b>
Extreme temperature	Jun/2010	55736
Earthquake (seismic activity)	27/May/1995	1989
Extreme temperature	Oct/2001	332
Extreme temperature	Jul/2001	276
Extreme temperature	Oct/2002	242
Mass movement wet	28/Jan/1993	239
Extreme temperature	10/Oct/2000	232
Extreme temperature	1/Nov/1995	208
Flood	11/Jul/2012	172
Extreme temperature	14/Dec/2012	170

**Top 10 Natural Disasters in Russia for the period 1900 to 2014 sorted by numbers of total affected people<sup>7</sup>**

<b>Disaster</b>	<b>Date</b>	<b>No Total Affected</b>
Drought	2003	1000000
Flood	17/Sep/1994	775429
Extreme temperature	Jan/1999	725000
Flood	19/Jun/2002	330613
Storm	15/Feb/2013	301491
Flood	7/Jul/2001	300000
Flood	3/Jul/1996	220000
Epidemic	19/Jun/1995	150000
Wildfire	20/Jul/1998	100683
Flood	18/Feb/1998	88000

**Top 10 Natural Disasters in Russia for the period 1900 to 2014 sorted by economic damage costs<sup>7</sup>**

<b>Disaster</b>	<b>Date</b>	<b>Damage (000 US\$)</b>
Wildfire	Jul/2010	1800000
Drought	Apr/2010	1400000
Drought	Jun/2012	1140000
Extreme temperature	Jan/2006	1000000

Flood	1/Aug/2013	1000000
Flood	11/Jul/2012	600000
Flood	8/Aug/2002	500000
Flood	19/Jun/2002	443000
Earthquake (seismic activity)	2/Aug/2007	420000
Extreme temperature	Jun/2010	400000

### Summarized Table of Natural Disasters in Russia from 1900 to 2014<sup>7</sup>

		No. of Events	Killed	Total Affected	Damage (000 US\$)
<b>Drought</b>	Drought	5	-	1000000	2540000
	ave. per event		-	200000	508000
<b>Earthquake (seismic activity)</b>	Earthquake (ground shaking)	10	2019	60190	551520
	ave. per event		201.9	6019	55152
	Tsunami	1	47	-	-
	ave. per event		47	-	-
<b>Epidemic</b>	Unspecified	1	-	100	-
	ave. per event		-	100	-
	Bacterial Infectious Diseases	1	-	150000	-
	ave. per event		-	150000	-
	Viral Infectious Diseases	8	33	8146	-
	ave. per event		4.1	1018.3	-
<b>Extreme temperature</b>	Cold wave	17	1766	759184	100
	ave. per event		103.9	44657.9	5.9
	Extreme winter conditions	1	116	14	1000000
	ave. per event		116	14	1000000
	Heat wave	3	56032	-	400000
	ave. per event		18677.3	-	133333.3
<b>Flood</b>	Unspecified	6	-	29505	5273
	ave. per event		-	4917.5	878.8
	Flash flood	3	267	376023	1183000
	ave. per event		89	125341	394333.3
	General flood	42	471	1544856	2907675
	ave. per event		11.2	36782.3	69230.4
	Storm surge/coastal	3	11	307181	41622

	flood				
	ave. per event		3.7	102393.7	13874
<b>Insect infestation</b>	Locust	1	-	-	-
	ave. per event		-	-	-
<b>Mass movement dry</b>	Avalanche	2	60	1750	2600
	ave. per event		30	875	1300
<b>Mass movement wet</b>	Avalanche	5	390	300	-
	ave. per event		78	60	-
	Landslide	2	24	508	-
	ave. per event		12	254	-
<b>Storm</b>	Unspecified	4	62	303751	196000
	ave. per event		15.5	75937.8	49000
	Extratropical cyclone	1	-	2	-
	ave. per event		-	2	-
	Local storm	9	114	18964	70000
	ave. per event		12.7	2107.1	7777.8
	Tropical cyclone	7	36	62	66050
	ave. per event		5.1	8.9	9435.7
<b>Wildfire</b>	Bush/Brush fire	1	53	5996	1800000
	ave. per event		53	5996	1800000
	Forest fire	20	84	103603	383336
	ave. per event		4.2	5180.2	19166.8
	Scrub/Grassland fire	1	2	598	-
	ave. per event		2	598	-

### 3. INSTITUTIONAL SETUP<sup>8</sup>

#### 3.1 Administrative system

Conventional long form: Russian Federation

Conventional short form: Russia

Government type: federation

Capital: Moscow

Administrative Divisions: 49 oblasts (oblastey, singular - oblast), 21 republics (respublik, singular -respublika), 10 autonomous okrugs (avtonomnykh okrugov, singular -avtonomnyy okrug), 6 krays (krayev, singular - kray), 2 federal cities (singular - gorod), and 1 autonomous oblast (avtonomnaya oblast)

## **2.2. Legal system, legal framework**

Several laws and policies were enacted by the Government of Russia to protect its people during emergency situations. These include the following (among others)

- Law of the Russian Federation On Safety (March 5, 1991)
- Presidential Decree (PD) No. 794 (December 30, 1992) “Single State System of Preventing and Eliminating Emergency Situations”.
- Federal Law (FL) No. 68-ФЗ on “Protecting the Population and Territories from Emergency Situations” (December 21, 1994)
- FL No. 3-ФЗ on “Emergency-Rescue Services and Status of Rescue Personnel” No. 151-ФЗ, and On Radiation Safety of the Population (January 9, 1996)
- FL No. 126-ФЗ on Communications (July 7, 2003) provided the prioritized use of communication networks in emergency situations
- PDs No. 261 (April 18, 1992) and No. 1113 (November 5, 1995), provided for a single state system of preventing and eliminating Emergency situations (RSES)
- PD No. 991 on Improving the Single State System for Prevention and Elimination of Emergency Situations (August 28, 2003), entrusted the Ministry of Emergencies functions of organizing and supervising search and rescue activities in inland waters, and supervising the anchorage and use of small-size vessels and bases(structures).

- Order of the Ministry of Emergencies of Russia No. 200 (April 21,2003) provided for the basic roles and functions of the Ministry of Emergencies
- Federation Subjects” No. 95-Φ3(July 4, 2003) and On General Principles of Organizing Local Self-Management No. 131-Φ3(October 6, 2003) resolved problems on comprehensive target planning of measures aimed at preventing emergency situations (ES, raising the stability of enterprises, and in ensuring the preparedness of management bodies
- Code of Administrative Law Infringements of the Russian Federation (December 30, 2001) provided sanctions for non compliance to the requirements of the norms and rules on Preventing and eliminating emergency situations.

### **2.3 Structure of disaster management**

The national structure for coordinating and executing disaster risk Reduction is the single state system of preventing and eliminating emergency situations (RSES), which was established in 1992. It integrates the management bodies, forces, federal bodies, local Administrations and organizations to protect population and territories from emergency situations. RSES also develops legal economic standards to realize target and scientific-engineering programs and ensure readiness of the forces and means to train the population.

The Main activities of the RSES include the following:

- prevention of accidents, and adverse impacts of natural disasters;
- reduce losses and damage from emergency situations;
- eliminate emergency situations;
- emergency-rescue operations;
- reduce disaster risks; and
- support relief and rehabilitation activities

The RSES consists of territorial and functional subsystems. It has five levels namely federal, regional, territorial, and local and one object level. Each RSES level has managerial bodies, permanent working bodies of control, forces and

means; reserves of financial and material-and equipment resources; systems of communication, notification, information supply, special educational establishments.

<b>Government of Russia</b>			
Financial and material resources		Ministry of Emergencies	Forces of ME of Russia
		Bodies of executive power of RF subjects CES	Ministries, committees, directorates chief administrations of CDES
Federal bodies of executive power CES			Forces and means
			Financial and material resources
Directorates, departments of CDES		Bodies of local administration	Directorates, departments of CDES
			Forces and means
			Financial and material resources
Forces and means	Financial and material resources	Management of economic objects CES	Departments, sectors of CDES
			Forces and means
			Financial and material resources

Sources: ADRC country report, WCDR country report

In 2006, Russian government set up “EMERCOM”, the Ministry of Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters is responsible for the implementation of disaster management policies. EMERCOM is engaged in firefighting, civil defense, and search and rescue after both natural and human-made disasters.

“National Crisis Management Center” is the daily management body of the Russian Unified System of Prevention and Elimination of Emergency Situations (RSChS). One of the main tasks of the National Crisis Management Center is the

acceleration and optimization of emergency response activities with the use of modern technologies.

The main tasks of the NCMC are:

- Emergency monitoring and forecasting;
- Information cooperation tasks aimed at providing safety of the population and territories on the Federal, Interregional and Regional levels;
- RSChS forces management, organization and conducting interdepartmental cooperation while solving the tasks on emergency prevention and relief;
- Establishment and constant development of the consistent contour of the Unified State System of Prevention and Elimination of Emergency Situations.

The NCMC consists of the following subdivisions of EMERCOM of Russia: - NCMC management, operational-analytical center, emergency response center, telecommunications center, space monitoring center, IT development center.

Following organizations are working under administrative control of the NCMC:

- CMC of the EMERCOM regional centers, headquarters of EMERCOM of Russia in the city of Moscow and the Kaliningrad Region;
- CMC of the headquarters of EMERCOM of Russia in the subjects of the Russian Federation.

## **2.4 Priority on disaster risk management**

- Risks assessments on various types of natural threats
- Early warning and forecasting
- Monitoring and evaluation of natural hazards and its impacts
- Hazard mapping
- Diagnosing seismic soundness of buildings and other Infrastructure
- Enhance public education and awareness on existing threats, and prevention/mitigation measures
- Conduct of capability building activities at all levels including drills
- Research and development
- Investing on disaster reduction measures

## 4. INITIATIVE<sup>8</sup>

### 4.1 Disaster management plan

As specified by laws mentioned above, planning of actions for emergency situations is carried out at all levels of the RSES system as follows:

- Federal plan of actions,
- Regional plans of actions (cooperation),
- plans of actions of federal executive bodies (functional subsystems),
- plans of actions of executive bodies of subjects of Russian Federation (territorial subsystems),
- plans of actions of local self management authorities and
- plans of actions of organizations (objects).

Special plans are also mandated such as:

- Plans of prevention and liquidation of spillage of oil and petroleum products;
- Operational plans of fighting forest fires, which is approved annually by state authority bodies of subjects of the Russian Federation;
- Plans of protecting personnel and population in case of emergency at a nuclear stations (nuclear power station, thermal nuclear power station);
- Plans of actions on the prevention of disasters arising from storage, transportation and liquidation of chemical weapons and eliminating their aftereffects.
- Plans of primary life-support and survival of the victims of disasters and calamities;

Basic components of the plans mentioned are as follows:

**Section 1:** Total estimation of probable situation with appearance of emergency situations

**Section 2:** Basic measures on prevention of emergency situations

**Section 3:** Provision of readiness for liquidation of probable emergency situations

**Section 4:** Actions in case of threat and appearance of federal trans-border emergency situations

**Section 5:** Provision of readiness of management system in crisis situations

Within the framework of the Federal Target-Oriented Program “Reduction of Risks and Alleviation of the Impacts of Natural and Anthropogenic Emergency Situations in the Russian Federation Till 2005” the budget material and financial reserves were created amounting to approximately 7.816 billion of rubles.

Budget size on national level financing of program measures is carried out through the federal budget.

For emergency situations the following resources are created and used:

- emergency fund of the government on the prevention and
- elimination emergency situations and consequences of natural disasters;
- reserves of inventories (part of the State material reserve) for
- ensuring urgent work and addressing the adverse impacts of disasters;
- reserves of material resources of the federal bodies of executive power;
- stocks of financial and material resources of the subjects of the Russian Federation, bodies of local administrations and organizations.

Procedures on the generation, use and recovery of stocks of financial and material resources are determined by the legislation of the Russian Federation and regulatory legal acts of local administration bodies. The volume of stocks for eliminating emergency situations, and the control of their formation, storage, use and recovery are determined by the body creating these stocks.

The state function of preventing and eliminating emergency situations is financed in 2003 at the rate of 21 million rubles including the distribution by subsections “Prevention and elimination of consequences of emergency situations” – 11 billion rubles, “Civil Defense” – 67 million rubles, “State Fire-Fighting service” – 10 billion rubles.

## References

<sup>1</sup><http://www.adrc.asia/nationinformation.php?NationCode=643&Lang=en&NationNum=20>

<sup>2</sup> [http://en.wikipedia.org/wiki/Geography\\_of\\_Russia](http://en.wikipedia.org/wiki/Geography_of_Russia)

<sup>3</sup> <http://data.un.org/CountryProfile.aspx?crName=Russian%20Federation>

<sup>4</sup> <http://hdr.undp.org/en/countries/profiles/RUS>

<sup>5</sup> <http://en.wikipedia.org/wiki/Russia>

<sup>6</sup><http://www.adrc.asia/nationinformation.php?NationCode=643&Lang=en&NationNum=20>

<sup>7</sup> <http://www.emdat.be/result-country-profile>

<sup>8</sup> <http://www.adrc.asia/countryreport/RUS/2005/english.pdf>

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