

# **Unmanned Aircraft Systems**

Project of the creation of a center for the production of unmanned aerial vehicles on the territory of the Customer

## Unmanned aircraft systems “BUSEL M”, “BUSEL M40” and “BUSEL M50”



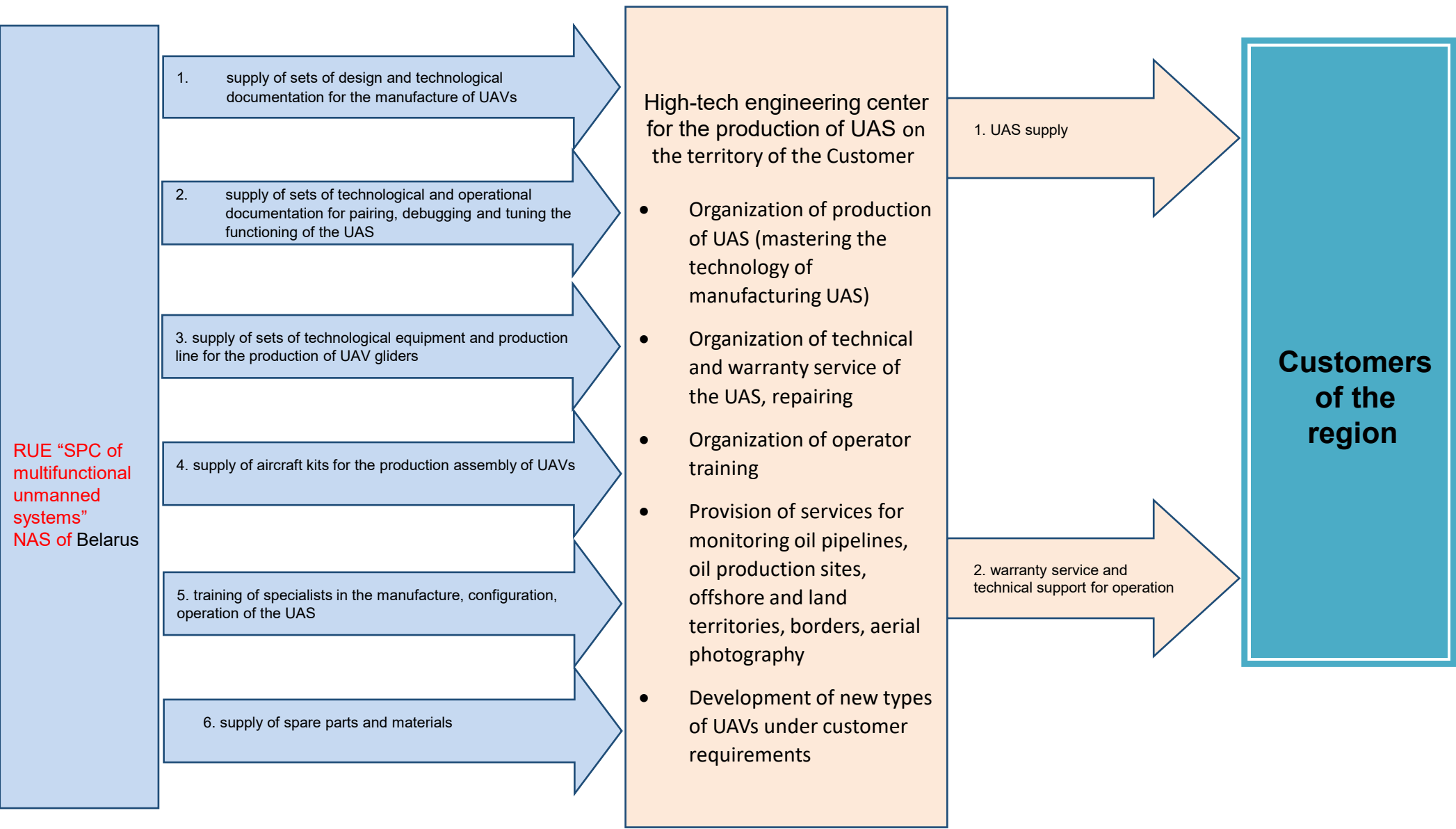
## Performance of UAS

Performance	"Busel M"	"Busel M40"	"Busel M50"
Take-off mass, kg	up to 10	up to 12	up to 14
Wing span, mm	2335	2750	3470
Endurance, min	up to 70	up to 120	up to 150
Speed, km/h	60–120	60–110	60–100
Altitude, m	up to 3000	up to 4500	up to 5000
Effective range with real-time video transmission, km	30	50	70
Payload	Gyro-stabilized platforms with embedded TV-, IR-, photo- or multispectral camera		
Flight-navigation complex	GPS, GLONASS and the automatic control system (fully automatic UAV flight in case of jamming GPS/GLONASS satellite navigation, or spoofing)		
Take-off/landing	by hand or catapult / by parachute with an airbag		



The UAV is launched by an operator's hand or from the catapult under the angle of  $15^\circ$  to the horizon. The UAV lands (with the parachute and an airbag) on to a preset point automatically or after an operator's command.

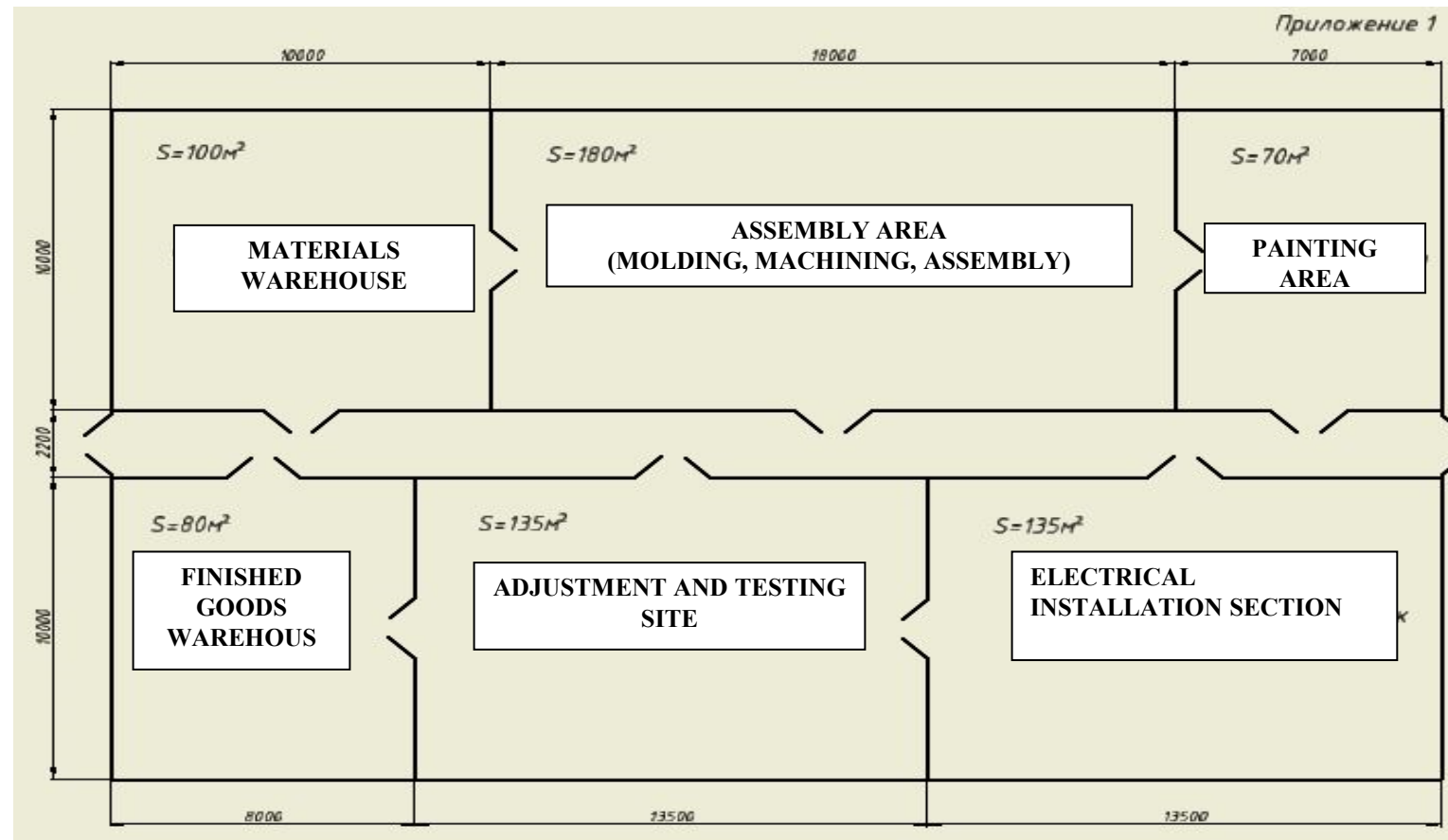
STRUCTURAL-LOGICAL DIAGRAM OF THE INTERACTION OF THE PARTIES DURING THE IMPLEMENTATION OF THE PROJECT



## REQUIRED AREAS FOR THE CENTER FOR PRODUCTION OF UNITS OF THE TYPE "Busel M40" ON THE TERRITORY OF THE CUSTOMER

The required area of the premises for the organization of production of UAVs of the "Busel M40" type is at least 800 - 1000 m<sup>2</sup>

The number of employees: 20 - 25 required for the production of 20 UAS type "Busel M40" per year and 40 - 55 workers for the production of 40 - 50 UAS per year



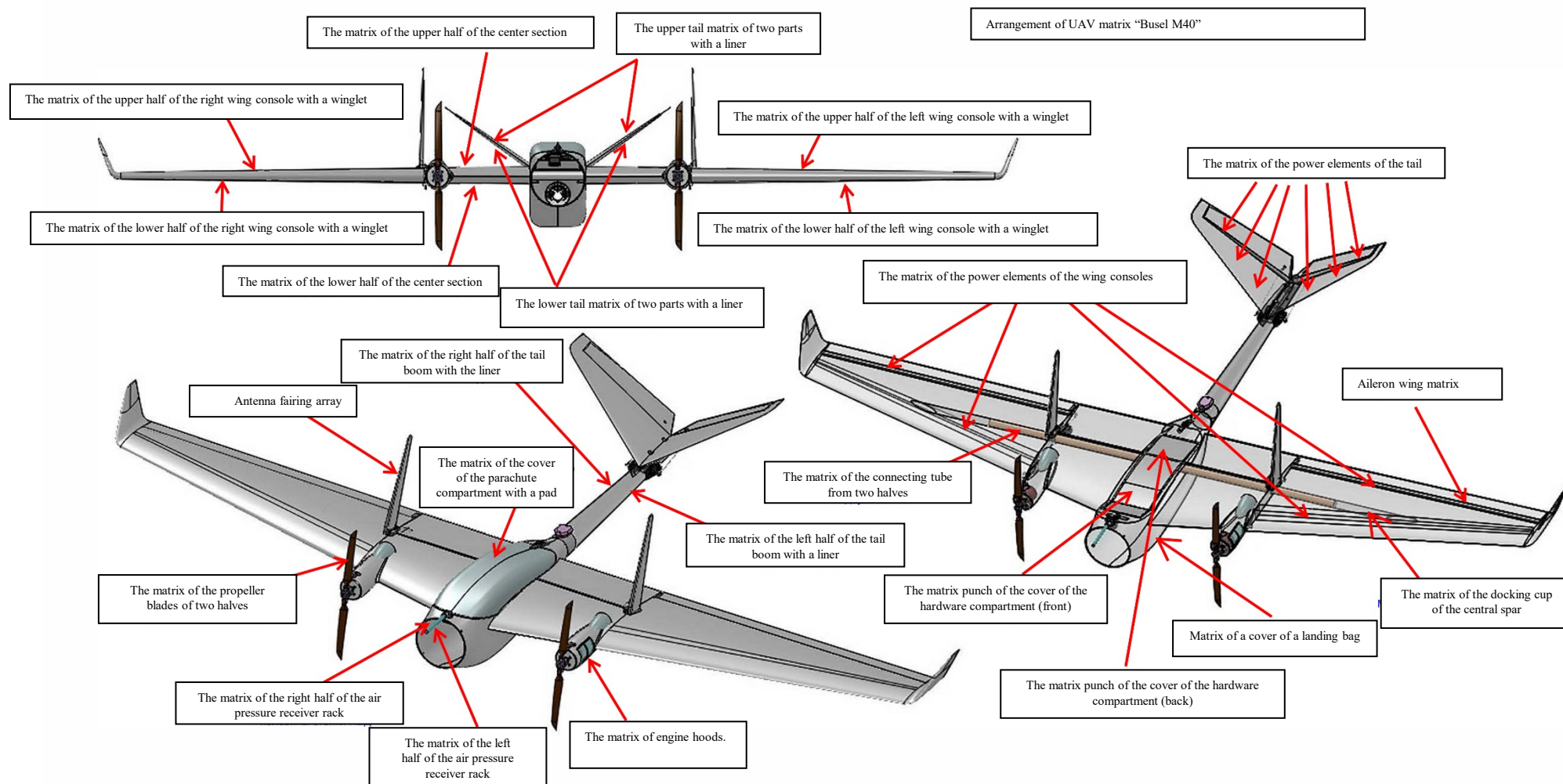
Creation in the Customer's territory of serial assembly production of UAS "Busel M40" with the localization of production of UAVs "Busel M40".

During the implementation of the first stage of work, the Customer will be supplied with a set of equipment for the technological line; a set of technological documentation for the production of UAV "Busel M40"



Technological equipment (matrixes/molds)









Production on a special technological equipment of glider elements of UAV "Busel M40"



Building the "Busel M40" Airframe



UAV airframe equipping



Equipping the UAV with payloads



Autopilot



Electric motor



Servo



Rotations control governor



**Stage of training on the territory of the Contractor:**

- training of the Customer's specialists on the territory of the Contractor in manufacturing technology of composite drone glider "Busel M40" using a set of matrices/molds and technological equipment of the Customer
- training of the Customer's specialists in equipping the "Busel M40" UAV with on-board equipment, installation of electronic equipment and tuning of the "Busel M40" UAV for flights
- training of the Customer's operators in flights on the UAS "Busel M40" on the territory of the Customer
- manufacture of the "Busel M40" UAV during training, acceptance tests in Belarus and delivery to the Customer of the "Busel M40" UAV in a configuration agreed by the Parties.

**Delivery Stage:**

- delivery to the Customer of technological documentation for the manufacture of UAV "Busel M40" gliders and their equipping with a set of on-board equipment
- supply to the Center of sets of matrices/molds and technological equipment for serial production of UAV "Busel M40"
- delivery to the Customer of a set of on-board equipment for equipping the UAV "Busel M40" and elements of the UAS "Busel M40".

**Stage of training on the territory of the Customer:**

- the second stage of training of the Customer's specialists in the manufacturing technology of UAV "Busel M40" glider from of composite components using the supplied set of matrices and technological equipment
- the second stage of training of the Customer's specialists in the technology of equipping and tuning the onboard equipment of the "Busel M40" UAV, in the installation of electronic equipment and tuning the UAS "Busel M40", the beginning of serial production of the UAVs from the UAS "Busel M40" composition.
- conducting joint acceptance tests of the "Busel M40" UAV manufactured and assembled on the territory of the Customer.

After completing the first stage, within the time period agreed with the Customer, it is possible to proceed to the second stage of the project - transferring the manufacturing technology of the reconnaissance-strike version of the “Busel MK” UAV - “bomber”, “drone-kamikaze”, equipped with two types of high-explosive fragmentation and cumulatively penetrating warhead with a range of up to 50 km.



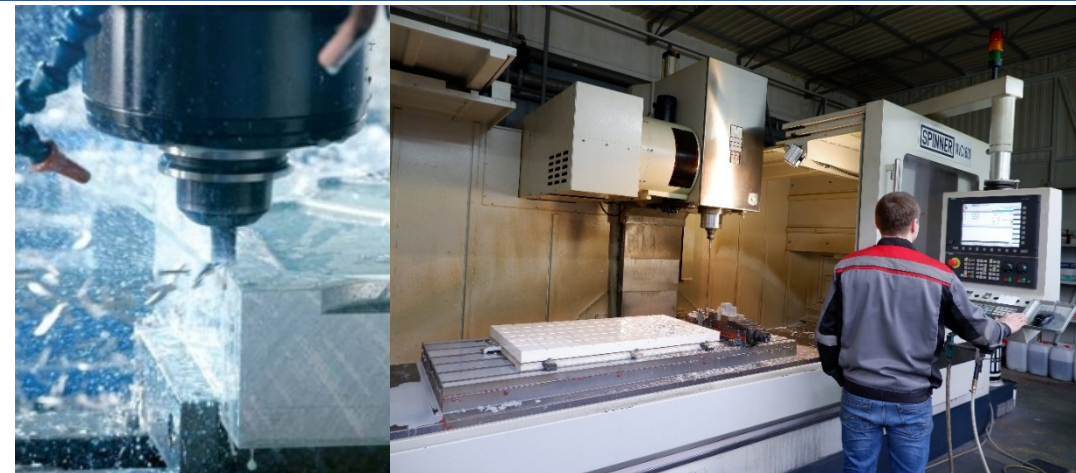




Molding of details from composite materials will be organized on the territory of the Customer



Production and Assembly of airframe elements will be organized on the territory of the Customer



Part process by the machine with CNC will be organized on the territory of the Customer



Setup and installing of electric components will be organized on the territory of the Customer









