



**CLUSTER
OF AUTOMOTIVE
INDUSTRY OF SAMARA
REGION**



**Cluster activities.
Localization and suppliers development.**

Cluster key indicators



>50 000
personnel of Cluster
members



>300
bln. roubles
turnover of
Cluster members



66
Cluster members



>14%
GRP of region is
generated by Cluster

10

OEMs

>50

Engineering
companies

Partners

>150

Suppliers

26

Regions

Members and Cluster geography



CLUSTER INFRASTRUCTURE



CLUSTER OF AUTOMOTIVE INDUSTRY OF SAMARA REGION:

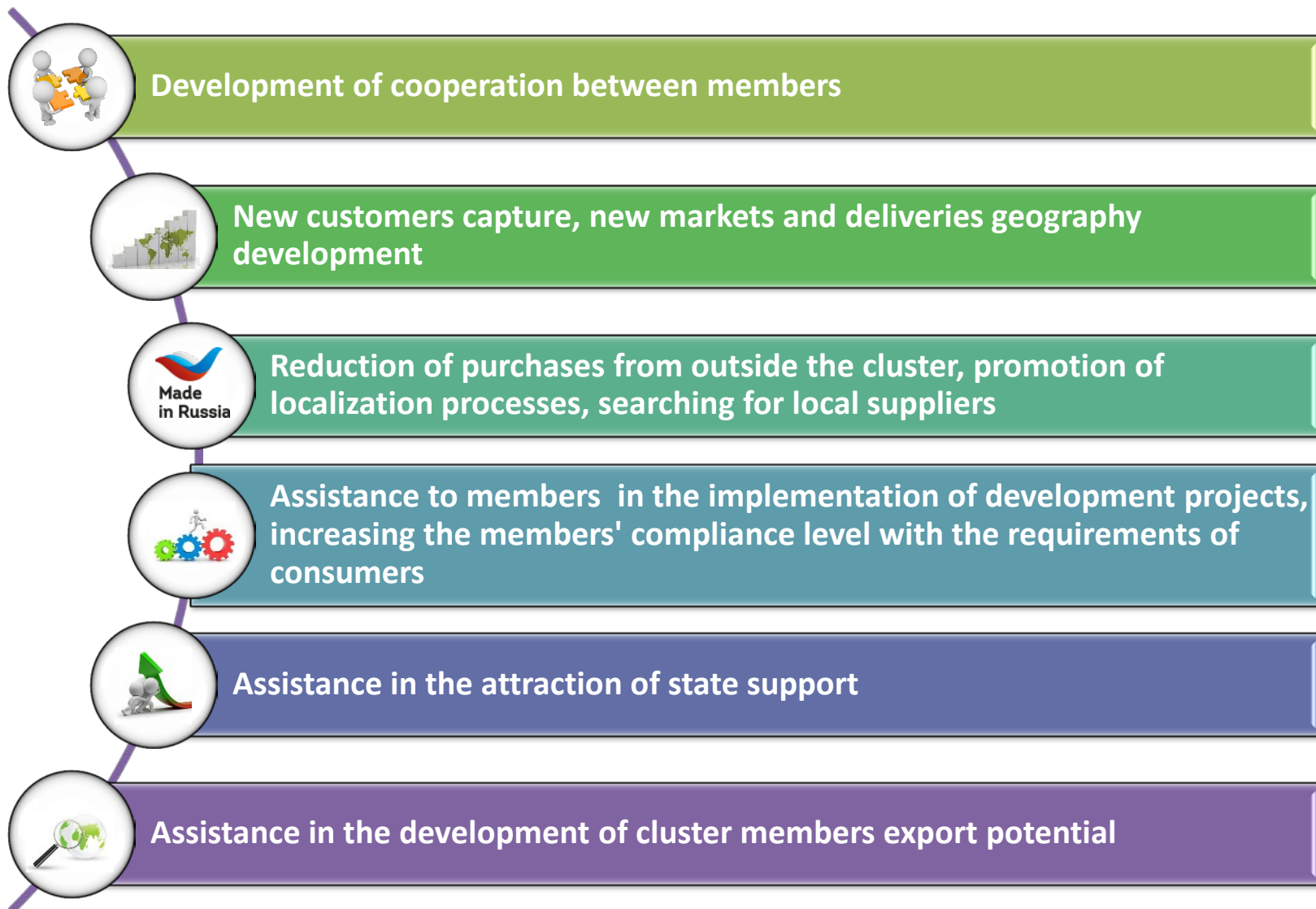
- 59 industrial enterprises – members of the cluster
- 3 technological infrastructure places
- 2 financial infrastructure places
- 3 industrial infrastructure places
- 2 research, development and training institutions



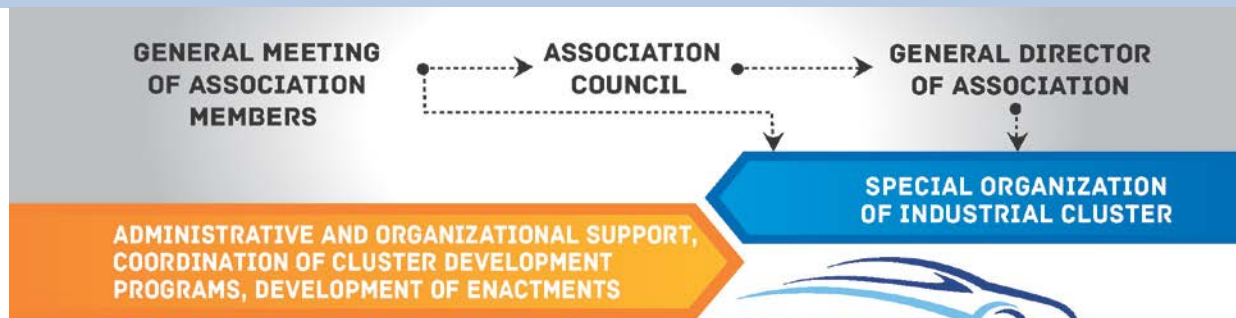
EXECUTIVE AUTHORITIES



Cluster main goals



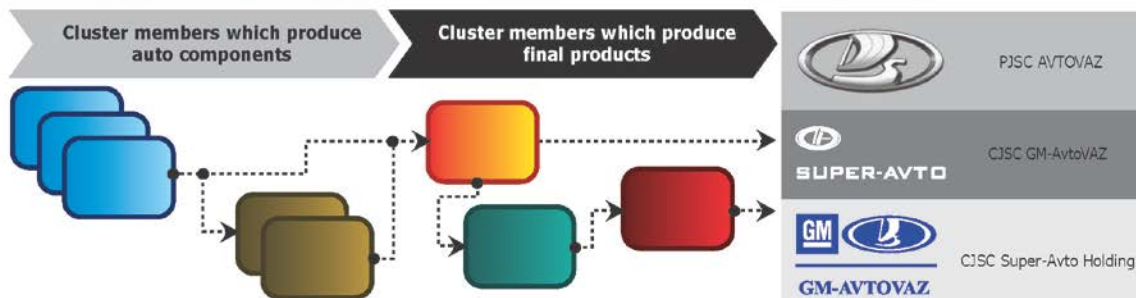
Cluster organizational map



PARTICIPATION IN DECISION-MAKING, REPORTING, DOCUMENTATION

METHODICAL, ORGANIZATIONAL, EXPERT, ANALYTICAL AND INFORMATION SUPPORT

MANUFACTURING OF INDUSTRIAL PRODUCTS



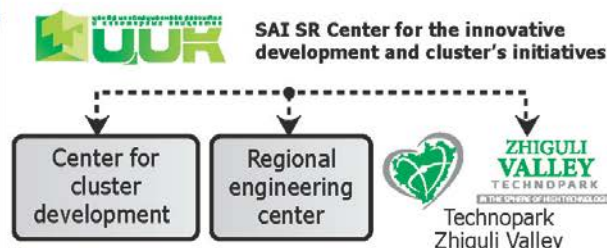
INDUSTRIAL INFRASTRUCTURE



SCIENTIFIC RESEARCH, R & D, TRAINING AND STAFF DEVELOPMENT



TECHNOLOGICAL INFRASTRUCTURE



FINANCIAL ORGANIZATION



Industrial cluster of the Russian Federation
















The Cluster was included in the Federal Register of the Russian industrial clusters (*PPRF of 31.07.2015 № 779*).



The Cluster has the opportunity to participate in program of state support of joint projects for the development of production and import substitution (*PPRF of 28.01.2016 № 41*).

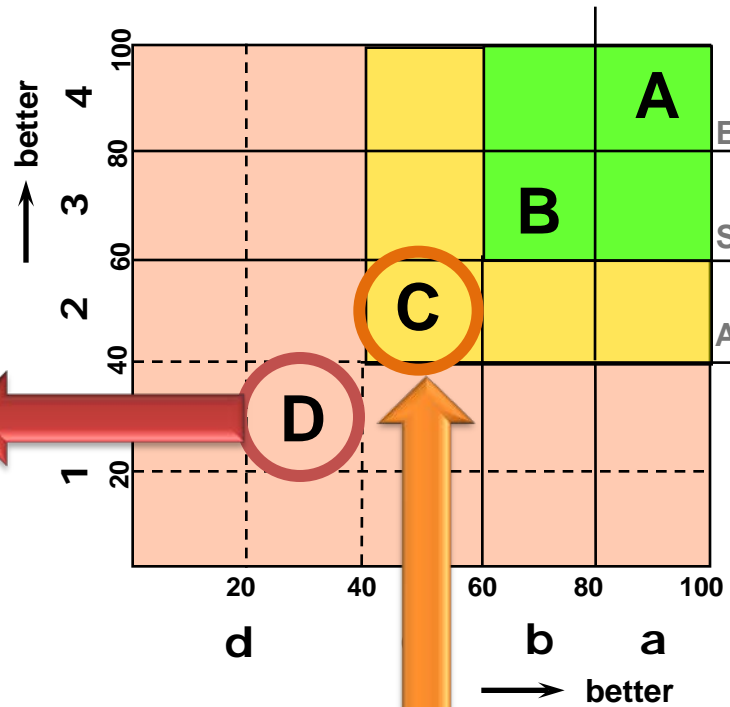


Supplier development tools

	Q	C	D	D	M
Training					
Support while integrating Renault-Nissan requirements					
Engineering center – solution of engineering tasks and training					
Support for the introduction of cost-management tools, loss reduction					
Attracting new customers					
Attraction of recourses for development					

Supplier development (from lowest D to acceptable C)

AVTOVAZ-Renault-Nissan
 Cluster



ASES result rank

Excellent (80-100) Good
 Satisfactory (60-79)
 Acceptable (40-59) Improvements are needed
 Does not meet requirements

More than
20
 suppliers received rank
 «C»

Realization of suppliers self - assessment

Selection of supplier group according to results

ASES-audit of selected suppliers

Recommendations according to ASES-audit

ASES re-audit

Implementation of action plan and improvements

Development of action plan according to ASES results

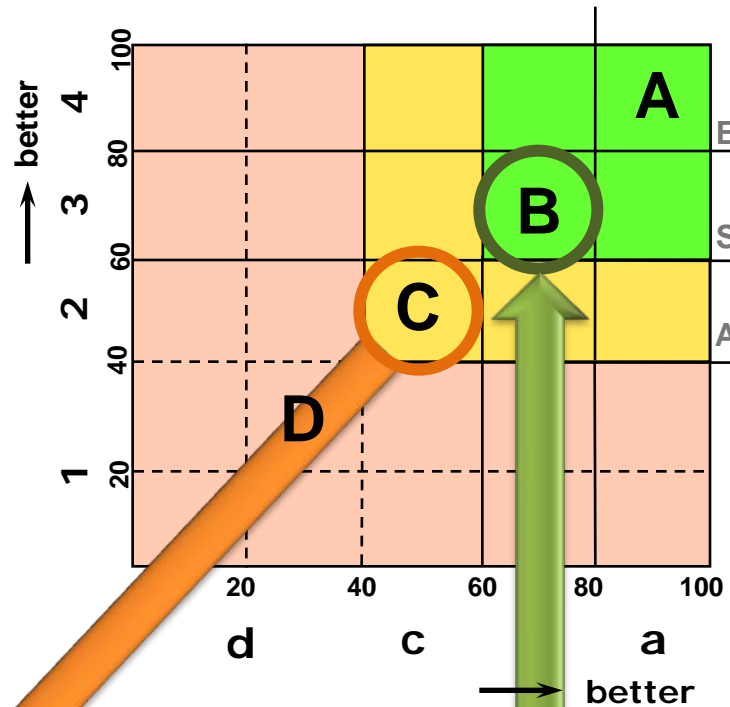
Training and seminars

Monitoring

Supplier development (C→B)

AVTOVAZ-Renault-Nissan
 Cluster

7
 suppliers received
 rank «B»
4
 suppliers
 in progress



ASES result rank

Good
Improvements are needed
Does not meet requirements

Repeated ASES- audit

Implementation of action plan and improvements

Development of action plan according to ASES results

Recommendations according to ASES-audit

Training and seminars

Monitoring

Cluster: support of supplier development



Training and professional development
Support for certification
Support for implementation of customer requirements (ASES, etc.)



Assistance in the solution of engineering tasks
Development of QMS and production system
Reducing losses, support while implementing lean manufacturing and Monozukuri



B2B, business missions
Searching the orders and attracting new customers
Assistance in obtaining state support

Cluster training center

Creation of training center



2016

Obtaining a license for educational activities

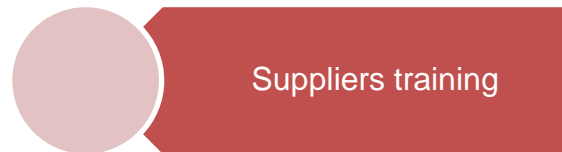


2017

Expansion and participation in tenders for new projects



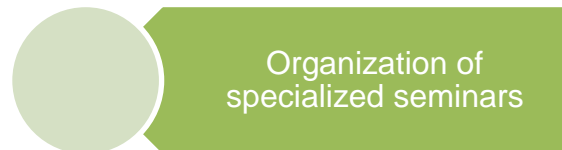
2018



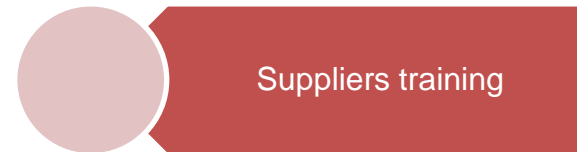
Suppliers training



Participation in the program of advanced training for AVTOVAZ employees



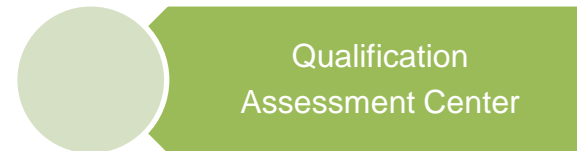
Organization of specialized seminars



Suppliers training



Organization of specialized trainings



Qualification Assessment Center

Cluster training center: competencies

Development and implementation of quality management system in automotive industry in accordance with IATF 16949:2016 and OEM requirements

- | | |
|---|--|
| 1 | Changes in IATF 16949: 2016 requirements and implementation practices |
| 2 | IATF 16949: 2016 requirements and implementation practices. ISO 9001: 2015 requirements |
| 3 | 1st and 2nd parties audits in accordance with IATF 16949: 2016, ISO 19011: 2011 requirements |
| 4 | IATF 16949: 2016 requirements and implementation practices. 1st and 2nd parties audits in accordance with IATF 16949: 2016, ISO 19011: 2011 requirements |

Core tools in automotive industry

- | | |
|----|--|
| 5 | Advanced Product Quality Planning in accordance with AIAG APQP. Basics of the project approach. Production Part Approval Process (PPAP). Customer requirements to new product development management and change management |
| 6 | ANPQP procedure |
| 7 | Failure Mode and Effects Analysis (FMEA) |
| 8 | Evaluation of the technological concept of the product based on DFMA. Failure Mode and Effects Analysis (FMEA). Management of special and key characteristics. |
| 9 | Failure Mode and Effects Analysis (FMEA)
Design and Process FMEA (DFMEA / PFMEA) |
| 10 | Statistical Process Control (SPC) and Measurement System Analysis (MSA) |
| 11 | Introduction in statistical quality control methods and statistical process control. How to control variability of key characteristics |
| 12 | Problem Solving Process 8D. Methods for investigating the root causes of quality problems |
| 13 | Methods for investigating the root causes of quality problems QC-story, QRQC. Analysis and managing data |
| 14 | Product and process management tools |
| 15 | Quantitative methods for improving processes. 6 Sigma. |
| 16 | Basic quality tools |
| 17 | Customer requirements analysis and Quality
Function Deployment (QFD) methodology, Quality Assurance Matrix (MQA) |
| 18 | Risk management |

Management system development

- | | |
|----|--|
| 19 | ISO 9001: 2015. Quality management systems. Requirements. Development, implementation, maintenance and continuous improvement. |
| 20 | Retraining of quality management system internal auditors in accordance with ISO 9001: 2015, ISO 19011: 2011 requirements |
| 21 | Internal audit in accordance with ISO 9001: 2015, ISO 19011: 2011 requirements |
| 22 | ISO 9001: 2015 requirements and implementation practices. Internal audit in accordance with ISO 9001: 2015, ISO 19011: 2011 requirements |
| 23 | Project management |
| 24 | Knowledge management as a tool for problem solving and achieving organizational goals |
| 25 | From interested parties - to KPI system (Key Performance Indicators) |
| 26 | Supply Chain Management |
| 27 | Management by objectives, KPI, BSC, motivation |

Production system development. Cost management. Loss reduction. Lean Manufacturing Tools.

- | | |
|----|---|
| 28 | Effective production systems. Development of lean management system |
| 29 | TPM (Total Productive Maintenance). SMED system |
| 30 | Practice of 5S implementation, visualization, standardization |
| 31 | Practice of value stream mapping, analysis and improvement |
| 32 | Enterprise cost reduction using Lean, LeanLogistics, LeanCost methodology |

VALEO supplier day

VALEO supplier day – 25-th of April 2018

Objectives:

- Looking for new potential local suppliers
- Presentation of VALEO and its plants
- Optimization of purchase costs
- Clarification of VALEO requirements to suppliers and principles of cooperation
- Reduction of import content



**Participants: 49 suppliers from RF
and Belarus, 77 people
54 B2B spent**



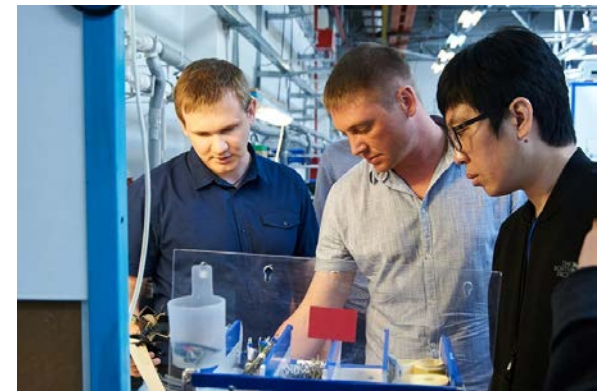
HYUNDAI supplier days in Samara region

Hyundai supplier days – May 22-23, 2018

Objectives:

- Looking for new potential local suppliers
- Presentation of Hyundai and its plans for localization
- Presentation of Hyundai Tier-1 local suppliers and their plans for localization
- Clarification of requirements to suppliers and principles of cooperation
- Reduction of import content

**Participants: 55 suppliers from
6 regions of RF, 99 people
81 B2B spent
30 visits to suppliers sites**



HYUNDAI supplier days in Kaluga

Hyundai supplier days – September 24-25, 2018

Objectives:

- Looking for new potential local suppliers
- Presentation of Hyundai and its plans for localization
- Presentation of Hyundai Tier-1 local suppliers and their plans for localization
- Clarification of requirements to suppliers and principles of cooperation
- Reduction of import content

**Participants: 33
suppliers from
8 regions of RF,
70 people
42 B2B spent,
16 visits to suppliers
sites**



KAMAZ and OAT supplier days

3-4 of October 2018, Togliatti

Participants:

216 people from 14 regions of RF
79 suppliers

Realized:

116 B2B for 55 suppliers
33 visits on 31 companies



Cluster organized the biggest event of auto component industry in the Samara region with the aims to

- deepen the localization of KAMAZ and OAT,
- increase the number of orders for potential suppliers
- substitute the import



HYUNDAI supplier day in Nizhniy Novgorod

Dates: 30 of October –

1st of November 2018

Location: technopark Ankundinovka



Supplier day key indicators:

- ❖ 42 suppliers from 12 regions of Russia
- ❖ around 100 participants
- ❖ 64 B2b with 34 suppliers
- ❖ 28 visits on 18 Nizhniy Novgorod companies



Assistance in obtaining state support, development of export potential

5 companies of Cluster and Samara region participated in the state program of export support



Subsidy for products transportation

01.10.2016-
30.06.2017,
mln. rub.

01.07.2017-
30.09.2017,
mln. rub.

Export
volume
mln. rub.

9,2

235,5

13,9

5,1

437,9

1,9

1,6

76

5,6

239,7

1,8

32,1

CONFIDENTIAL

| Total: >1 billion of rubles in 2017

New customers: within and outside the Cluster

New requests with Tier 1 suppliers

Cases:

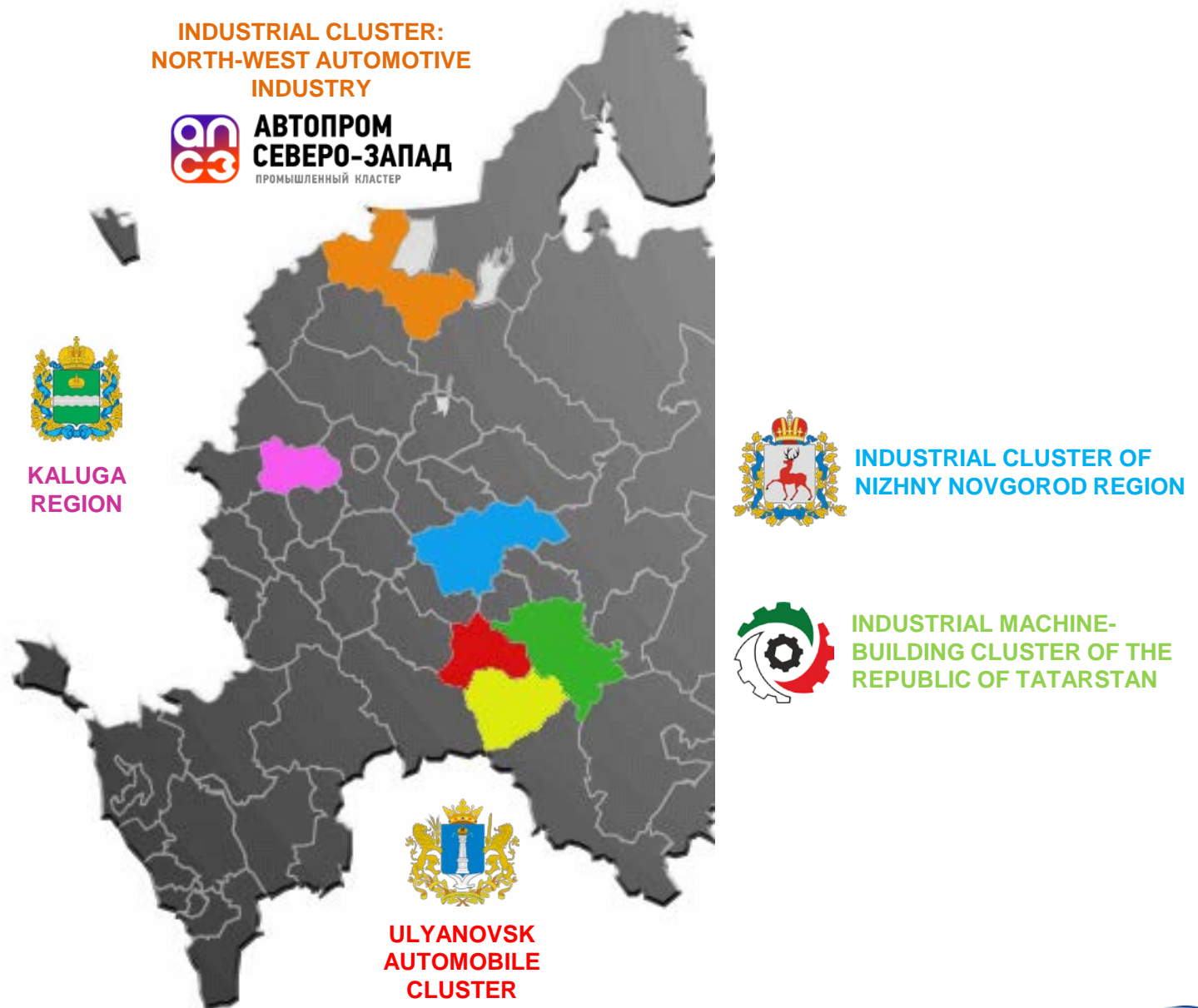


New consumers outside of the Cluster

Cases:



Cooperation with automotive clusters in Russia



Partners in the engineering field

Regional engineering center
implementation of engineering
projects and trainings



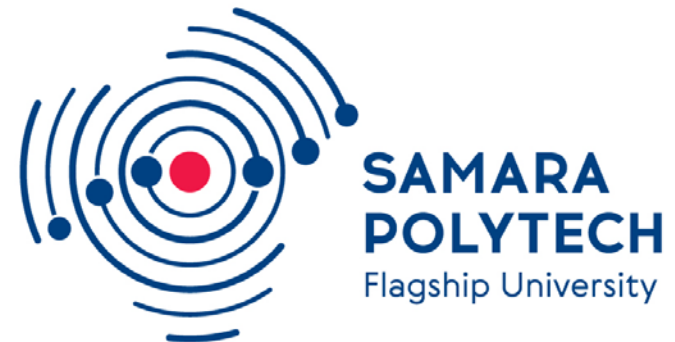
R & D, engineering, test activities



SAMARA UNIVERSITY



Engineering projects



R & D, engineering

Thank you for your attention!



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