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BUREAU OF INDUSTRY AND SECURITY

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# India Space Congress

## U.S. Export Administration Regulations Spacecraft/Satellites 2022

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*Note: This presentation is merely a summary of official statements and final rules published by the Departments of Commerce and State. Final rules, as well as the Export Administration Regulations and International Traffic in Arms Regulations, must be reviewed to determine the full scope of any applicable requirements.*

**Date of Last Revision: March 12, 2020**

# Summary of Spacecraft Controls



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## Cat XV Before ECR

## CCL Before ECR

### Revised USML

### Revised CCL

#### Cat XV

#### Other

#### ECCN 9x515

#### Existing ECCNs

Military Satellites

Military Ground equip

Parts critical for military functions

Services for USML and CCL satellites (IV and XV)

GPS Rcvrs (XII)

Worldwide license, including Canada for "Spacecraft" in ECCN 9A515.a.1, .a.2, .a.3, or .a.4, or items in 9A515.g,

25% *de minimis*, except 0% for China and other D:5 countries.

STA eligible for A:5, except for "spacecraft" in ECCN 9A515.a.1, .a.2, .a.3, or .a.4 or items in 9A515.g and certain software and technology

Review microelectronic circuit ECCNs, 7A004, 7A104, and ECCNs using "space qualified" prior to using the catch-all control in 9A515.x.

Sats and Ground equip not in USML

Rad Hard ICs

Parts not on USML or other CCL

New sat related item or tech

Spec electronics

Spec optical sensors

Spec radar systems

# Items Transferred to CCL



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- **Satellites**
  - Commercial Communication Satellites
  - Lower-Performance Remote Sensing Satellites
  - Planetary Rovers
  - Planetary and Interplanetary Probes
  - Certain logistics spacecraft
- **Related systems for the above:**
  - Ground control systems
  - Training simulators
  - Test, inspection, and production equipment
  - Radiation hardened microelectronics
- **Parts and components of satellite bus and payloads not listed on USML**

# Order of Review - Spacecraft

## (Supp. No. 4 to part 774)



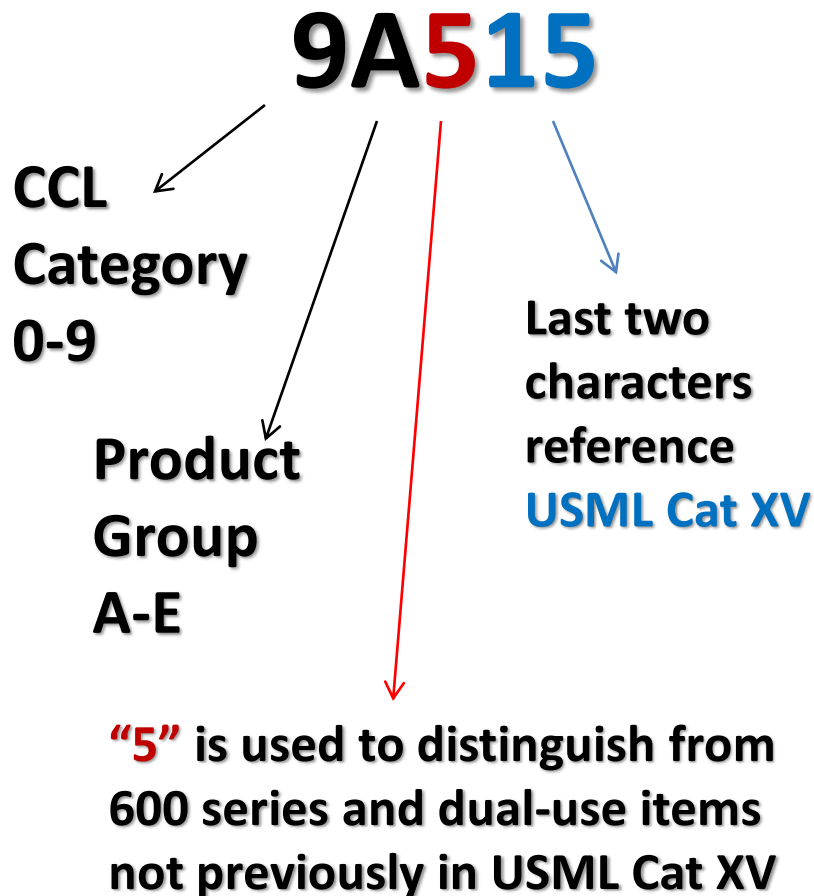
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- Review USML Category XV
  - Specifically enumerated items
  - “Catch-all” controls and ITAR definition of “specially designed”
- If not on the USML, review the CCL
  - Review applicable 9x515 ECCN
    - Specifically enumerated items
    - “Catch-all” controls and EAR definition of “specially designed”
    - Note: the following ECCNs supersede 9A515.x:
      - ECCNs for microelectronic circuits and discrete electronic components
      - 3A001.b.4, 3A001.b.8, 7A004, 7A104, 9A004
      - ECCNs containing “space qualified” as a control criterion
  - Review other applicable non-9x515 ECCNs

# 9x515 Framework



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- .a - .w: specifically enumerated end items, materials, parts, components, accessories, and attachments
  - Some items may be “specially designed”
- .x: “specially designed” parts, components, accessories, and attachments that are not specifically enumerated
- .y: items that would otherwise be within scope of 9A515.x but that have been identified in interagency-cleared CCATS (§ 748.3(e))

# 9x515 Framework



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- Subject to same scope of controls as 600 series items
  - NS1, RS1, and AT1 generally
  - MT for some items; RS2 for some items
- License applications for Country Group D:5 reviewed consistent with ITAR § 126.1
  - Policy of denial for Country Group E:1 and China

# License Exceptions



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- 9x515 generally eligible for many license exceptions
- Review § 740.2
  - MT controls on some 9A515 items
  - 9A515 items controlled for MT reasons are eligible for certain provisions of TMP, RPL, TSU, or AVS if exported as part of a spacecraft in quantities appropriate for replacement parts (§ 740.2(a)(5)(i))

# License Exception STA



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- 9x515 generally eligible for STA for Country Group A:5
  - Certain spacecraft in 9A515.a require eligibility request
  - “Spacecraft” in ECCN 9A515.a.1, .a.2, .a.3, or .a.4, or items in 9A515.g are not eligible for STA
  - Software in 9D515.b, .d, or .e and technology in 9E515.b, .d, .e, or .f are not eligible for STA



# Export Considerations

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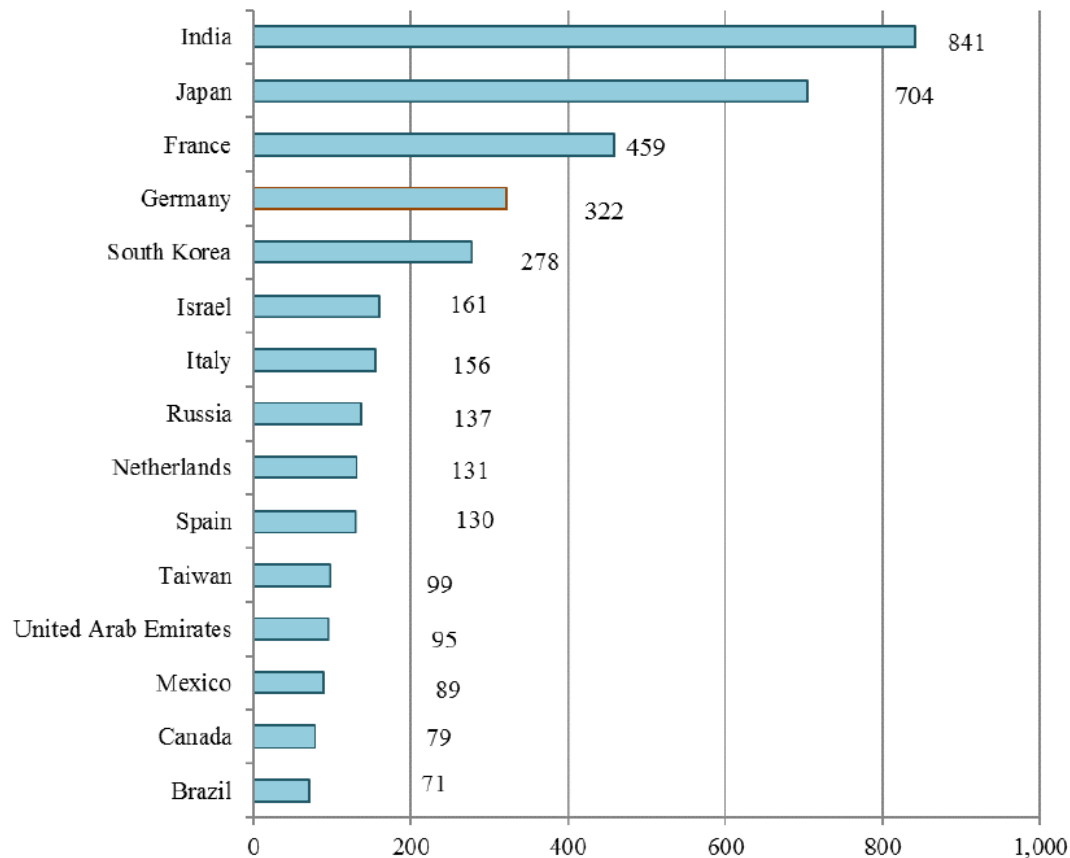
- India
  - NASA/ISRO
  - Domestic Indian Programs
  - CubeSats

# 9x515 License Destinations



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**Top Fifteen Destinations of BIS Approved Licenses  
for 9x515 Items by License Count**  
June 27, 2014 to December 31, 2019



Source: Commerce U.S. Exports Exporter Support System, February 6, 2020

# 9x515 Export Volume



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<b>The Fourth USML to CCL Regulatory Change-Satellite</b> Top 15 Destinations of U.S. Exports under BIS Jurisdiction by Value June 27, 2014 to December 31, 2019				
Country	Shipment Count	% of Total Shipment Count	Value \$million	% of Total Value
French Guiana	67	0.4%	\$1,920.3	22.0%
France	2,166	12.0%	\$1,723.1	19.8%
Japan	2,393	13.2%	\$796.9	9.1%
Kazakhstan	8	0.0%	\$548.9	6.3%
United Kingdom	1,688	9.3%	\$347.1	4.0%
Brazil	22	0.1%	\$335.2	3.8%
Mexico	99	0.5%	\$293.6	3.4%
Australia	173	1.0%	\$254.3	2.9%
Saudi Arabia	4	0.0%	\$230.3	2.6%
Spain	1,384	7.7%	\$222.5	2.6%
India	712	3.9%	\$209.5	2.4%
Germany	2,972	16.4%	\$185.2	2.1%
Italy	1,058	5.9%	\$177.4	2.0%
Hong Kong	37	0.2%	\$166.1	1.9%
Panama	1	0.01%	\$131.6	1.5%
<b>Top 15 Total</b>	<b>12,784</b>		<b>\$7,542.1</b>	
<b>Top 15 Total/Grand Total</b>		<b>70.7%</b>		<b>86.5%</b>
<b>Grand Total</b>	<b>18,071</b>		<b>\$8,723.5</b>	
Note: The Guiana Space Center, run by France and European Union, is located in French Guiana.				
Source: Automated Export System, February 21, 2020				

# Recent 9A515 Changes



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- August 30, 2018
  - Added spacecraft thrusters as 9A515.h (with MT1 control) per industry request for clarification
- May 23, 2019
  - Added air-launch platforms as 9A004.g (with NS1 control) per 2018 Wassenaar Arrangement agreement
- January 6, 2020
  - Added certain geospatial imagery software specially designed for training a Deep Convolutional Neural Network as 0D521 (with RS1 control)

# Contact Information



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## **BIS Website:**

- [BIS Website \(doc.gov\)](#)
- [Export Administration Regulations \(EAR\) \(doc.gov\)](#)

## **Technical and Licensing Questions on Satellites: Office of National Security and Technology Transfer Controls**

- Jason Chauvin, [Jason.Chauvin@bis.doc.gov](mailto:Jason.Chauvin@bis.doc.gov)

## **Regulatory Interpretation and Transition Guidance**

- Regulatory Policy Division: [rpd2@bis.doc.gov](mailto:rpd2@bis.doc.gov) , 202-482-2440