

NAPAK

National Association of Automotive
Component Manufacturers

Development of regional and international cluster
cooperation.

Establishment of auto-industrial clusters in Russia.

November 19, 2015, Stockholm, Sweden

Automotive clusters of Russia

www.rusautoconnect.com



Automotive clusters of Russia

Cluster	Subject of Russian Federation	Key specialization	Number of members	Year of foundation
«Automotive Industry North-West»	St. Petersburg and Leningrad region	Automotive industry, automotive components production, spare parts production	15	2015
Automotive cluster of Samara region	Samara region	Automotive industry and automotive components production	28	2014
Kamskiy innovation territorial-and-production cluster	Tatarstan Republic	Automotive industry and automotive components production	51	2012
Automotive Industry cluster	Tatarstan Republic	Automotive industry and automotive components production	10	2015
Nizhnyi Novgorod industrial innovative cluster in automotive industry and petrochemical sector	Nizhnyi Novgorod region	Automotive industry and automotive components production	11	2015

Specific features of Russian automotive industry

- Presence of home full circle automotive manufacture at the time when foreign car manufacturers came into Russian market
- Presence in almost all segments of the automotive market
- High degree of vertical integration (up to 80%)
- Focusing on Home market
- Limited number of models while producing all classes of vehicles -> absence of competition as a motivation for improving quality
- Level of quality corresponding with technological level of vehicle construction
- Absence of long-term strategies of communication with suppliers: car-makers and component manufacturers exist in "parallel worlds"

Federal Act «On industrial policy in Russian Federation»

Territorial development of industry is carried out on the basis of:

- (1) Industrial parks
- (2) Industrial clusters



Decree of the Government of the Russian Federation №779 of July 31 2015 «On industrial clusters and specialized organizations of industrial clusters»



The requirements to industrial clusters for inclusion in a register of industrial clusters of a Ministry of Industry and Trade of Russia

Clusters included in a register can receive state support for realization of joint projects

Industrial cluster

1. Not less than one half of cluster members have established a specialized organization of a cluster which performs coordinating functions for joint projects of cluster members.

4. Infrastructure includes:

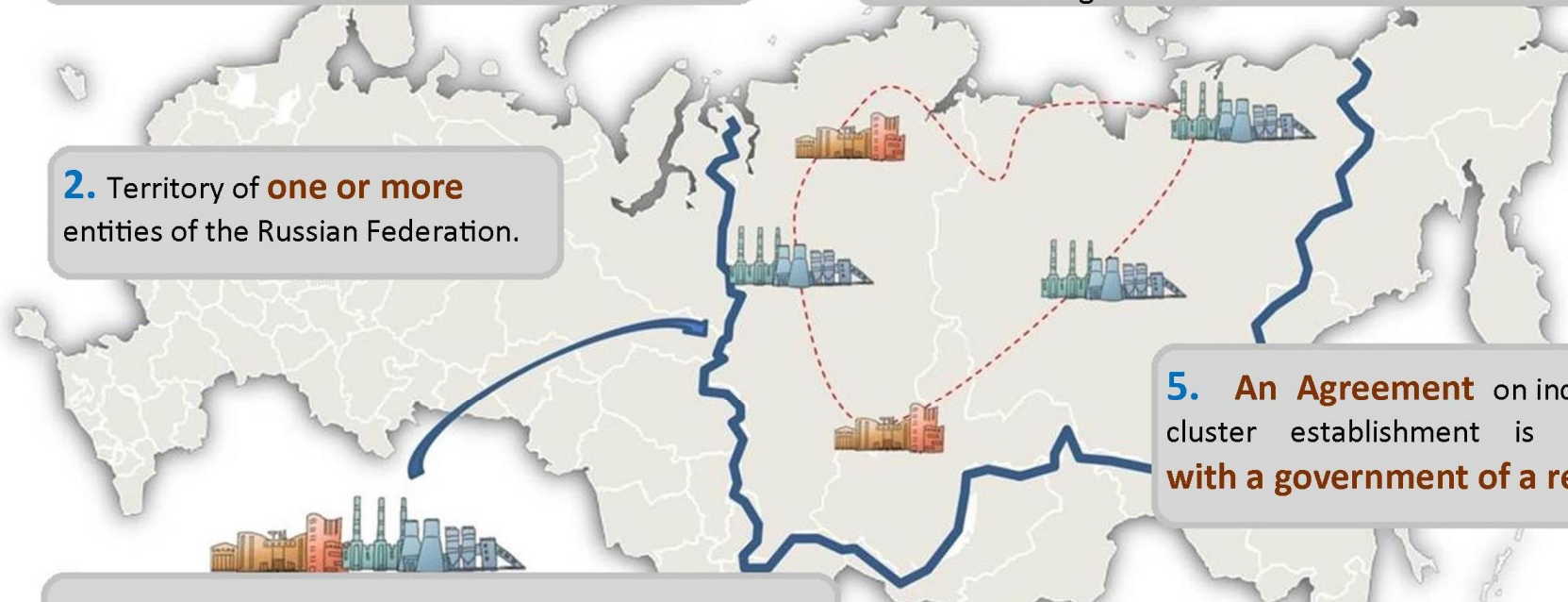
- 1** HPE or SPE institutions
- 2** objects of technological infrastructure
- 1** non-commercial or public organization
- 1** financial organization

2. Territory of one or more entities of the Russian Federation.

3. Not less than 10 members—industrial enterprises, not less than **1 member**—enterprise of a final production.

5. An Agreement on industrial cluster establishment is signed **with a government of a region**

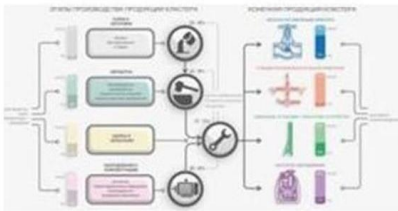
6. Cooperation rate—**not less than 50 %** of a cluster final production is used by other members (excluding enterprise of a final industrial production of a cluster)



The objective of the establishment of Industrial cluster

- 1. Reducing import components** in cluster industrial final production
- 2. Increase of share of added value** in a final industrial production of a cluster of participants
- 3. Creating of new types** of final industrial production of cluster manufactured during cooperation of members
- 4. Creating of additional high-performance job quotas** on enterprises— cluster members

key documents of a cluster
for selection



Functional map of a cluster

Cooperation of cluster members and participation in manufacturing the final industrial production of a cluster

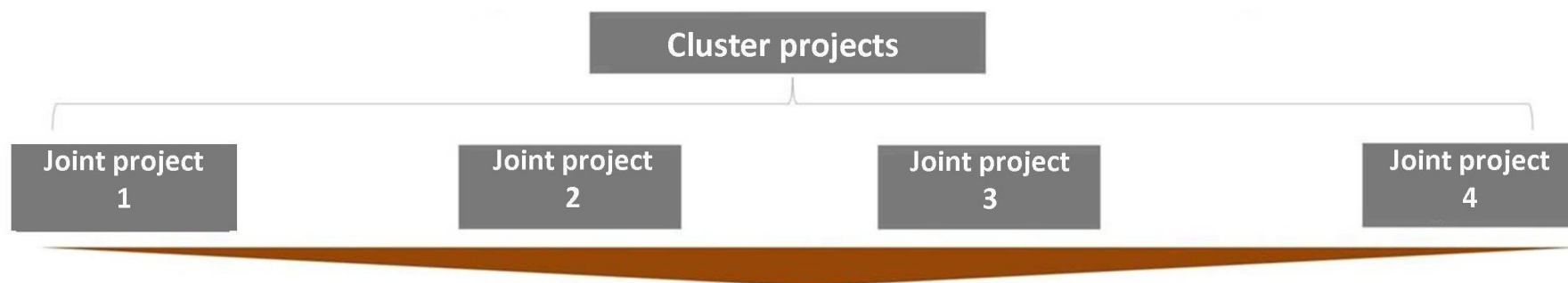


List of joint projects of cluster members



Management scheme of joint projects of cluster members and scheme of involvement cluster infrastructure in realization of joint projects and manufacturing of final industrial production of a cluster

Possible types of support of joint projects of cluster members



- 1. Co-financing of expenses**
- 2. Return financing**
- 3. Subsidies for credits rates**
- 4. Cost recovery of tax deductions in state budget**

- (1.1) Purchasing of hardware-software complexes and licensing support
- (1.2) Licensing, certification of equipment
- (1.3) Development of a system of preparation and improving the qualification of engineer technical staff
- (1.4) Process and organizational innovations of shifting enterprises to LEAN technologies, COST-management
- (1.5) Organizational, methodological and expert-analytical

R&D



Technical rearmament and purchasing equipment



Creating infrastructure



Requirements to joint cluster projects

1. Number of members of a joint project realization—
not less than 2 industrial enterprises members of industrial cluster



2. Participation in a project through own or borrowed funds in a total amount **not less than 30%**



3. Achievement as a result of a the project following objectives:

- **reducing share of import components** in the final industrial production of a cluster;

- **enhancing share of added value** produced in the final cluster production using capacities of enterprises cluster members;

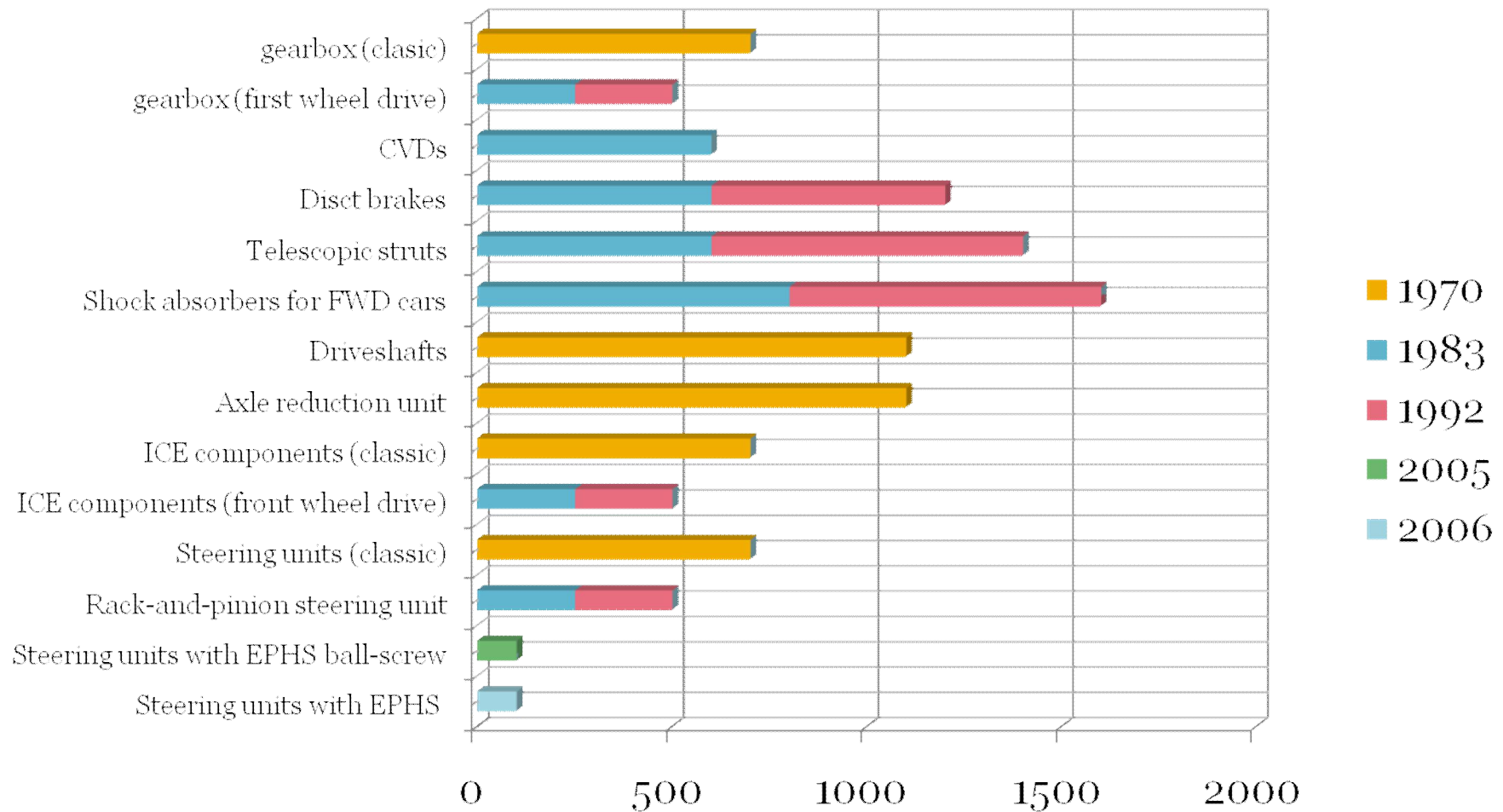


- **amount of new types** of industrial production of a cluster;

- amount of created **high-performance job quotas.**



90 % of existing production facilities for production of basic part and aggregates are worn-out and mechanically inefficient



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Annual output, pcs.	Vehicle key parts	Wearing of equipment level
1 000 000	<ul style="list-style-type: none">• ICE components, classic• Gearbox, classic• Axle reduction unit• Steering unit, classic• Drive shafts	(90-100%)
500 000	<ul style="list-style-type: none">• Gearbox for first wheel drive• ICE, first wheel drive• Rack-and-pinion steering units• Telescopic struts• Disc brake units• Shock absorbers for first wheel drive cars• CVDs	(50-70%)
200 000	<ul style="list-style-type: none">• Steering units with hydraulic amplifier• Steering units with hydraulic amplifier ball-screw	(20-30%)

Stages of Tier 1,2 component localization

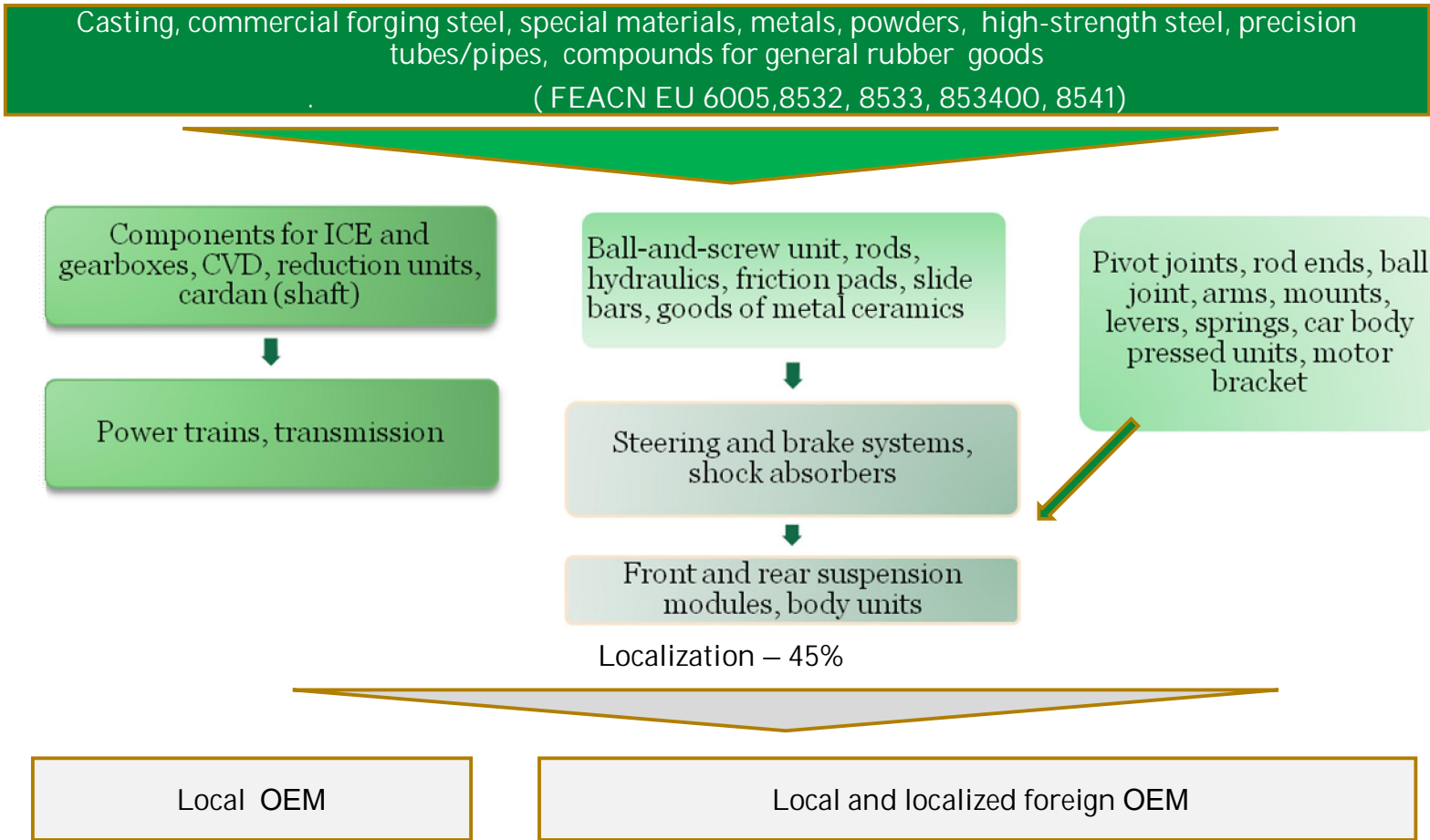
Stages	Operations
Stage 1	Assembly operations. In some cases – production of large-sized components
Stage 2	Localization of assembly units, separate components
Stage 3	Localization of materials, cast and blank forgings, semi-finished products

In accordance with effective legislative acts (Decree No. 166 of the Government of the Russian Federation, the Procedure defining the concept of “industrial assembly” of units and aggregates as amended on 21.11.2010) investor companies implementing projects on production of automotive components must provide the following level of localization (added value percentage):

- not less than 15% by 31.12.2014;
- not less than 30-45% from 2015 to 2018 (depending on group of components)

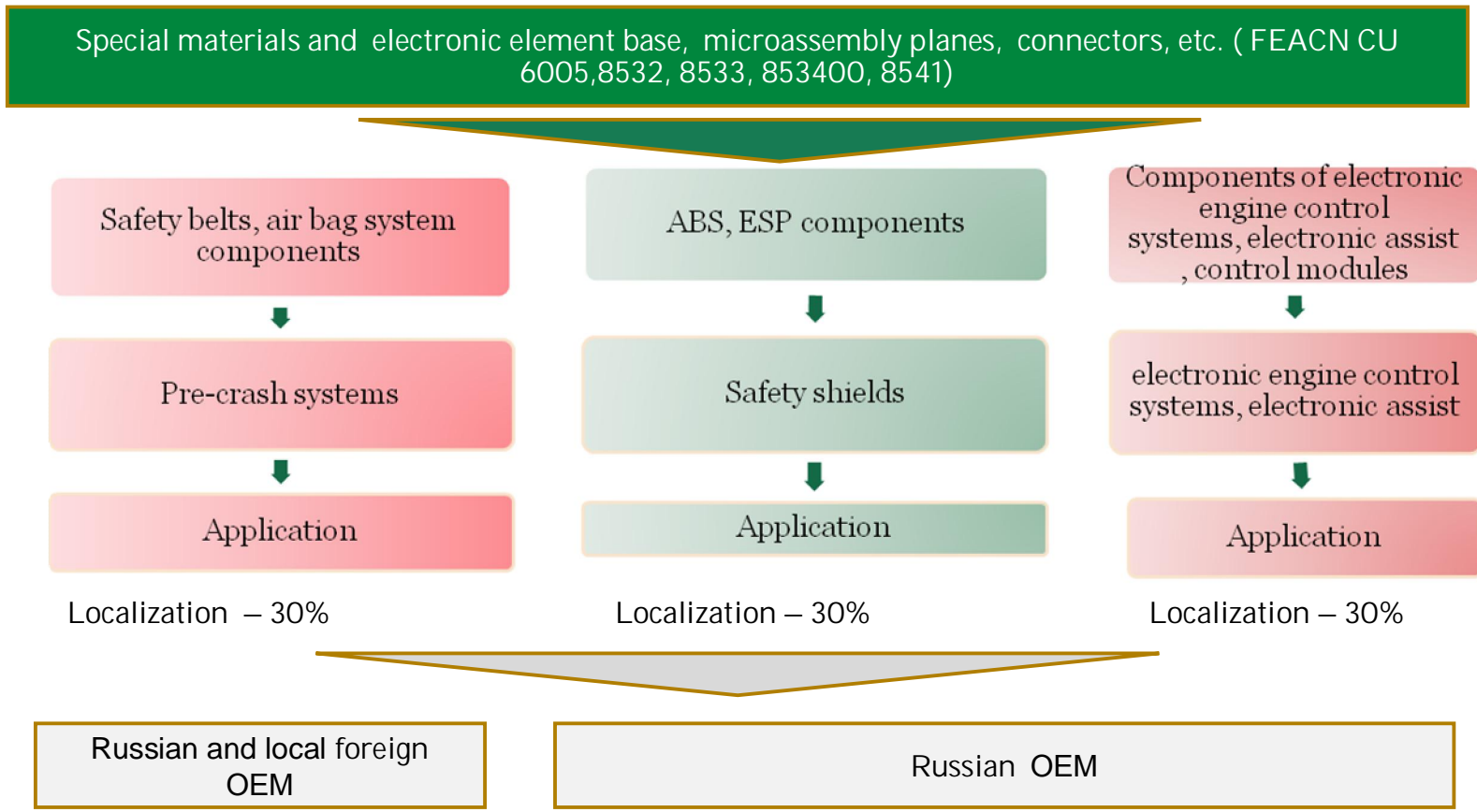
Typical localization stages as per groups

Group: engines, their units and aggregates



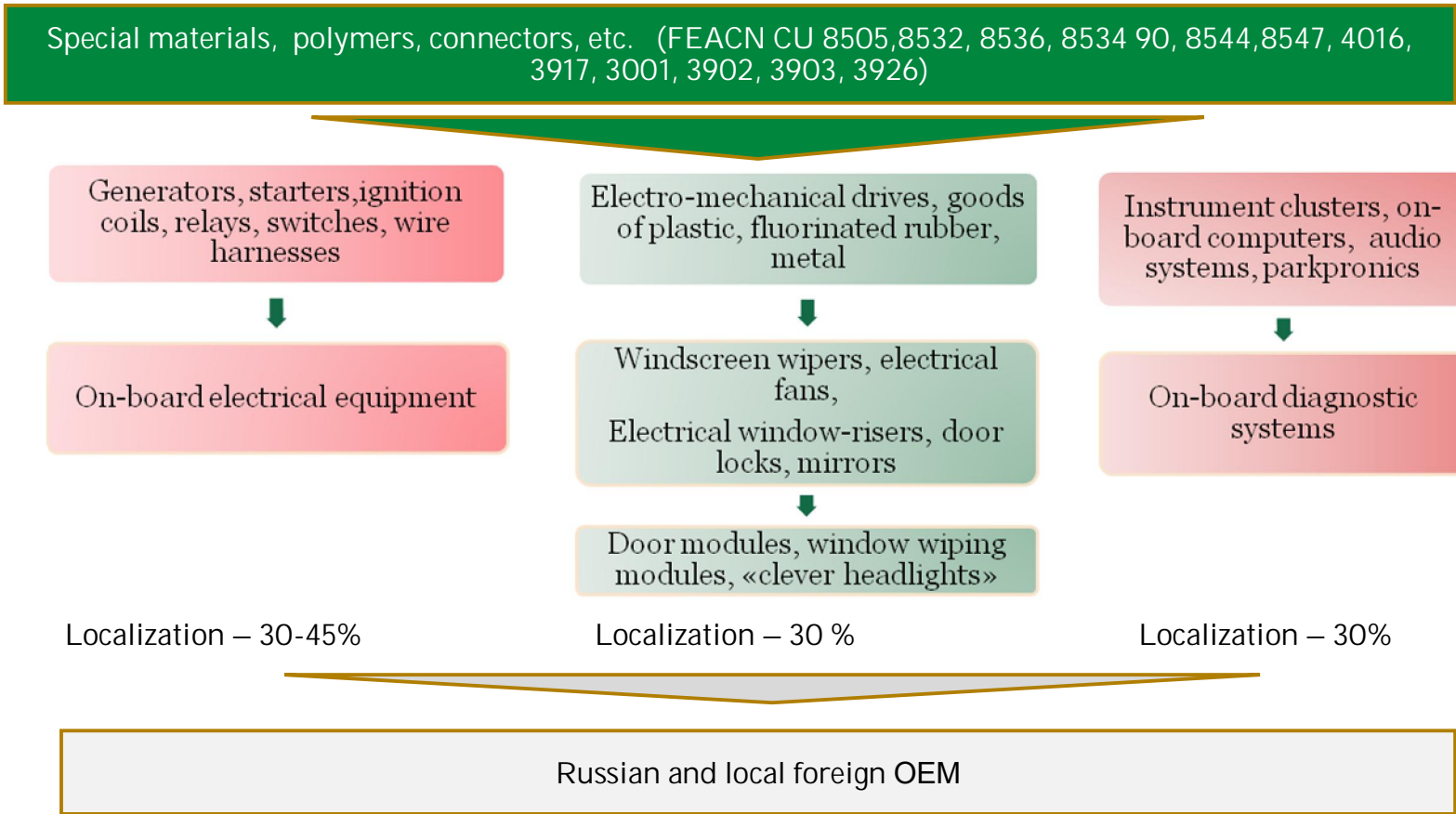
Typical localization stages as per groups

Safety shields and pre-crash systems, electronic control systems

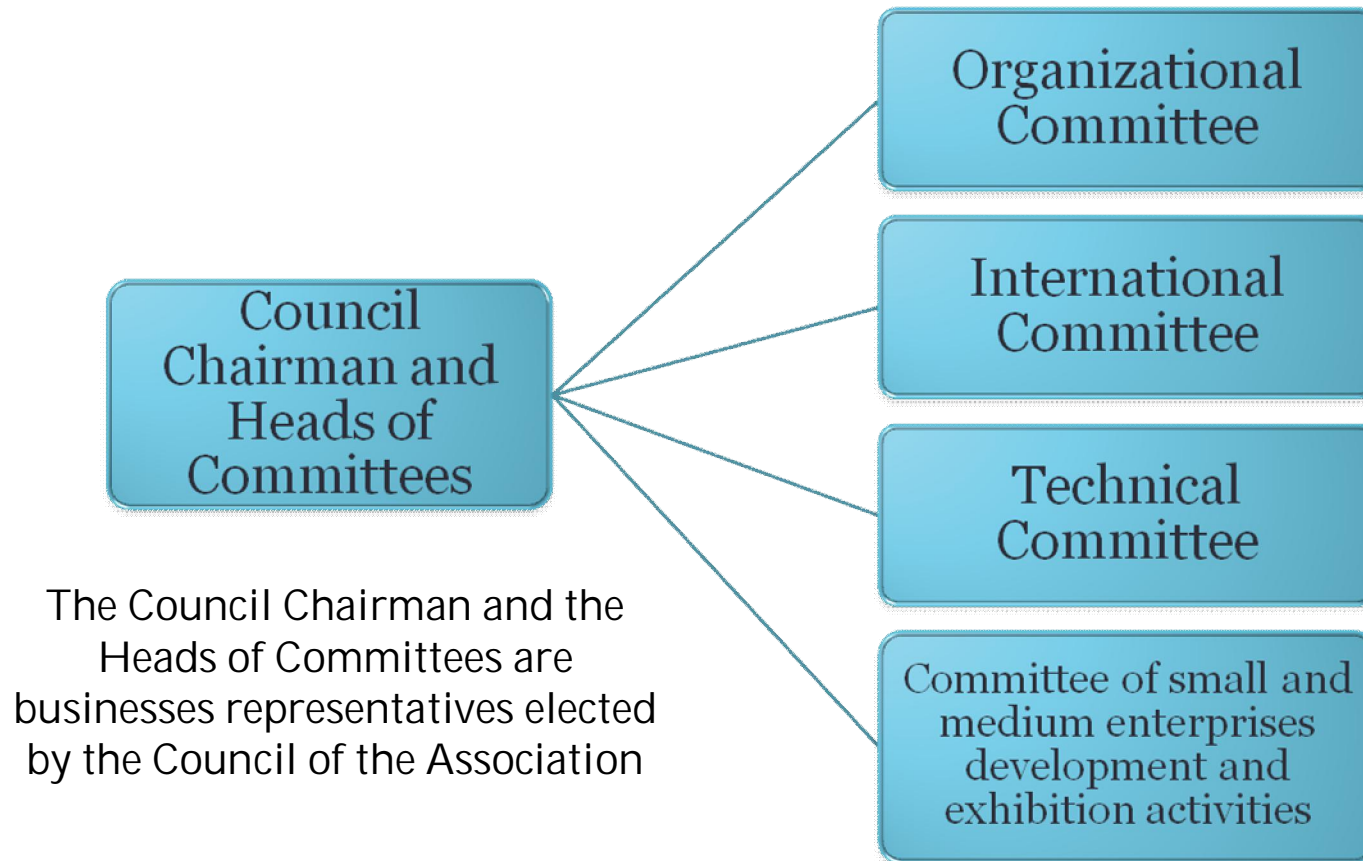


Typical localization stages as per groups

Electrical equipment, diagnostic systems, car body equipment



NAPAK STRUCTURE



NAPAK SUPPORT OF LOCAL AND FOREIGN SUPPLIERS

✓ ANALYSIS OF THE PROJECTS

✓ Assistance in promotion of local suppliers projects on international and regional level. Performing representative functions of a company office on a stage of launching a business.

✓ Cooperation with governments of regions on programs of suppliers development

✓ "TURN-KEY" PROJECTS:

- Selection of design organizations and subcontracting enterprises
- Selection of a site and partners

✓ RECOMMENDATIONS OF SUPPLIERS, PARTNERS

Automotive component market structure

General world practice:

- **OE** (Original Equipment – supplies to assembly line)
 - ✓ Tier 1
 - ✓ Tier 2
- OES/OESS (supplies to official dealers under automotive manufacturer's brand)
- AM (Aftermarket – market of spare part under manufacturer's brand)

Russia:

- Absence of clear differentiation between OE, OES/OESS and AM
- Quality level of automotive components might be lower than that of AM
- Intermixture of OE and AM production at the level of manufacturer

Options for entering Russian market: PROS

Option 1: Own manufacture	Option 2: Joint Venture	Option 3: Postponed appearance
<ul style="list-style-type: none">• 100% ownership• Full control of automotive component sales and equipment for primary furnishing• Opportunity to choose location	<ul style="list-style-type: none">• Small financial participation• Profitable and safe location, acceptable cost of public facilities, qualified personnel• Reliable partner• Support of local authorities	<ul style="list-style-type: none">• Absence of current financial risks• Appearance of foreign automotive manufacturers• Time to estimate probable business potential

Options for entering Russian market: CONS

Option 1: Own manufacture	Option 2: Joint Venture	Option 3: Postponed appearance
<ul style="list-style-type: none"> • 100% liability for probable risks • Total financial risk • Investments in equipment, personnel, training, etc. • Full payment for public facilities 	<ul style="list-style-type: none"> • Dependence on a certain location • Insufficient budget for full-scale business expansion • Limited timelines for making decision • Probable management difficulties 	<ul style="list-style-type: none"> • Losses in the market share • OE customers organize their own manufacture or cooperate with other suppliers – no need in your company • Heavy expenses as a result of late appearance on the market • Advantage can be taken by competitors

Strategy of development of further presence

- Development of base of local suppliers and deepening of localization
- Consolidation of volumes of components/critical technologies with other manufacturers
- Original spare parts production for secondary market
- Establishment of local engineering-technical center
- Expanding of nomenclature of production
- Development of export potential
- Full integration of enterprise into international structures

Industrial assembly Decree 566 (166 – for vehicles) in the territory of RF

Joint Order **№678/№1289/184n** of 24.12.2010 of the Ministry of Economic Development of Russia, Ministry of Industry and Trade of Russia and the Ministry of Finance of Russia

Duration period: up to December 31st, 2020

Criteria defining the concept of “industrial assembly”:

Annual average localization ratio

- First stage 2011-2014:
 - production whereby the level of localization makes minimum 15%
- Second stage 2015-2017 :
 - production whereby the level of localization makes minimum 30%;
- *Third stage 2018-2020 :
 - Production whereby the level of localization makes minimum 45%;
 - * for mechanic components, interior and exterior of vehicle body equipment

LEGISLATIVE BASIS

Industrial assembly Decree 566 (166 – for vehicles) in the territory of RF

Annual average localization level of manufacture of all groups of components is calculated by the formula given below:

$$L = \left(1 - \frac{V}{P}\right) \times 100\%$$

where:

L – Annual average level of localization;

V – Customs value of all automotive components classified in codes of FEACN CU for “industrial assembly” and in codes not “for industrial assembly”, imported by a Russian juridical entity for manufacture of motor vehicle key parts and integral units;

P – Total value of all key parts and integral units for motor vehicles of commodity items 8701 - 8705 FEACN CU, produced by the company.

ENTERING RUSSIAN MARKET

Options of entering Russian market: Purchase of existing production

PROS	CONS
	<ul style="list-style-type: none">• Business opacity
<ul style="list-style-type: none">• Well-known brand/ manufacturer on the market	<ul style="list-style-type: none">• Fundamental analysis “from the inside” – danger of “facing the reality”
<ul style="list-style-type: none">• a market share is quickly obtained	<ul style="list-style-type: none">• worn-out equipment park
<ul style="list-style-type: none">• ready established business	<ul style="list-style-type: none">• lack of qualified personnel is compensated by personnel numbers
<ul style="list-style-type: none">• established and strong links with suppliers and customers	<ul style="list-style-type: none">• retraining of personnel in accordance with new standards is necessary

ENTERING RUSSIAN MARKET

Options of entering Russian market:
JV or own production?

ANALYSIS OF THE REASON FOR OWN PRODUCTION SET UP INSTEAD OF JV

- Substantial differences in technological level of production
- Opacity (due to western standards) of potential partners
- Mutual adaptation of all business processes is required --> expenses can't be foreseen
- Potential difficulties in JV management
- Negative experience of setting up JVs with Russian partners is prevailing
- Differences in business development strategies

Making decision to come to Russia: main factors

POSITIVE

- Big market potential
- Comparative conformity of a model range
- Absence of serious competition in a number of criteria
- Appearance of foreign automotive manufacturers with a well-known component nomenclature
- Existing market share
- Well-established links with local automotive manufacturers
- Guaranteed business capacity

Making decision to come to Russia: main factors

NEGATIVE

- Low price of Russian analogues
- Mismatch of quality control systems
- Small short-term business capacity (at the stage of start-up) due to foreign manufacturers
- Absence of encouragement of investments mechanism
- Quality assurance problem
- Structure opacity
- Organization of marketing and sales
- Economical efficiency in conditions of fair competition

Prospects for component production in Russia

Tier2, Tier 3 Suppliers for Producers of :

- Exhaust systems
- Seats
- Dashboards
- Plastic components
- Body metal parts
- Gear box
- Brake systems
- HVAC
- Suspension
- Starters
- Generators
- Electronics
- Lighting
- Bearings
- Airbags
- Seat belts
- Wheels
- Fasteners

Material Suppliers :

- Resins
- Paints
- Polymers

Critical technologies:

- Laser welding
- Plastic localization
- Metallization of plastics
- High precision hot sheet metal forming
- Hardening in stamps
- Aluminium casting under pressure
- Finish chipping

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