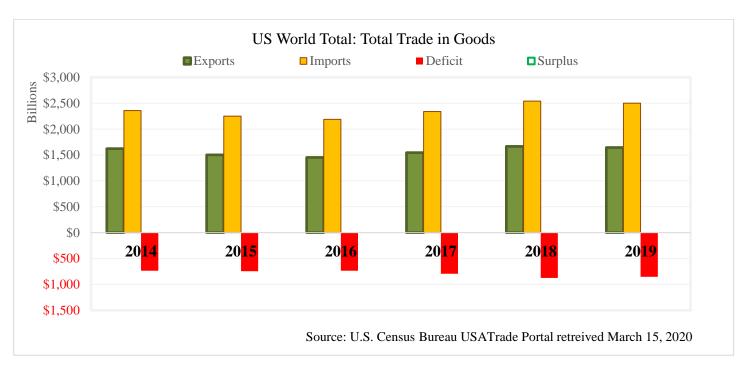


### Office of Technology Evaluation Statistical Analysis of U.S. Trade with the World

#### I. Total U.S. Trade with the World

In 2019, both U.S. exports and imports decreased slightly from 2018; however, both U.S. export and import values remained higher than the average level of the last five years. In 2019, U.S. exports totaled \$1.6 trillion, a 1.4% (\$22.5 billion) decrease; U.S. imports totaled \$2.5 trillion, a 1.6% (\$40.2 billion) decrease; and the trade deficit was \$854.4 billion, a 2.0% (\$17.7 billion) decrease.



	2014	2015	2016	2017	2018	2019	2014-2018 Average		
EXPORTS	\$1,621,873.8	\$1,503,328.3	\$1,451,459.7	\$1,546,473.5	\$1,665,688.5	\$1,643,160.9	\$1,557,764.8		
Δvalue		-\$118,545.4	-\$51,868.7	\$95,013.8	\$119,215.0	-\$22,527.6			
$\Delta pct$		-7.3%	-3.5%	6.5%	7.7%	-1.4%			
IMPORTS	\$2,356,356.1	\$2,248,811.4	\$2,186,785.9	\$2,339,884.0	\$2,537,729.3	\$2,497,531.5	\$2,333,913.3		
$\Delta value$		-\$107,544.7	-\$62,025.5	\$153,098.1	\$197,845.3	-\$40,197.8			
$\Delta pct$		-4.6%	-2.8%	7.0%	8.5%	-1.6%			
BALANCE	(\$734,482.3)	(\$745,483.0)	(\$735,326.2)	(\$793,410.6)	(\$872,040.8)	(\$854,370.6)	(\$776,148.6)		
$\Delta value$		(\$11,000.7)	\$10,156.8	(\$58,084.4)	(\$78,630.2)	\$17,670.2			
Δpct 1.5% -1.4% 7.9% 9.9% -2.0%									
	Values in Millions of U.S. Dollars. Source: U.S. Census Bureau USATrade Portal March 15, 2020								



#### Office of Technology Evaluation Statistical Analysis of U.S. Trade with the World

The top commodity sectors traded in 2019 were the same for both exports and imports. Of the \$1.6 trillion in U.S. exports to the World in 2019, the top commodity sectors were machinery and mechanical appliances (23.1%), transportation equipment (16.7%), and chemicals, plastics and leather products (15.6%).

Of the \$2.5 trillion in U.S. imports from the World in 2019, the top commodity sectors were machinery and mechanical appliances (28.7%), transportation equipment (13.8%), and chemicals, plastics and leather products (13.7%).





### Government Filing Requirements

#### II. Exports to the World subject to US Government Filing Requirements

In 2019, U.S. exported \$1.6 trillion in goods, of which \$46.4 billion (2.8% of the total exports) was exported under a government license:

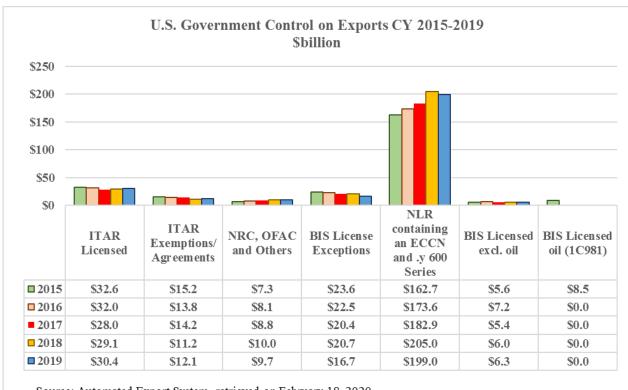
- ▶ \$6.3 billion was licensed by BIS, an increase of 5.6% (\$333.1 million);
- ▶ \$30.4 billion was licensed under ITAR, an increase of 4.5% (\$1.3 billion); and
- ➤ \$9.7 billion was licensed by NRC, OFAC and other government agencies, a decrease of 2.8% (\$282.2 million).

In 2019, \$28.8 billion (1.8% of the total exports) was exported under a government license exception/exemption/agreement:

- ➤ \$16.7 billion was under BIS license exceptions (C35-C59, C62), a decrease of 19.5% (\$4.0 billion); and
- ➤ \$12.1 billion was under ITAR license exemption/agreements, an increase of 7.9% (\$885.4 million).

In 2019, \$199.0 billion (12.1%) was exported under No License Required (NLR):

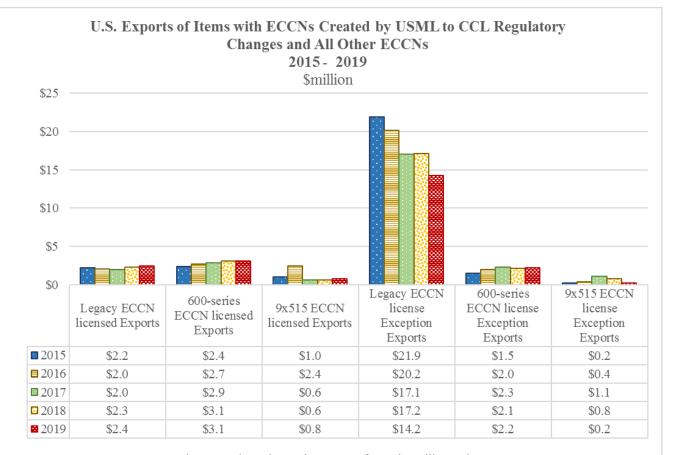
- ▶ \$198.6 billion was under NLR with an ECCN reported (not including EAR99), a decrease of 2.9% (\$6.0 billion); and
- ➤ \$318.9 million was under NLR for 600-Series .y 600 sub-para items, a decrease of 1.5% (\$4.7 million).



Source: Automated Export System, retrieved on February 18, 2020



## Office of Technology Evaluation Analysis of Exports to the World subject to U.S. Government Filing Requirements



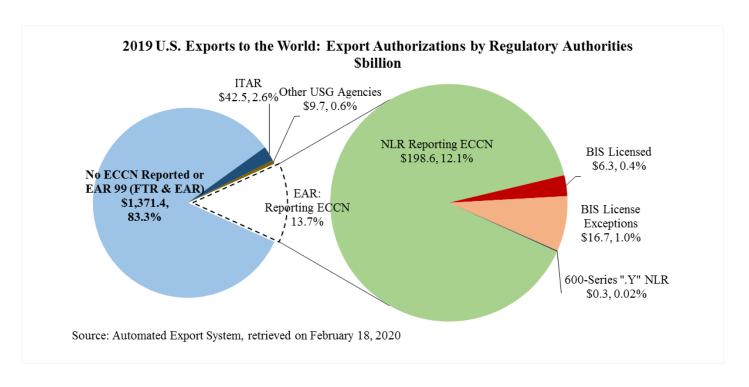
Source: U.S. Customs & Border Protection, Electronic Export Information Filing, February 14, 2020



## ology Evaluation Analysis of Exports to the World subject to U.S. Government Filing Requirements

In 2019, of the \$1.6 trillion in U.S. exports to the World:

- \$22.9 billion (1.4% of the total exports) were subject to a BIS license requirement:
  - o 0.4% was exported under a BIS license.
  - o 1.0% was exported under a BIS license exception.
- \$199.0 billion (12.1%) were exported under No License Required (NLR) with an ECCN reported and NLR for .y 600-series items.
  - o 12.1% was exported under NLR with an ECCN reported; and
  - o 0.02% was exported under NLR for .y 600-series items.

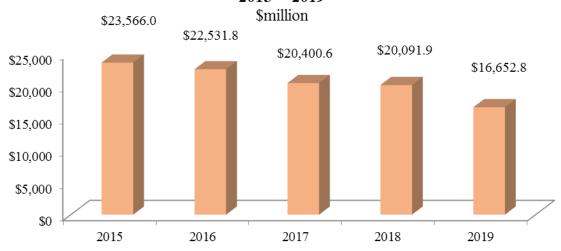




## Government Filing Requirements

In 2019, U.S. exports to the World shipped under a BIS license exception totaled \$16.7 billion, a decrease of 19.5% (\$4.0 billion) from 2018.

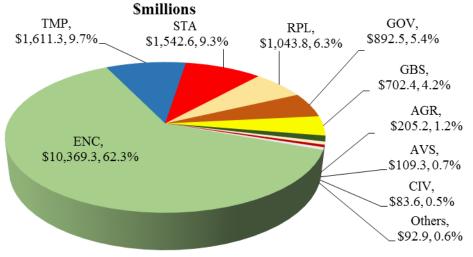
U.S. Exports to the World under BIS License Exceptions 2015 - 2019



Source: Automated Export System, retrieved on February 18, 2020

In 2019, the top license exception, Encryption Commodities, Software and Technology (ENC) totaled \$10.4 billion (62.3% of all license exceptions), followed by Temporary imports, exports, re-exports and transfers (in-country) (TMP) at \$1.6 billion (9.7%) and Strategic Trade Authorization valued at \$1.5 billion (9.3%).

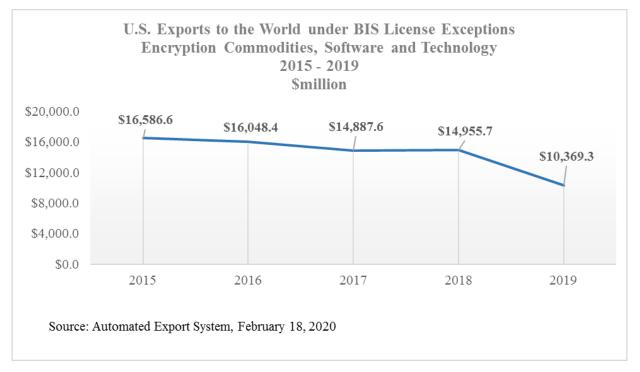
2019 U.S. Exports by BIS License Exceptions

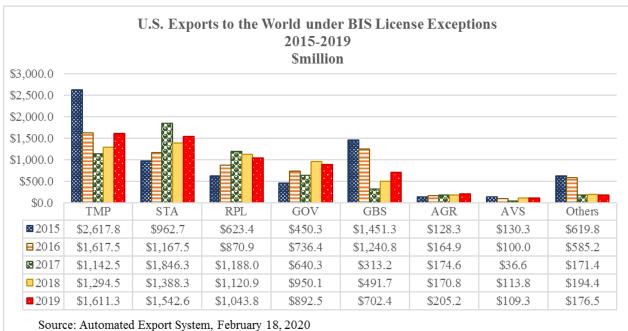


Source: Automated Export System, retrieved on February 18, 2020



## Government Filing Requirements







# Office of Technology Evaluation Analysis of Exports to the World subject to U.S. Government Filing Requirements

	Тор	Ten ECCNs by	/ Value to World
	#1	9A610	Military Aircraft and Related Commodities
D	#2	9A515	Spacecraft and Related Commodities
ī	#3	9A619	Military Gas Turbine Engines and Related Commodities
LICENSEI	#4	3A611	Military Electronics
Z	#5	0A606	Ground Vehicles and Related Commodities
뽔	#6	7A103	Instrumentation, Navigation Equip./Systems Not
$\cong$	#7	9A001	Aero Gas Turbine Engines
	#8	6A001	Acoustic Systems, Equipment and "Components"
	#9	7A003	Inertial Navigation Systems (Gimballed/Strapdown)
	#10	5A002	Systems/Equip./Integrated Circuits for Info Sec

Source: Automaed Export System, retrieved on February 18, 2020

	Top Ten ECCNs by Value to World									
()	#1	5A002	Systems/Equip./Integrated Circuits for Info Sec							
ž	#2	No ECCN	No ECCN is required for License Exceptions TMP*							
TIONS	#3	9A610	Military Aircraft and Related Commodities							
Н	#4	9A515	Spacecraft and Related Commodities							
5	#5	3A001	Electronic Components							
	#6	3A611	Military Electronics							
EXC	#7	EAR99	Items subject to the EAR that are not elsewhere controlled							
$\sim$	#8	9A619	Military Gas Turbine Engines and Related Commodities							
	#9	5B002	"Information Security" Test, Inspection and "Production" Equipment							
	#10	9A991	Aircraft N.E.S. and Gas Turbine Engines not Controlled by 9A001 or 9A101							

Source: Automaed Export System, retrieved on February 18, 2020

\*Note: No ECCN is Required for License Exception TMP per EAR 758.1(g)(2)

	Top 1	Ten ECCNs by	/ Value to World
ECCN	#1	9A991	Aircraft N.E.S. and Gas Turbine Engines not Controlled by 9A001 or 9A101
18	#2	5A992	Equipment not controlled by 5A002
$\mathbf{H}$	#3	4A994	Computers Not Controlled By 4A001 or 4A003
	#4	3B991	Other Mfg/Test Equip. Not Controlled By 3B
NLR with I	#5	5A991	Telecommunication Equip. Not Controlled by 5A001
3	#6	3A991	Electronic Devices and "Components" not controlled by 3A001
~	<b>#7</b>	7A994	Other Navigation Direction Finding Equip Not Controlled under 7A003
	#8	3B992	Equip. for the Inspection/Testing of Components not Controlled by 3B002
Z	#9	2B999	Specific Processing Equip., N.E.S.
	#10	3A999	Specific Processing Equip., N.E.S.

Source: Automaed Export System, retrieved on February 18, 2020

NOTE: ECCN Descriptions have been truncated; please review Commerce Control List for Full Description



## ology Evaluation Analysis of Exports to the World subject to U.S. Government Filing Requirements

Тор	Ten ECCNs by	Value to World
#1	9A610	Military Aircraft and Related Commodities
#2	9A619	Military Gas Turbine Engines and Related Commodities
#3 #4 #5 #6 #7	2B230	Pressure Transducers
<b>4</b> 4	3A611	Military Electronics
#5	0A606	Ground Vehicles and Related Commodities
#6	0A987	Optical Sighting Devices for Firearms
#7	2B350	Chemical Manufacturing Facilities and Equip.
#8	7A103	Instrumentation, Navigation Equip./Systems Not
#9	0A984	Shotguns, Buckshot, Shotgun Shells
#10	5A002	Systems/Equip./Integrated Circuits for Info Sec

Source: Automaed Export System, retrieved on February 18, 2020

	Тор	Ten ECCNs by	Value to World
(0)	#1	5A002	Systems/Equip./Integrated Circuits for Info Sec
<b>SNOI</b>	#2	9A610	Military Aircraft and Related Commodities
$\overline{o}$	#3	No ECCN	No ECCN is required for License Exceptions TMP*
Ħ	#4	EAR99	Items subject to the EAR that are not elsewhere controlled
	#5	9A619	Military Gas Turbine Engines and Related Commodities
ш	#6	9A991	Aircraft N.E.S. and Gas Turbine Engines not Controlled by 9A001 or 9A101
EXC	#7	3A001	Electronic Components
	#8	3 <b>A</b> 611	Military Electronics
	#9	5D002	"Sortware" as follows (see List of Items Controlled)
	#10	5B002	"Information Security" Test, Inspection and "Production" Equipment

Source: Automaed Export System, retrieved on February 18, 2020

To	p Ten ECCNs by	Value to World
#2 #3 #3	9A991	Aircraft N.E.S. and Gas Turbine Engines not Controlled by 9A001 or 9A101
8 #2	2 5A992	Equipment not controlled by 5A002
#3	5A991	Telecommunication Equip. Not Controlled by 5A001
_ #/	4A994	Computers Not Controlled By 4A001 or 4A003
LR with	7A994	Other Navigation Direction Finding Equip Not Controlled under 7A003
#6	3B991	Other Mfg/Test Equip. Not Controlled By 3B
#7	7 3A991	Electronic Devices and "Components" not controlled by 3A001
#8	3A992	General Purpose Electronic Equip. Note Controlled by 3A002
#9	3A999	Specific Processing Equip., N.E.S.
#1	<b>0</b> 2B999	Specific Processing Equip., N.E.S.

Source: Automaed Export System, retrieved on February 18, 2020

NOTE: ECCN Descriptions have been truncated; please review Commerce Control List for Full Description



#### III. Licensing to the World subject to US Government Filing Requirements

In 2019, BIS reviewed **32,993** license applications valued at **\$158.8** billion for exports and re-exports for tangible items, software and technology, a decrease of 2.5% (842 less) from 33,835 in 2018.

- Approved licenses totaled 28,223, a decrease of 2.8% (800 less). The approval rate was 85.5%;
- Denied licenses applications totaled 370, an increase of 40.2% (106 more). The denied rate was 1.1%:
- Return without action (RWA) totaled 4,400, a decrease of 3.3% (148 less). The RWA rate was 13.3%;

In 2019, BIS reviewed 1,320 applications for Deemed Export, an increase of 31.1% (313 more) from 1,007 in 2018.

			Duomiou e	of RIC Line	nco Annlicatio	ons 2015 - 2019			
	2015	2016	2017	2018	2019	% of the total by decision	% of the Grand Total license applications	% change from 2018	Change from 2018
Grand Total license applications	38,372	34,661	36,429	34,842	34,313			-1.5%	-529
			Total lic	ense appli	cations for dec	emed export			
Total	1,381	1,476	1,525	1,007	1,320			31.1%	
Approved	1,268	1,377	1,394	846	1,124	85.2%	3.8%	32.9%	278
Denied	18	13	24	11	3	0.2%		-72.7%	-8
RWA	95	86	107	150	193	14.6%		28.7%	43
		Total lice	ise applica	tions for ta	angible items,	software and technology		T	
Total	36,991	33,185	34,904	33,835	32,993		96.2%	-2.5%	-842
Approved	30,980	28,204	29,633	29,023	28,223	85.5%	90.276	-2.8%	-800
Denied	311	301	277	264	370	1.1%		40.2%	106
RWA	5,700	4,680	4,994	4,548	4,400	13.3%		-3.3%	-148
					· · · · · · · · · · · · · · · · · · ·	·	100.0%		

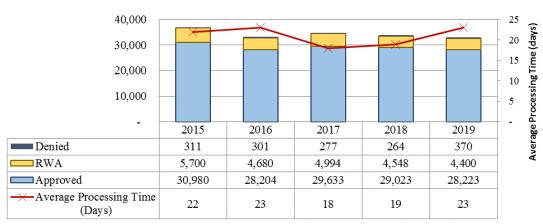
Detailed License Information regarding Tangible items, software and technology										
						% of the total by	% of the total for tangible	% of the Grand Total license	% change from 2017	Change from
	2015	2016	2017	2018	2019	decision	items	applications		2017
Total license applications for										
legacy ECCNs	21,331	18,546	19,081	19,470	19,287		58.5%		-0.9%	-183
Approved	16,968	15,060	15,446	16,047	15,824	82.0%		56.2%	-1.4%	-223
Denied	250	223	220	227	321	1.7%			41.4%	94
RWA	4,113	3,263	3,415	3,196	3,142	16.3%			-1.7%	-54
Total license applications for										
600-series items	14,413	13,493	14,582	13,478	12,917		39.2%		-4.2%	-561
Approved	12,968	12,247	13,134	12,181	11,677	90.4%		37.6%	-4.1%	-504
Denied	23	56	39	29	42	0.3%			44.8%	13
RWA	1,422	1,190	1,409	1,268	1,198	9.3%			-5.5%	-70
Total license applications for										
9x515 items	1,247	1,146	1,241	887	789		2.4%		-11.0%	-98
Approved	1,044	897	1,053	795	722	91.5%		2.3%	-9.2%	-73
Denied	38	22	18	8	7	0.9%			-12.5%	-1
RWA	165	227	170	84	60	7.6%			-28.6%	-24
							100.0%	96.2%		
		Source: Co	mmerce U.S.	Exports Expo	orter Support Syst	em, retrieved on June 9,	2020			

Note: to ensure the accuracy of change from 2018, 2018 licensing data are revised based on data retrieved on January 30, 2020.

This revision of 2018 data is not significant, only 31 less for the approved licenses than reported a year ago.



BIS Licenses for Tangible Items, Software and Technology for the World by License Count 2015 - 2019



Source: Commerce U.S. Exports Exporter Support System,, retrieved on June 9, 2020

#### Note: Figures above do not include deemed export applications

BIS Licenses for Tangible Items, Software and Technology for the World by Value 2015 - 2019 Smillion

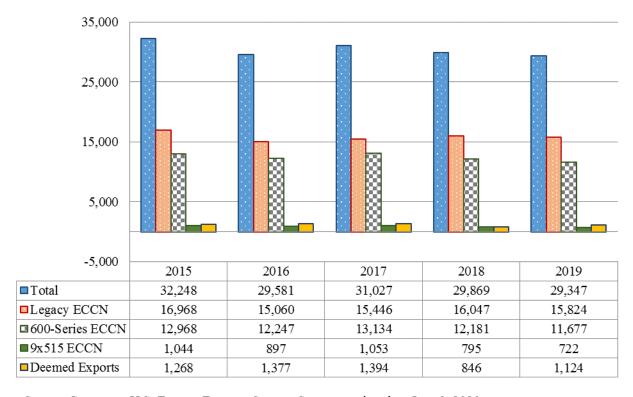


Source: Commerce U.S. Exports Exporter Support System, August 3, 2020

Note: Effective on December 27, 2015, license requirement was removed for Crude petroleum.



#### Overview of BIS Approved Licenses 2015-2019

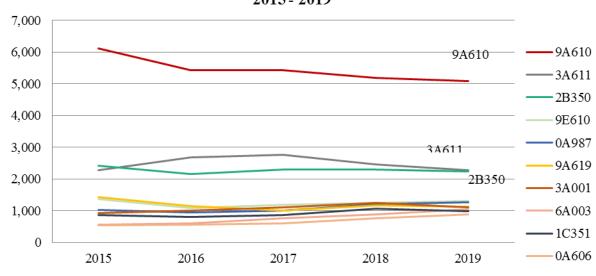


Source: Commerce U.S. Exports Exporter Support System, retrieved on June 9, 2020



In 2019, the top three approved ECCN remained the same as 2018. They were 9A610 for Military aircraft and related commodities (5,078 approvals, 101 less than 2018); and 3A611 for military electronics (2,276 approvals, 189 less); and 2B350 for Chemical manufacturing facilities and equipment (2,230 approvals, 59 less).

Top Ten Approved ECCNs by Count 2015 - 2019



Source: Commerce U.S. Exports Exporter Support System. Retrieved on January 30, 2020

						2018-2019
	2015	2016	2017	2018	2019	$\Delta$ in Approvals
9A610	6,120	5,419	5,429	5,179	5,078	-101
3A611	2,280	2,681	2,765	2,465	2,276	-189
2B350	2,409	2,159	2,290	2,289	2,230	-59
9E610	1,363	1,084	1,176	1,240	1,309	69
0A987	1,016	948	1,006	1,195	1,257	62
9A619	1,430	1,148	1,001	1,167	1,116	-51
3A001	926	1,002	1,110	1,240	1,113	-127
6A003	564	590	761	884	1,045	161
1C351	855	799	853	1,069	974	-95
0A606	536	564	590	761	884	123



ECCN	Description	Denied	Value
LCCN	Description	Applications	\$million
EAR99	Items subject to the EAR that are not elsewhere controlled	70	\$29.
3A001	Electronic components and specially designed components	50	\$10.
1A984	Chemical agents, including tear gas; liquid pepper; smoke bombs, etc.	26	\$4.
0A987	Optical sighting devices for firearms	25	\$5.
9A610	Military aircraft and related commodities	21	\$31.
0A982	Law enforcement restrain devices	14	\$0.
0A985	Discharge type arms and devices to administer electric shock	14	\$32.
5D002	Software for information security	12	\$2.
0A984	Shotguns, buckshot shotgun shells	11	\$0.
0A978	Law enforcement striking weapons, including saps, police batons, side handle batons, tonfas, sjamboks and whips	10	\$0.

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Summary of U.S. Exports to the World Calendar Year 2019				
	CY2018	CY2019	% of Total Exports	Percentage Change from previous year
Total Exports	\$1,665,688,500,000	\$1,643,160,900,000		-1.4%
Subject to ITAR Including VDS	\$40,324,691,789	\$42,518,827,684	2.6%	5.4%
Subject to Other Gov. Agencies Including VDO	\$9,974,382,829	\$9,692,215,853	0.6%	-2.8%
Detailed Summary of EAR-Controlled Exports				
AES License Type				5 5
Code	Description	Value	Percentage of Total	Percentage Description
C30	BIS License	\$6,284,002,856	99.998%	
VDC	Voluntary Disclosure to Commerce	\$108,621	0.002%	
	Total of BIS Licensed Exports	\$6,284,111,477	0.4%	Total BIS Licensed Exports / Total Exports
C35	Limited Value Shipments	\$8,507,813	0.1%	
C36	Country Group B Shipments	\$702,407,098	4.2%	
C37	Civil End Users	\$83,614,532	0.5%	
C38	Restrict Technology & Software (Filing not required)	\$172,973	0.001%	
C40	Temporary Imports, Exports, & Re-Exports	\$1,611,253,779	9.7%	
	Servicing & Replacement of Parts & Equipment	\$1,043,765,172	6.3%	
	Government & International Organizations	\$892,478,826	5.4%	
	Gift Parcels & Humanitarian Donations	\$2,009,039	0.01%	
C44	Technology & Software Unrestricted	\$46,081,960	0.3%	
	Baggage	\$572,705	0.003%	
C46	Aircraft & Vessels	\$109,344,103	0.7%	
C50	Encryption Commodities & Software	\$10,369,287,149	62.3%	
C51	Agricultural Commodities	\$205,153,506	1.2%	
C53	Computers	\$12,353,047	0.1%	
C54	Short Supply - Western Red Cedar	\$4,489,570	0.03%	
C55	Short Supply - Crude Oil Samples	\$0	0.0%	
C57	Validated End-User	\$3,007,678	0.02%	
C58	Consumer Products related to Communications to Cuba	\$1,299	0.00%	
	Strategic Trade Authorization	\$1,542,587,961	9.3%	
	Support for the Cuban People	\$15,683,468	0.1%	
Total of BIS License Exceptions		\$16,652,771,678	1.0%	Total BIS License Exceptions / Total Exports
			72.6%	Total BIS License Exceptions/ Total Subject to BIS License Requirement
Total subject to BIS license requirement (Exports reported under BIS Licenses and BIS License Exceptions)		\$22,936,883,155	1.4%	Total Subject to BIS License requirement / Total Exports
C60 No License Required for .y Subparagraph 600 series		\$318,877,694	0.2%	NLR for .y subparagraph 600 Series/ Total Exports
Total Exports reported with an ECCN under No License Required		\$198,649,299,318	12.09%	Total NLR with an ECCN / Total Exports
Total of NLR with an ECCN & .y 600-series		\$198,968,177,012	12.1%	Total NLR with EAR99 / Total Exports
Total Exports not reporting an ECCN or EAR		\$1,369,044,796,296	83.3%	Total NLR without ECCN / Total Exports
Source: Automated Export System, retrieved on June 8, 2020				