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OMB Control Number: 0694-0120

Expiration Date: 01/31/2019

# Section 232 National Security Investigation: Imports of Automobiles and Automotive Parts



# SCOPE OF ASSESSMENT

The Bureau of Industry and Security (BIS), Office of Technology Evaluation (OTE), is conducting a survey of the armored vehicle industry. The survey, requested by the Office of the Secretary of the U.S. Department of Commerce, will be used to support an investigation initiated under Section 232 of the Trade Expansion Act of 1962, as amended. The investigation was requested by the President of the United States.

The principal goal of this survey is to assist the Commerce Department in assessing the domestic armored vehicle industry and the impact of automotive parts imports on armored vehicle industry supply chains, research and development, and labor force, and other factors relevant to Section 232 analysis. Information collected will include facilities and production data, joint ventures, trade flows, supply chain data, sales and demand data, employment information, conditions of competition, research and development information, and government and defense activities. The resulting aggregate data will give the Commerce Department detailed industry information that is otherwise not publicly available and needed to effectively conduct its analysis.

# **RESPONSE TO THIS SURVEY IS REQUIRED BY LAW**

A response to this survey is required by law (50 U.S.C. Sec. 4555). Failure to respond can result in a maximum fine of \$10,000, imprisonment of up to one year, or both. Information furnished herewith is deemed confidential and will not be published or disclosed except in accordance with Section 705 of the Defense Production Act of 1950, as amended (50 U.S.C. Sec. 4555). Section 705 prohibits the publication or disclosure of this information unless the President determines that its withholding is contrary to the national defense. Information will not be shared with any non-government entity, other than in aggregate form. The information will be protected pursuant to the appropriate exemptions from disclosure under the Freedom of Information Act (FOIA), should it be the subject of a FOIA request.

Notwithstanding any other provision of law, no person is required to respond to nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number.

# **BURDEN ESTIMATE AND REQUEST FOR COMMENT**

Public reporting burden for this collection of information is estimated to average 30 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information to BIS Information Collection Officer, Room 6883, Bureau of Industry and Security, U.S. Department of Commerce, Washington, D.C. 20230, and to the Office of Management and Budget. Paperwork Reduction Project (OMB Control No. 0694-0120). Washington. D.C. 20503.

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	General Instructions
A.	Your organization is required to complete this survey of the armored vehicle industry using an Excel template, which can be downloaded from the BIS website: <a href="http://bis.doc.gov/autos232">http://bis.doc.gov/autos232</a> If you are not able to download the survey document, at your request, Commerce staff will e-mail the Excel survey template directly to you.  For your convenience, a PDF version of the survey and required drop-down content is available on the BIS website to aid internal data collection. DO NOT SUBMIT the PDF version of the survey as your response to BIS. Should this occur, your organization will be required to resubmit the survey in the requested Excel format.
В.	Respond to every question. Surveys that are not fully completed will be returned for completion. Use the comment boxes to provide any information to supplement responses provided in the survey form. Make sure to record a complete answer in the cell provided, even if the cell does not appear to expand to fit all of the information.  DO NOT CUT AND PASTE RESPONSES WITHIN THIS SURVEY OR PASTE IN RESPONSES FROM OUTSIDE THE SURVEY. Survey inputs should be completed by typing in responses or by using a drop-down menu. The use of cut and paste can corrupt the survey template. If your survey response is corrupted as a result of cut and paste responses, a new survey will be sent to your organization for immediate completion.
D.	Do not disclose any USG classified information in this survey form.
E.	Upon completion of the survey, final review, and certification, <b>transmit the survey document via e-mail to</b> : <a href="mailto:autos232@doc.gov">autos232@doc.gov</a> .
F.	Questions related to the survey should be directed to BIS survey support staff at <a href="mailto:autos232@doc.gov">autos232@doc.gov</a> .  E-mail is the preferred method of contact.  You may also speak with a member of the BIS survey support staff by calling (202) 482-4358.
G.	For questions related to the overall scope of this Industrial Base assessment, contact <a href="mailto:autos232@doc.gov">autos232@doc.gov</a> or:  Brad Botwin, Director, Industrial Studies Office of Technology Evaluation, Room 1093 U.S. Department of Commerce 1401 Constitution Avenue, NW Washington, DC 20230  DO NOT submit completed surveys to Mr. Botwin's postal or personal e-mail address. All surveys must be submitted electronically to <a href="mailto:autos232@doc.gov">autos232@doc.gov</a> .

Term	Definitions  Definition
Advanced Battery	The cells, modules/arrays, internal cooling loops, control and balancing boards and pack cases meeting performance capabilities for some or all motive power in any interstate highway capable vehicles for the mode
Advanced Battery Cells	years they are commercially marketed.  The battery cells meeting performance capabilities for some or all motive power in any interstate highway capable vehicles for the model years they are commercially marketed.
Applied Research	A systematic study to gain knowledge or understanding necessary to determine the means by which a recognized and specific need may be met. This activity includes work leading to the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes a new processes.
Armored Vehicle	new processes.  For purposes of this questionnaire, "armored vehicle" refers to motorized armored fighting vehicles intended fimilitary activities, including all-terrain vehicles, tactical vehicles, transport vehicles and cargo vehicles, but not including tanks.
Authorizing Official	An executive officer of the organization or business unit or another individual who has the authority to execute this survey on behalf of the organization.
Autonomy	this survey on behalf of the organization.  Technology related to vehicles with any electronic system that influences the lateral or longitudinal operation is both) of a vehicle meeting SAE levels 2-5 for driving automation.
Auto parts	All components for production/assembly of passenger can, SUVs, vans and light trucks, including engines and engine parts, electrical and electronic equipment, steering and suspension components, brake systems.  But the subject of t
Basic Research	A systematic, scientific study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts.
Body and Frame	The main body panels, secondary panels, structural panels, frames, subframes, door lids and hinges.
Braking Systems	Disks, pads, drums, shoes, lines, hoses, calipers, master cylinders, seals, power boosters, anti-lock brake contro sensors and related components.
Capital Expenditures	Investments made by an organization in buildings, equipment, property, and systems where the expense is depreciated. This does not include expenditures for consumable materials, other operating expenses, and salaries associated with normal business operations.
Connectivity/Connected Car	Ability to each ange digital information between a vehicle and other entities (e.g., another vehicle, infrastructure); exhicles that are able to communicate, either directly or through intermediaries, with other vehicles, infrastructure, and devices.
Design Facility	A space or studio with personnel who use design software, intellectual property, supporting computer systems engineering and other information technology to create auto parts and automobiles, including cars, SUVs, vans and light trucks.
Development	The design, simulation, and testing of a prototype, including experimental software or hardware systems, to validate technological feasibility or concept of operation in order to reduce technological risk, or provide test systems prior to production approval.
Drive Components	The axie shafts, housings, hubs, carriers, differentials and related subassemblies such as gears, bearings, spring gaskets and seals.
Electric Drive Motors	Any electric motors used to provide some or all motive power.
Electrical Sytems	Lights, alternators, starters, window motors, switches, relays and related wiring.
Electrification	Technology for vehicles receiving some degree of motive power via electrical energy and an electric motor; includes hybrid, plug-in hybrid, electric, and fuel-cell vehicles.
Electronics and Controls	Power electronics, controls (except fuel management and anti-lock brake), infotainment systems, modules, inverters, and advanced battery charging system components.
Exports	Shipments to destinations outside the United States, including shipments to NAFTA countries and to related firm
Fuel Management Systems	The major engine bay fuel system components including injectors, throttles and controls.
Full Time Equivalent (FTE) Employees Global Headquarters	Employees who work for 40 hours in a normal work week. Convert part-time employees into "full time equivalents" by taking their work hours as a fraction of 40 hours.  A location that serves as the firm's hub of worldwide operations with all global corporate branches or divisions reporting to it.
Import Value	Values reported should be landed, duty paid values at the U.S. port of entry, including ocean freight and insurance costs, brokerage charges, and import duties (i.e., all charges except inland freight in the United States).
Interior Systems	Seats, liners, carpeting, consoles, panels, dashes and related interior components.
Light Truck	Motor whicle manufactured primarily for the transport of goods: any truck or "truck derivative" with a gross vehicle weight rating (GVWR) of 8.500 pounds or less, and a vehicle curb weight (VCW) of 6.000 pounds or less includes pickup trucks (non-passenger automobiles with passenger compartment and an open cargo area). Covers the following HTS codes: 6704/21000, 5704510000, 5704510000, 5704510000.
Lightweighting	Mass reduction of vehicles through the minimization of materials or substitution of materials with lower densit and volume.
Manufacturing	Engaging in the mechanical, physical, or chemical transformation of materials, substances, or components into automotive parts, passenger cars, SUVs, vans and light trucks at a manufacturing facility. Includes vehicle ssembly operation.
Manufacturing facility	An establishment that uses an array of equipment, components, systems, and labor to transform designs into automotive parts and/or passenger cars, SUVs, vans and light trucks.
Non-U.S. Facility	A facility that is physically located outside of the United States.
Organization	A company, firm, laboratory, or other entity that owns or controls one or more U.S. establishment(s) capable of designing and/or manufacturing automotive products.
Passenger Car	Motor vehicle manufactured primarily for use in transportation of fewer than ten persons; includes two- and four-door sedans, hatchbacks, station wagons; cross-utility vehicles, and, two-seater sports cars. For this surve
Product/Process Development	Conceptualization and development of an automotive part, system or whole vehicle prior to the production of the product for customers (i.e., consumers, tier-one suppliers, automakers, etc.).
Research and Development	Basic and applied research in the engineering sciences, as well as design and development of prototype product and processes. Efforts that an organization conducts towards innovating, introducing and/or improving product
Sales	Reported sales including sales to distributors.
teering and Supensions Systems	absorbers, springs, struts, control arms, sway bars, knuckles and related bushings.
SUV (Sport Utility Vehicle)	Motor vehicle built using a "body on frame" construction principally designed for the transport of fewer than t persons.
Supplier	An entity from which your organization obtains inputs, which may be goods or services. A supplier may be another firm which you have a contractual relationship, or it may be another facility owned by the same parent organization.
Turbos and Superchargers	Forced induction devices driven by exhaust, belts or electric motors.
United States	The "United States" or "U.S." includes the 50 states, Puerto Rico, the District of Columbia, Guam, the Trust Territories, and the U.S. Virgin Islands.
U.S. Sales	Shipments made within the United States as a result of an arm's length commercial transaction in the ordinary course of business. Report net values (i.e., gross sales values less all discounts, allowance, rebates, prepaid freight, and the value of returned goods) in U.S. dollars, F.O.B. your point of shipment.
	Covered, boxlike motor vehicle with an enclosed cargo space not exceeding five metric tons; typically has a rea
Van	door and sliding doors on the side panels, used for transporting goods or fifteen or fewer persons.

Pre	<u>vious Page</u>								<u>Next Page</u>
			1a	: Organization	Information				
	Provide the following information for your organization								
	Organization Name		ohn jones						
	Street Address								
	City								
A.	State								
A.	Zip Code								
	Location of Global Headquarters								
	U.S. Point of Contact Name								
	U.S. Point of Contact Email								
	U.S. Point of Contact Phone								
	Is this organization owned, in whole or in part, by any private or government entity? Indicate Yes/No, then identify the entities below, if applicable. List entities with at least 5% ownership.								
			quarters Street dress Global Headquarters City		Global Headquarters State/Province	Global Hea Cou		Ownership %	
В.									
Б.									
	At the global headquarters level, identify the total number of armored vehicle manufacturing and/or assembly facilities, product development and design facilities, and research and development facilities that your firm currently operates.								
C.	Act	ivity			Numl	per of U.S. Facilities	Numbe	r of Non-U.S.	Facilities
	Manufacturing/Assembly of Armored Vehic	cles							
	Product Development & Design								
	Research & Development								
		BUSINESS (	CONFIDENTIAL	Per Section 7	05(d) of the De	efense Production Act			

d in the United States, iden nits. Expected Change 2018-2022	ntifying each facility's name, city, state, 2017 Production Volume of Armor Vehicles, in Units
Expected Change	2017 Production Volume of Armo
Expected Change	2017 Production Volume of Armo
Expected Change 2018-2022	2017 Production Volume of Armo Vehicles, in Units
d outside the United States	s, identifying each facility's name, city,
Expected Change	s, identifying each facility's name, city,  2017 Production Volume of Armo
Expected Change	2017 Production Volume of Armor
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Expected Change	2017 Production Volume of Armor

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		1	Lc: Changes in U.S. Facili	ty Operations, 2013 - Q2 2018		
Identit	fy any U.S. facility closings, relocations	contractions expansions corporate acqu	usitions or consolidation	is or other major changes in U.S. o	operations since	January 1, 2013. For each change, provide the location, reasons
for the	e change in operations (e.g., loss of mai	rket share to imports, loss of market share	e to domestic competition	on, declining demand, low profitab	oility, firm restru	cturing), and units of vehicles, as well as number of full-time-
equiva	alent (FTE) employees impacted. Denot	e reductions with a "-" symbol.				
	Location	Type of Change	Date of Change	Units of Vehicles Impacted	FTEs Impacted	Explanation
1						
2						
3						
4						
5						
6						
7 8						
9					-	
					-	
10 11						
12					1	
13					+	
14						
15						
16					+	
17					+	
18					+	
19						
20					+	
					1	
	Comments:					

# 2a: Production

At the global headquarters level, identify the quantity (in units) of armored vehicles produced annually and sold in the United States at both your U.S. and non-U.S. facilities.

	Units Produced at U.S. Facilities and Sold in the U.S.									
A.		2013	2014	2015	2016	2017	2018 (Jan - Jun)			
	Armored Vehicles (U.S.)									
	Units Produced at Non-U.S. Facilities and Sold in the U.S.									
В.	Type of Motor Vehicle/Part	2013	2014	2015	2016	2017	2018 (Jan - Jun)			
	A 137.1.1.1. /									
	Armored Vehicles (non-U.S.)									

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	2b: Production (Continued)									
Foi	or U.S. operations, provide the production, sales, and average unit value (AUV) data for each year below.									
	Armored Vehicles									
	Item	2013	2014	2015	2016	2017	2018 (Jan - Jun)			
	Average Production Capacity (Units)									
	Production (Units)									
A.	. U.S. Sales/Shipments (Units)									
	U.S. Sales/Shipments (\$)									
	Export Sales/Shipments (Units)									
	Export Sales/Shipments (\$)									
	AUV U.S. Auto Parts Content*									
	UV U.S. Auto Parts Content: Provide the average hicle production operations (numerator) over the					iginating auto parts use	ed for U.S. armored			

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			2c: Constraints to Operat	ions		
For each vehicle sold in the U.S. or part since 2013, providing an explanation fo automotive parts.	type consumed for vehicles so or each. Explanations should in	old in the U.S., i aclude the produ	ndicate whether your organizati icts affected, specific reasons for	on's production of the item o constraints, and years associ	r acquisition/pated with the	ourchase of the item has ever been constrained constraint. See definitions page for details on
Auto or Part Type	Constraint to Organization's U.S. Production		Explanation	Constraint Organization's E Acquisitio	xternal	Explanation
Armored Vehicles				No		
Engines - 4 Cylinder						
Engines - 6 Cylinder						
Engines - 8 or More Cylinder						
Transmissions - 7 or Fewer Gears				Not Applica	ble	
Transmissions - 8 or More Gears						
Bodies and Frames						
Drive Components						
Steering & Suspension Systems						
Advanced Batteries				Not Applica	ble	
Fuel Management Systems						
Electronics and Controls						
Electrical Systems						
Braking Systems						
Interior Systems						
Other						
For the manufacturing equipment that each detailing reasons for using equipm			lities, estimate the percentage (	in units) that is supplied by m	anufacturers	pased in the United States. Provide explanations for
Equipment	t	U.S. %		Explanation for U	Ising Non-US	Suppliers
Machine Tools - Engines						
Machine Tools – Transmissions/Transax	kles					
Body Panels/Structural Component - Sta Presses/Tooling	tamping & Forming					
Machine Tools - Large Gears						
Production Operations - Design & Opera	ations Software					
Production Line Control Systems						
Computer-Controlled Assembly Line Vel	chicle Transport Systems					
Robotic Welders						
Robotic Paint Systems						
Wheel Alignment Systems						

Other Other

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3: Financial Staten	nent - U.S. Operatio	ons				
Report the requested information, in thousands of U.S. dollars, for your organization's U.S. Opera	tions					
Income Statement (Select Items)	2013	2014	2015	2016	2017	2018 Jan - Jun
A Total Sales Revenue Earned on all U.S. Sales						
1 Revenue - Armored Vehicles						
B Total COGS for All U.S. Sales						
1 COGS - Armored Vehicles						
C Gross Profit (Loss) for all U.S. operations (including U.S. sales and exports)						
D Selling, General, and Administrative (SG&A) Expenses (inc. U.S. sales and exports)						
E Total Operating Income (Loss) (including U.S. sales and exports)						
F Other Income & Expenses (inc. Interest Expenses) (inc. U.S. sales and exports)						
G Net Income (Loss) Before Taxes (including U.S. sales and exports)						
Balance Sheet (Select Items)	2013	2014	2015	2016	2017	2018 Jan - Jun
A Cash and Cash Equivalents						
B Inventory						
C Current Assets						
D Total Assets						
E Current Liabilities						
F Total Liabilities						
G Retained Earnings						
H Total Owner's Equity						
BUSINESS CONFIDENTIAL - Per Section	on 705(d) of the De	fense Productio	n Act	•		

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# 4a: Exports

Identify the top 10 export destinations (by 2017 export volume) for your organization's U.S.-produced armored vehicles, and list the total units exported each year.

	Armored Vehicles (Units Exported)											
		Export Destination Country	2013	2014	2015	2016	2017	2018 (Jan - Jun)				
	1											
	2											
	3											
A	4											
	5											
	6											
	7											
	8											
	9											
	10											
			SUSINESS CONFIDEN	TIAL - Per Section 70	5(d) of the Defense	Production Act						

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	4b: Imports										
lf yo	your company imports any armored vehicles, identify the top 10 countries of import (by 2017 import volume) for each.										
	Armored Vehicles (Units Imports)										
		Country of Import	2013	2014	2015	2016	2017	2018 (Jan - Jun)			
	1										
	2										
	3										
A.	4										
Λ.	5										
	6										
	7										
	8		<del></del>								

10

### 5a: Supply Chain

For each type of auto part input, identify the total number of Original Equipment Suppliers (OESs) from which your organization sourced parts in 2017, and list the top five OESs by supplier name, country of headquarters, country of part manufacture, whether the OES is affiliated with your organization (5% or more shared ownership), the number of units acquired in 2017, and the value of parts acquired in 2017. Then, for each supplier rate (from 1 to 4, with 1 being Most Important and 4 being Least Important) how important price, tariffs, product availability, and performance/quality are in deciding to use this supplier.

	Engines:	4 Cylinder		Total OESs:				Reasor	for Preferring	Supplier (Rank Ea	ch 1-4)
	Supplier Name	Country of Headquarters	Country of N	/Janufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
Δ 1											
2											
3											
5											
7	Engines:	6 Cylinder		Total OESs:				Reasor	for Preferring	Supplier (Rank Ea	ch 1-4)
	Supplier Name	Country of Headquarters	Country of N	/Janufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
3 1											
2											
3											
5											
	Engines: 8 or	More Cylinder		Total OESs:				Reasor	for Preferring	Supplier (Rank Ea	ch 1-4)
	Supplier Name	Country of Headquarters	Country of N	/Janufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
c 1											
2											
3 4											
5											
	Transmissions:	7 or Fewer Gears		Total OESs:				Reason for Preferring Supplier (Rank Each 1-4)			
	Supplier Name	Country of Headquarters	Country of N	/Janufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
D 1											
2											
3											
5											
	Transmissions:	8 or More Gears		Total OESs:				Reasor	for Preferring	Supplier (Rank Ea	ch 1-4)
	Supplier Name	Country of Headquarters	Country of N	/Janufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
1											
2											
3											
5											
3						Defense Producti					

# 5b: Supply Chain

For each type of auto part input, identify the total number of Original Equipment Suppliers (OESs) from which your organization sourced parts in 2017, and list the top five OESs by supplier name, country of headquarters, country of part manufacture, whether the OES is affiliated with your organization (5% or more shared ownership), the number of units acquired in 2017, and the value of parts acquired in 2017. Then, for each supplier rate (from 1 to 4, with 1 being Most Important and 4 being Least Important) how important price, tariffs, product availability, and performance/quality are in deciding to use this supplier.

		Bodies and	Frames		Total OESs:				Reason	for Preferring	Supplier (Rank E	ach 1-4)
		Supplier Name	Country of Headquarters	Country of N	Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
Α	1											
	3											
	4											
	5											
		Drive Comp	onents		Total OESs:				Reason	for Preferring	Supplier (Rank E	ach 1-4)
		Supplier Name	Country of Headquarters	Country of N	1anufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
В	1											
	2											
	4											
	5											
		Steering & Susper	nsion Systems	Total OESs:				Reason	for Preferring	Supplier (Rank E	ach 1-4)	
		Supplier Name	Country of Headquarters	Country of N	Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
С	2											
	3											
	4											
	5											
		Advanced B	atteries		Total OESs:				Reason	for Preferring	Supplier (Rank E	ach 1-4)
		Supplier Name	Country of Headquarters	Country of N	Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
D	2											
	3											
	4											
	5											
		Fuel Manageme	ent Systems		Total OESs:				Reason	for Preferring	Supplier (Rank E	Each 1-4)
	1	Supplier Name	Country of Headquarters	Country of N	/lanufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
Ε	2											
	3											
	4											
	5		DIICINIC	SS CONFIDENTIAL	- Der Section 70	5(d) of the Det	fence Droduction	Act				
			BUSINE	33 CONFIDENTIAL	rei section /0:	Juj of the Dei	ense Production	ALL				

### 5c: Supply Chain

For each type of auto part input, identify the total number of Original Equipment Suppliers (OESs) from which your organization sourced parts in 2017, and list the top five OESs by supplier name, country of headquarters, country of part manufacture, whether the OES is affiliated with your organization (5% or more shared ownership), the number of units acquired in 2017, and the value of parts acquired in 2017. Then, for each supplier rate (from 1 to 4, with 1 being Most Important and 4 being Least Important) how important price, tariffs, product availability, and performance/quality are in deciding to use this supplier.

			<u>.</u>								
	Electronics an	d Controls		Total OESs:				Reason f	or Preferring S	Supplier (Rank	Each 1-4)
	Supplier Name	Country of Headquarters	Country of Ma	anufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
Α Ξ											
3											
	Electrical S	ystems		Total OESs:				Reason f	or Preferring S	Supplier (Rank	Each 1-4)
	Supplier Name	Country of Headquarters	Country of M	anufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
В											
3											
4											
į	5										
	Braking Systems			Total OESs:				Reason f	or Preferring S	Supplier (Rank	Each 1-4)
	Supplier Name	Country of Headquarters	Country of M	anufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
c _											
3											
į	5										
	Interior Sy	vstems		Total OESs:				Reason f	or Preferring S	Supplier (Rank	Each 1-4)
	Supplier Name	Country of Headquarters	Country of Ma	anufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
D :											
3											
	Other			Total OESs:				Reason f	or Preferring S	Supplier (Rank	Each 1-4)
	Supplier Name	Country of Headquarters	Country of Ma	anufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
E											
į	5										
		BUSINES	S CONFIDENTIAL -	Per Section 705	(d) of the Def	ense Production A	Act				

### 6: Domestic and Foreign Sourcing

For each auto part type sourced and used for armored vehicle assembly in the U.S. by your organization, estimate the average percent (based on units sourced) of the parts that are manufactured in the U.S., Canada, and Mexico for each of the years 1985, 1995, 2005, and 2015. Then, provide reasons for your organization's decisions to source auto parts from foreign countries (e.g., domestic source unavailable, foreign source offers lower price, higher quality, etc.)

Part Type		Estimated Percent of Auto Parts Manufactured in the U.S.			Estimated Percent of Auto Parts Manufactured in Canada			Estimated Percent of Auto Parts Manufactured in Mexico				Explanation and Reasons for Sourcing from Outside th U.S., Canada, or Mexico	
	1985	1995	2005	2015	1985	1995	2005	2015	1985	1995	2005	2015	
Engines - 4 Cylinder													
Engines - 6 Cylinder													
Engines - 8 or More Cylinder													
Transmissions - 7 or Fewer Gears													
Transmissions - 8 or More Gears													
Bodies and Frames													
Drive Components													
Steering & Suspension Systems													
Advanced Batteries													
Fuel Management Systems													
Electronics and Controls													
Electrical Systems													
Braking Systems	ing Systems												
Interior Systems													
Other													
	•		•	BUSINES	CONFIDE	NTIAL - Pe	r Section	705(d) of t	ne Defens	Producti	on Act	•	

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				7: Joint V	entures and Fore	eign Trade Zones							
					Joint Vent	ures							
	From 2013 - Q2 2018 design, and R&D, incl	, record the tota uding public/pri	al number of joint ventures ar ivate partnerships, in which yo	nd other business partnersh our organization participate	ips related to arn d.	nored vehicle assembly, dev	elopment &						
			Identify your organizatio	n's 10 most recent joint ven	ture relationship	s, including any other type	of public/priv	ate R&D part	nerships.				
	Partner Organiz Partnership Ent	zation and tity Name	% of Shares Held by Partner Organization	Country of JV/Partnership	Year Initiated	Primary Work Scope	Primary P	urpose of Re	lationship		Explain		
	1												
	3												
	4												
	5												
١.	6												
Α	7 8												
10													
	11												
	12												
	13												
	14 15												
	16												
	17												
	18												
	19												
	20												
				U	.S. Foreign Trade	Zones (FTZs)							
	In how many U.S. FTZs does your organization produce or admit vehicles?												
If one or more, describe the locations and nature of your organization's vehicle U.S. FTZ operations, then identify the number of units produced in U.S. FTZs, as well as the number ultimately entered from U.S. FTZ into the U.S. stream of commerce each year.									U.S. FTZs				
В							2013	2014	2015	2016	2017	2018	
	FTZ Operation Location and Description:				Units Produced in FTZs								
						Units Entered into U.S. Commerce							
				BUSINESS CONFIDENTIAL	- Per Section 705	(d) of the Defense Product	ion Act						

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	8: U.S. Em	oloyment				
From 2013 - Q2 2018, record your organization's annual Total Full Time Edevelopment, and R&D activities. Then record the same data for each oc		es in the United St	ates involved in armor	ed vehicle manuf	acture, assembly, p	product design and
	2013	2014	2015	2016	2017	2018 Jan-Jun
Total FTE Employees in the U.S.						
Average Weekly Hours Worked by FTE Employees						
Administrative, Management, and Legal Staff						
Engineers, Scientists, and R&D Staff						
Information Technology/Cybersecurity						
Marketing and Sales						
Production Line Workers						
Testing Operators, Quality Control, and Support Technicians						
Does your organization have difficulty hiring and/or retaining its armored						
Estimate the percentage of your employees involved in armored vehicle automotive industry (i.e., have previous experience working for automak	production that have bed ers or auto parts supplie	en directly recruite rs).	d from or have a back	ground in the		
For each occupation category, specify the kind of difficulty your organizar primary reason for unfilled vacancies. Explain your response.	tion faces, number of cu	rent unfilled vacar	ncies, average length c	of time positions r	emain unfilled (in v	veeks), and
	Difficulty	Number of Vacancies	Average Weeks Vacant		Explanation	
Administrative, Management, and Legal Staff						
Engineers, Scientists, and R&D Staff						
Information Technology/Cybersecurity						
Marketing and Sales						
Production Line Workers						
Testing Operators, Quality Control, and Support Technicians						
Comments						
BUSINESS CON	FIDENTIAL - Per Section	705(d) of the Defe	ense Production Act			

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			9: Competi	tion and Demand Trends							
	vehi			l within the United States and outside of the United Sta rends and describe the principal factors that have affect							
Α		Market	Overall Change	Explanation and Factors							
		Within the United States									
		Outside the United States									
	Hov with	has import competition affected respect to the production of arn	d your U.S. manufactu nored vehicles from 20	ring operations, sales, employment, planned expansion 013 to Q2 2018. Please be as specific as possible.	s, investments, etc.						
	From 2013 to Q2 2018, has your organization experienced any negative effects on its return on investment or its growth, investment, ability to raise capital, existing development and production efforts, or the scale of capital investments as a result of imports of armored vehicles into the United States? Indicate Yes/No to the right and explain below.										
В.	explain below.  Does your organization anticipate any negative effects on its business due to future imports of armored vehicles										
		the United States? Indicate Yes/									
	Describe the top 5 largest challenges to the competitive position of your organization in the global armored vehicles market.										
	1										
	2										
	3										
	4										
	5										
		cribe the top 5 largest challenges	to the competitive po	sition of your organization in the U.S. armored vehicles	market.						
	1	, , ,		, ,							
	2										
	3										
	4										
	5										
С	Des	cribe the top 5 barriers to armore	ed vehicles innovation	for your organization in the global market.							
	1										
	2										
	3										
	4										
	5										
		cribe the top 5 barriers to armore	ed vehicles innovation	for your organization in the U.S. market.							
	1										
	2										
	3										
	4										
	5										
		BUSINESS	CONFIDENTIAL - Per	Section 705(d) of the Defense Production Act							

# 10a: Research & Development

From 2013 - Q2 2018, report your organization's Global and U.S. R&D dollar expenditures and report the listed component expenditures on a percentage basis. Also report your organization's global and U.S. R&D funding sources on a dollar basis and component expenditures on a percentage basis.

		Record \$ in Th	ousands, e.g.	\$12,000.00 =	survey input of	f \$12	
		2013	2014	2015	2016	2017	2018 Jan - Jun
	1 Total Global R&D Expenditures						
	2 Total Global Armored Vehicle R&D Expenditures						
Α	a Global Autonomy R&D (as a % of A2)						
	b Global Connectivity R&D (as a % of A2)						
	c Global Electrification R&D (as a % of A2)						
	d Global Lightweighting R&D (as a % of A2)				2%		
	e Other (as a % of A2) (specify here)						
		2013	2014	2015	2016	2017	2018 Jan - Jun
	1 Total U.S. R&D Expenditures						
	2 Total U.S. Armored Vehicle R&D Expenditures						
В	a U.S. Autonomy R&D (as a % of B2)						
	b U.S. Connectivity R&D (as a % of B2)						
	c U.S. Electrification R&D (as a % of B2)						
	d U.S. Lightweighting R&D (as a % of B2)						
	e Other (as a % of B2) (specify here)						
		2013	2014	2015	2016	2017	2018 Jan - Jun
	1 Total Global R&D Funding Sources						
	a Internal/Parent Company (as a % of C2)						
	b U.S. Federal Government (as a % of C2)						
С	c State and Local Government (as a % of C2)						
	d U.S. Private Equity (includes industry and university) (as a % of C2)						
	e Foreign Government (as a % of C2)						
	f Foreign Non-Government (as a % of C2)						
	g Other (as a % of C2) (specify here)						
	2 Total of a-g (must equal 100%)	0%	0%	0%	0%	0%	0%
		2013	2014	2015	2016	2017	2018 Jan - Jun
	1 Total U.S. R&D Funding Sources						
	a Internal/Parent Company (as a % of D2)						
	b U.S. Federal Government (as a % of D2)						
D	c U.S. State and Local Government (as a % of D2)						
	d U.S. Private Equity (includes industry and university) (as a % of D2)						
	e Foreign Government (as a % of D2)						
	f Foreign Non-Government (as a % of D2)						
	g Other (as a % of D2) (specify here)						
	2 Total of a-g (must equal 100%)	0%	0%	0%	0%	0%	0%
	BUSINESS CONFIDENTIAL - Per Section 70:	(d) of the Defe	nse Productio	n Act			

evio	us Page	10b	: Research & Development (Co	ntinued)	Next Page						
	For each technology listed bel location of the R&D, list of all	ow, identify your firm's top fiv		or private, in terms of overall R&	D expenditures, provide the primary						
			Autonomy								
	Partner Name	Global Headquarters	Primary Location of R&D	List of Countries R&D Carried Out In	Explanation of R&D						
1											
2											
3											
5											
-			Connectivity								
	Partner Name	Global Headquarters	Primary Location of R&D	List of Countries R&D Carried Out In	Explanation of R&D						
3 1											
3											
4											
5											
Electrification											
	Partner Name	Global Headquarters	Primary Location of R&D	List of Countries R&D Carried Out In	Explanation of R&D						
. 1											
2											
4											
5											
			Lightweighting								
	Partner Name	Global Headquarters	Primary Location of R&D	List of Countries R&D Carried Out In	Explanation of R&D						
$\frac{1}{2}$											
3											
4											
5											
	om 2013 to Q2 2018, describe in sent those constraints.	n detail constrains on global R&	&D activities (for example, inade	equate revenue), and explain add	ditional R&D activities that would occur						
	om 2013 to Q2 2018, describe in sent those constraints.	n detail constraints on U.S. R&	D activities (for example, inaded	quate revenue), and explain addi	tional R&D activities that would occur						
		BI ISINESS CONFIDEN	ITIAL - Per Section 705(d) of the	Defense Production Act							

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11: Economic Downt	urn Information								
Provide the following data estimates for your organization's U.S. activi should pertain to your manufacturing, assembly, and sales of armored the same basis as the data provided in Section 3 of this survey. Dollar f	vehicles. The prof	it/loss data you p	provide in this tab						
	2007	2008	2009	2010					
Gross Profit/Loss (\$1,000)									
Operating Income/Loss (\$1,000)									
Net Income/loss before income taxes (\$1,000)									
A Total U.S. sales quantities of armored vehicles (units)									
Total U.S. sales values of armored vehicles (\$1,000)									
Total COGS for U.S. sales of armored vehicles (\$1,000)									
R&D spending (\$1,000)									
Capital Expenditure spending (\$1,000)									
Amount of assistance received from related companies in U.S. or abroad (specify company name and country) (\$1,000)									
Amount of assistance received from government entities in U.S. or abroad (specify entity name and country) (\$1,000)									
During the global economic downturn in 2007 – 2010, describe cutbac percentage of decline in global R&D expenditures compared to 2004-2		pending, if any, by	y R&D activity typ	e and the					
During the global economic downturn in 2007 – 2010, describe cutbac percentage of decline in U.S. R&D expenditures compared to 2004-200 C		nding, if any, by F	R&D activity type	and the					
During the global economic downturn in 2007 – 2010, describe cutbac percentage of decline in global capital expenditures compared to 2004		spending, if any,	by capital activity	y type and the					
	During the global economic downturn in 2007 – 2010, describe cutbacks in U.S. capital spending, if any, by capital activity type and the percentage of decline in U.S. capital expenditures compared to 2004-2006								
BUSINESS CONFIDENTIAL - Per Section 7	05(d) of the Defen	se Production Ac	et .						

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		Section 12a: Support of U.S. Government (USG) - Agencies		
		ts and agencies your organization has supported, directly or indire n indicate the primary type of product associated with this suppor		s - Q2 2018
		Agency Name	Support	Primary Type of Support
	U.S. Air Force (USAF)			
	U.S. Army			
	U.S. Navy			
	U.S. Marine Corps (USMC)			
	U.S. Department of Energy (DOE)			
Α	U.S. Department of Homeland Secur			
	U.S. Department of State			
	U.S. DOD Defense Advanced Research	ch Projects Agency (DARPA)		
	U.S. DOD Missile Defense Agency (M	IDA)		
	U.S. Intelligence Community (e.g. Cl	A, NGA, NRO, NSA, DNI, etc.)		
	National Aeronautics and Space Adm	ninistration (NASA)		
	Other Agency	(specify here)		
	Other Agency	(specify here)		
	Other Agency	(specify here)		
	Comments:			

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	12b: Global and	Defense Activities
	-Yes/No-	Explain
Has your organization ever designed, developed, or manufactured, individually or in collaboration with other private or government partners, any product specifically for military purposes?		
Does your organization currently design, develop, or manufacture, individually or in collaboration with other private or government partners, any product specifically for military purposes? If your organization has previously done so but no longer does, provide an explanation for the reasons for the change.		
C Does your organization sell any products directly to a U.S. defense agency?		
D Does your organization sell any products directly to a foreign defense agency?		
Indicate whether your organization performs any R&D that is funded by or E in cooperation with a U.S. government agency, then describe all such activities.		
Indicate whether your organization performs any R&D that is funded by or F in cooperation with a foreign government agency, then describe all such activities.		

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# 12c: Advanced Technology

From your organization's perspective, for the technologies listed below, rank their importance to the development of future armored vehicle products over the next 10 years for each of the vehicle types described

Advanced Technical Services and	Current Level of R&D	Importance		
Advanced Technology Requirements	Investment	Conventional Vehicles	Electric Vehicles	Autonomous Vehicles
1 Advanced Electric Drive - Motor				
2 Advanced Electric Drive - Transmission				
3 Advanced Batteries				
4 Hydrogen Fuel Cells				
5 Battery Management Systems				
6 Power Electronics				
7 Power Generating Shock Absorbers				
8 Improved Regenerative Braking Systems				
9 Collision Avoidance Systems - LIDAR				
10 Collision Avoidance Systems - Radar				
11 Directional Mapping/Global Positioning				
12 Guidance Sysems				
13 Jam-Resistant Dedicated Short-Range Communications (DSRC) technology				
14 Vehicle-to-Vehicle Communications				
15 Automotive Electromagnetic Interference Filters				
16 Advanced Microprocessors Availability				
17 Sensor Fusion Integrated Electronics				
18 High-Fidelity Antennas				
19 Integrated Braking and Steering Control Systems				
20 Lightweighting				
21 Sensor Systems - Light Detection and Ranging (LIDAR) detection and ranging,				
22 Sensor Systems - Other Optical				
23 Sensor Systems - Other Radar				
24 Sensor Systems - Discriminating Directional Sensors				
25 Sensor Systems - Object Recognition/Vehicle Recognition				
26 Sensor Systems - Driver Behavior/Human Factors				
27 Software & Algorithm Tools				
28 Systems Simulation Tools				
29 Power Electronics Simulation Software				
30 Software Validation Tools				
31 Other				
32 Other				

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13: Certification					
knowledge. It is a criminal offense to willfully m Government as to any matter within its jurisdict	ey, save a copy and submit it via email to <a href="mailto:autos232@doc.gov">autos232@doc.gov</a> . Be sure to retain your survey for your				
BIS Survey Website	https://www.bis.doc.gov/autos232				
Organization Name					
Organization's Internet Address					
Name of Authorizing Official					
Title of Authorizing Official					
E-mail Address					
Phone Number and Extension					
Date Certified					
In the box below, provide any additional comme	ents or any other information you wish to include regarding this survey assessment.				
How many hours did it take to complete this sur	vey?				
BUSINESS CONFIDENTIAL - Per Section 705(d) of the Defense Production Act					